County of San Diego COVID-19 Response After Action Report

County of San Diego Government

March 10, 2023

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Preface

This document was developed by Hagerty Consulting, Inc. to support the County of San Diego with identifying lessons learned and opportunities for improvement in response to the COVID-19 pandemic. It is consistent with guidelines established by the federal Homeland Security Exercise and Evaluation Program.

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Executive Summary

This After-Action Report documents observations by County stakeholders made in relation to the County's response to the Coronavirus Disease 2019 (COVID-19) pandemic, spanning from January 2020 to June 2022. The report identifies strengths and areas for improvement within the County's response. These observations are based upon information collected by Hagerty through various stakeholder interviews, surveys, and document review. These observations are intended to provide an analysis to garner its strengths and execute recommendations on areas for improvement that will ensure improvement of the County's emergency response operations.

The County of San Diego COVID-19 After Action Report is organized into the five sections enumerated below:

1. Executive Summary: Provides an overview of the after-action review, including a summary of events, event timeline, and review methodology.
2. Report Development Methodology: Provides an overview of the review methodology used by the report development team.
3. Focus Area Evaluation: Analyzes six areas of evaluation that were critical to the County of San Diego COVID-19 response operation. Each area includes an overview of the events with strengths and recommendations identified in the respective focus areas. The following six focus areas are analyzed in this report: Response Strategy, Operational Area Coordination, Public Information Management, Data Reporting, Community and Business Support and Recovery, and County Continuity of Operations Plans and Functions.
4. Improvement Plan: Provides a consolidated list of recommendations identified in this report, along with responsible agencies/organizations. Implementation timelines will be established for each recommendation.
5. Appendices

Event Timeline

The response to COVID-19 was unprecedented in scope compared to a typical incident timeframe due to the nature and magnitude of its impacts across the world. This report intends to capture notable elements and events that drove the success of the County's response. The timeline starts with the Center for Disease Control and Prevention confirming the first case of the novel coronavirus in the United States on January 20th, 2020. On February 14th, 2020, San Diego County proclaimed a Local Emergency and declared a Local Health Emergency. The State of California officially declared a State of Emergency on March 4th, 2020, and the World Health Organization declared the Covid-19 Outbreak a global pandemic just 7 days later on March 7th, 2020. As concerns grew, the County adjusted their posture and elevated the Emergency Operations Center to a Level 1 activation on March 20th, 2020. Over the next month the County began collaborating with different levels of government and internally preparing the Test, Trace, Treat Strategy which

was announced on April 28th, 2020. On August 6th, 2020, the County reported a record number of 652 cases in a single day. The County's first vaccination site opened on December 16th, 2020, and by January 11th, 2021, the County was operating a first of its kind vaccination superstation, administering up to 5,000 doses per day. By April 29th, 2021, one million San Diego County residents had been fully vaccinated. The Delta Variant became a concern as case numbers spiked, following national trends on July 13th, 2021. To combat the evolving variants, the County began encouraging booster vaccines to fully vaccinated, eligible residents on September 27th, 2021. By January 27th, 2022, eighty percent of eligible San Diegans (5 years and older) were fully vaccinated. On March 30th, 2022, the County de-escalated its Medical Emergency Operations Center from a Level 1 to a Level 2 reflecting the reduction in case numbers and hospitalizations. Throughout this timeline, stakeholders identified the County's areas of strength and opportunities for improvement. This information was collected through document review, interviews, and surveys to ensure a thorough analysis.

Methodology

Analyzing the collected data in the Focus Area Evaluation provided best practices and opportunities for improvement within the County's response effort that translate into actionable steps to enhance future response operations. These findings are identified and detailed in the report's Improvement Plan.

Results and Assessment

Findings from the Response Strategy focus area were identified through sub-focus areas including Hepatitis-A After Action Report Lessons Learned, Operational Area Emergency Operations Center Operations, Medical Operations Center Operations, Test, Trace, Treat and Vaccination Operations, Public Health Laboratory Operations, Education and Community Outreach, and Community Partnerships.

The County and associated stakeholders found great strength in the incorporation of lessons learned from the Hepatitis-A After Action Report. Although many of these efforts were implemented through all phases of response operations, the data collected for this report found exceptional strength in the County's conduction of Incident Command System training prior to the onset of COVID-19 and establishment of decision-making structures and subcommittees early in the response to expertly and efficiently, make informed policy decision.

Findings from the Operational Area Emergency Operations Center Operations analysis illustrated both efforts to be memorialized and incorporated into future Emergency Operations Center practices and areas to improve upon for more effective operations. The strengths included establishing a morning meeting to communicate daily concerns and areas of interest, implementing a COVID-19 inbox to centralize Frequently Asked Questions, expediting logistical needs to better serve partners and local jurisdictions with emergency requests, implementing

processes that enabled an uninterrupted transition to virtual operations, and avoiding duplications of effort alongside the Medical Operations Center through continuous operational review. The recommended actions for the County to incorporate in the future include continuing exercises, trainings, and drills that encourage collaboration among partners to avoid silos in response efforts, developing Memorandums of Understandings with local manufacturers and vendors to thwart strained supply chains impacts felt across the country, and institutionalizing the Medical Reserve Corps Volunteer Program by maintaining year round engagement to increase their familiarity with potential support capabilities and better integrate the volunteers into complex operations.

The Medical Operations Center was established to provide public health expert support to County response operations. Medical Operations Center staff were able to address communication obstacles between hospitals and government leadership and ensure community healthcare partners were appropriately informed of any new guidance issued. Report findings highlighted a repeated concern of PPE availability for response staff across the County demonstrating the need for increased capabilities in storage and distribution of supplies.

The Test, Trace, Treat and Vaccination Operations were a flagship of the County's overall success in the COVID-19 response. Some of the elements that contributed to the success include utilizing infrastructure and lessons learned from testing operations to guide vaccination efforts, implementing high levels of County coordination among partner sites, continually improving communication between sites and Health and Human Services, executing data-driven strategies for testing and vaccinations, developing effective and efficient trainings for staff conducting testing and vaccination operations, and establishing a clinical advisory group of community experts to promote trust within the County. Public Health Laboratory Operations also played a role in testing success, augmenting their capabilities by contracting with Helix OpCo, LLC Labs to increase capacity and reduce turnaround times. While the Test, Trace, Treat and Vaccination sub-focus area proved effective and beneficial, findings also noted the need to examine existing civil service rules and update to ease the onboarding and promoting of needed personnel in this emergency event.

Vaccination being provided at the Grossmont Vaccination Super Site

The Response Strategy analysis also included the review of elements within Education and Community outreach. Notable practices within this piece of the response effort include partnerships with Community Healthcare Workers and Promotores, effective and regular communications through telebriefings, websites, and continual response to community questions, engaging diverse partners in support of at-risk populations, and implementing data driven strategies from ongoing assessments. One of the areas to improve upon in future operations include ensuring materials and information are timely translated into a variety of languages for community members in a culturally appropriate manner.

The final focus area evaluated within the response strategy was Community Partnerships. These findings highlighted the importance of leveraging pre-established relationships, increasing partner collaboration, developing, and maintaining new relationships with community members in tribal nations, prioritizing operations and information-sharing efforts at the border, and implementing strategies to avoid overwhelming hospital systems to better manage patient care.

The results of this After-Action Report were also driven by the analysis of Operational Area Coordination. Findings were classified under Planning, Incident Command System Implementation, and Policy Group and COVID-19 Subcommittee as sub-focus areas.

Overall, planning efforts helped prepare the County to coordinate and implement effective response practices throughout the pandemic. This report determined great strength in integrating public health with emergency management, designing a transition plan to augment surge support as needed, updating existing Memorandums of Understanding, applying knowledge and lessons learned from initial Federal operations, and incorporating equitable solutions into operations to ensure all community members were receiving support uniformly.

The Operational Area Coordination was also driven by the implementation of the Incident Command System. Feedback on this sub-focus area detailed the importance of augmenting this structure to meet the communication needs between the County and regional medical system by assigning a liaison and establish other additional branches and units to accomplish operational goals. Stakeholders also encouraged requiring additional Incident Command System trainings to increase the number of Disaster Service Workers available to support future complex incidents.

Another key element in the response was proper management of public information. Internally, the Joint Information Center enabled efficient information sharing between experts who built trust through this operation. When providing information and guidance to the public, this report identified subcommittee press conferences and town halls, social media, and daily virtual forums as efforts directly related to the success of this information management.

This After-Action Report also dug into the strengths and areas for improvement within COVID-19 Data Reporting practices. Many stakeholders found great use of the County website in tracking testing and vaccination progress throughout the County. Some of the areas to improve before the next disaster of this nature include further developing the capabilities of the dashboard on the County website, adding capacity to data units within the Emergency Operations Center Data Team, socializing data management processes and procedures to reduce workload and duplications, and designing a central repository and data warehouse infrastructure to be accessed and used by all County departments.

The Community and Business Support and Recovery focus area highlighted categorized findings into either Care and Shelter Branch Operations, Reopening, Compliance, Finance, or Contracting sub-focus areas. The Care and Shelter Branch Operations acknowledged the importance of offering non-congregate sheltering solutions to individuals experiencing homelessness in efforts to reduce the spread and support health and safety. The County supported reopening of local organizations and businesses by developing Reopening Plan templates, offering review and feedback, and establishing a point of contact to manage the efforts. The Safe Reopening Compliance Team also facilitated rapid transmission of information to address non-compliant entities. Stakeholders encouraged the development of training materials to standardize support skill sets among staff and increase support capacity.

The findings related to Finance noted the positive impact of receiving clear guidance and approvals from the Board of Supervisors early in the response, integrating recovery consultants into the response, and establishing a process to assess each claim to ensure Federal funding was used properly and in accordance with federal guidelines. The only recommendation in this area included planning for additional capacity to support efforts in future disasters similar in magnitude. County logistics contributed to success in procurement by implementing a user-friendly system for potential vendors to utilize in finding information on their offerings. To clarify the requirements for requested purchases, the County should ensure that departments, like logistics, know where to find points of contact or subject matter experts for department purchasing requests.

Continuity of Operations Plans and Functions played a major role in all operations during the pandemic. The County's best practices in this sub-focus area included identifying back-up staff for key leadership positions and encouraging staff to use tools that support health and wellness and promote resilience. Continuing operations remotely was critical to remaining effective in response operations. The findings in this report indicated varying levels of preparedness throughout different departments when it came to a virtual transition. Going forward, the County should improve plans across the board to ensure uniformity. As part of efforts related to continuity, the County also took steps to succeed in Facility and Real Estate Management. This included standing up a second Emergency Operations Center to allow response staff to clearly define roles and responsibilities in dual activations. The County also provided appropriate social distancing measures to avoid outbreaks amongst response staff.

This After-Action Report details the timeline of events and findings identified in the Results and Assessment, briefly noted above. Overall, the County served as a role model for expanding operations and led the nation with their expertise and innovation. This recognition is prevalent in both the data collected from associated stakeholders and awards and recognition received from external institutions.

Recommendations

This After-Action Report presents recommendations to the County of San Diego which provide actionable guidance on how to memorialize best practices demonstrated in its COVID-19 response and shore up areas for improvement. Hagerty designed recommendations to align with the Federal Emergency Management Agency's all-hazards approach to emergency management based on its National Preparedness Guidelines[1]. Recommendations focus on how to implement lessons learned from the COVID-19 pandemic into pre-incident planning, training, and exercise efforts within the County. A full list of recommendations presented throughout the document can be found in the Improvement Plan on page 80 of this report.

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[1] [1]"National Preparedness Guidelines." U.S. Department of Homeland Security. September 2007. fema.gov/pdf/emergency/nrf/National_Preparedness_Guidelines.pdf

Introduction

Summary of Events

Background

In December 2019, China alerted the World Health Organization to a cluster of patients in Wuhan, China with an unknown disease causing severe respiratory issues. In January 2020, Chinese officials identified and reported the first death caused by the disease, which became known as COVID-19. COVID-19 is a respiratory illness spread between people in close contact with one another through respiratory droplets in the air or on surfaces, and no vaccine existed until Fall 2020. The virus spread rapidly despite containment measures taken at the original epicenter of the outbreak. On January 20, 2020, the Centers for Disease Control and Prevention confirmed the first cases of COVID-19 in the United States. After reports of COVID-19 cases in multiple countries, the World Health Organization declared a global public health emergency on January 31, 2020.

The County began monitoring the 2019 novel coronavirus in January 2020, working with the Centers for Disease Control and Prevention, California Department of Public Health, and local jurisdictions to plan for identifying, quarantining, isolating, and testing possible cases.

Activation

The County Medical Operations Center was activated at a Level 3 (lowest level monitoring phase) on January 21, 2020, following the Centers for Disease Control and Prevention confirmation of the first COVID-19 case within the U.S., in Washington state. The Medical Operations Center elevated to a Level 2 activation on February 1. In collaboration with the Federal Government, the Medical Operations Center was integral in planning for the federal quarantine site at Marine Corps Air Station Miramar (Miramar) for U.S. Citizens being repatriated from Wuhan, China. The first repatriation flight landed at Miramar on February 5 with 167 passengers, several of whom were identified as patients under investigation for the 2019 novel coronavirus. The Miramar federal quarantine mission provided the County early experience in identifying and managing COVID-19 infections prior to any localized cases.

On February 14, 2020 the County proclaimed a Local Emergency and declared a Public Health Emergency; both were officially ratified on February 19. These declarations enabled the County to stand up its internal structure to support the response and prepare for the future transmission of cases within San Diego County. The local health emergency declaration and local emergency proclamation also empowered the County to more effectively seek and utilize mutual aid, ensure the County's health professionals and other local stakeholders had all necessary tools at their disposal, and enhance authority to seek reimbursement from the state. The State of California proclaimed a State of Emergency for COVID-19 on March 4, 2020, to permit the deployment of

State resources and implement the emergency powers of the Governor to protect the health and safety of California residents. The County Public Health Lab detected the first COVID-19 case within the region on March 9, 2020.

The County's Office of Emergency Services Operational Area Emergency Operations Center (Emergency Operations Center) was activated at a Level 3 on March 10, 2020. To slow the spread of COVID-19, the County's first COVID-19 Public Health Order went into effect on March 13, 2020 which restricted gatherings to no more than 250 people. A revised order went into effect on March 17, 2020 further reducing permissible gathering sizes and closing many public gathering spaces (e.g., schools, restaurants, bars). The County ensured restrictions given in the Public Health Order were in alignment with the state of California.

As the County stood up its response to COVID-19, leadership recognized the need to promote transparent and up-to-date communications to the public. Amid frequently changing information and as transmission increased throughout the U.S., County leadership began holding daily press conferences beginning March 5, 2020, to provide timely public information. Public awareness campaigns and media messaging were also critical components, promoting efforts to slow the spread of COVID-19 within the community. On March 13, 2020 the County launched its community sector structure utilizing existing *Live Well San Diego* community partners to promote transparent, up-to-date, and two-way communications across various sectors. This approach also facilitated conducting routine updates for elected officials and their offices. The County aligned with State COVID-19 prevention guidance and implemented social distancing, mass closures of public spaces, isolation, and quarantine, wearing masks in public, frequent hand washing, and use of alcohol-based hand sanitizers as primary methods of control to reduce the spread of the virus.

COVID-19 Testing and Mass Care Response

The County Public Health Laboratory gained the ability to test specimens for COVID-19 in late February without having to send the specimens to the Centers for Disease Control and Prevention. The County Public Health Laboratory was one of dozens across the nation certified to test for the 2019 novel coronavirus by the Centers for Disease Control and Prevention. The County Public Health Laboratory detected its first positive case in a San Diego County resident on March 9, which was verified by the Centers of Disease Control and Prevention. Up to this point and in partnership with Miramar, the Health and Human Services Agency had placed 76 patients under investigation, and 464 people had been placed under self-quarantine at home, most of whom were repatriated U.S. citizens and not San Diego County residents.

County partnerships with organizations such as Rady Children's Hospital helped facilitate the initial testing of first responders. This partnership later led to the establishment of the COVID Collaboration for Children to focus testing on youth.

The County's Public Health Laboratory was a key component throughout the response.

Test, Trace, Treat

In late April 2020, COVID-19 infections spread throughout the County. The County worked to expand contact tracing, testing, public awareness campaigns, isolation and quarantine protocols, and mitigations measures (e.g., social distancing, masking). On April 28, 2020, the County announced the rollout of its Test, Trace, Treat strategy to fight the COVID-19 pandemic. While capacities for regional testing, contact tracing, and isolation and quarantine already existed within the response, the strategy was created to accelerate and coordinate testing, disease investigation, and safe isolation and quarantine in a people-centric manner. The County Public Health Lab, local hospitals, and private lab partnerships (e.g., Helix) all supported testing capacity in the region.

The County prioritized health equity through the breadth of operations taken on by the Test, Trace, Treat team. For example, the County prioritized testing of ethnic and vulnerable groups; established a diverse team of case investigators and contract tracers including the use of community health workers; focused testing strategy in the South County; conducted testing at the border; directed County Fire Authority Testing in rural areas; and conducted Latino Farmworkers/Outreach testing. Through working with community partners and continually examining the best practices and lessons learned of processes, the County was able to use its testing strategies to inform vaccination strategies once vaccines became available. Communication was also key to the success of testing and vaccination strategies, and the Test, Trace, Treat team utilized its staff to create a robust system of communications to ensure

information was provided in an accurate and timely manner on its website amidst rapidly changing guidance.

The County quickly established numerous public health programs to treat and support the needs of high-risk residents in collaboration with local, State, and Federal partners. Care and shelter operations initially began as part of the overall COVID-19 response operation and later was folded into the Test, Trace, Treat team upon its creation as part of the Treat structure. These efforts included the development of alternate care sites, the creation of the Public Health Temporary Lodging Program, and homeless shelter operations. For example, Operation Shelter to Home, led by the City of San Diego with the County supporting, was a program that established a shelter at the San Diego Convention Center for individuals experiencing homelessness, serving to protect these populations from contracting COVID-19 by providing a socially distanced shelter and human services. Additional social programs included Great Plates Delivered, a program established in May 2020 to provide daily meals to older adults to prevent those at higher risk from COVID-19 from potential exposure at grocery stores or restaurants. Figure 1 demonstrates the various strategic approaches the County took for responding to COVID-19:

COVID-19 APPROACHES FOR EMERGENCY RESPONSE

ICS	INCIDENT COMMAND SYSTEM
	ADAPTIVE RESPONSE: CONTAINMENT AND MITIGATION (NON-PHARMACEUTICAL INTERVENTIONS)
	SECTOR PARTNERSHIPS*
	COMMUNICATION: INTERNAL & EXTERNAL*
T3	T3 STRATEGY: TEST, TRACE, AND TREAT
	HEALTH EQUITY
	VACCINES
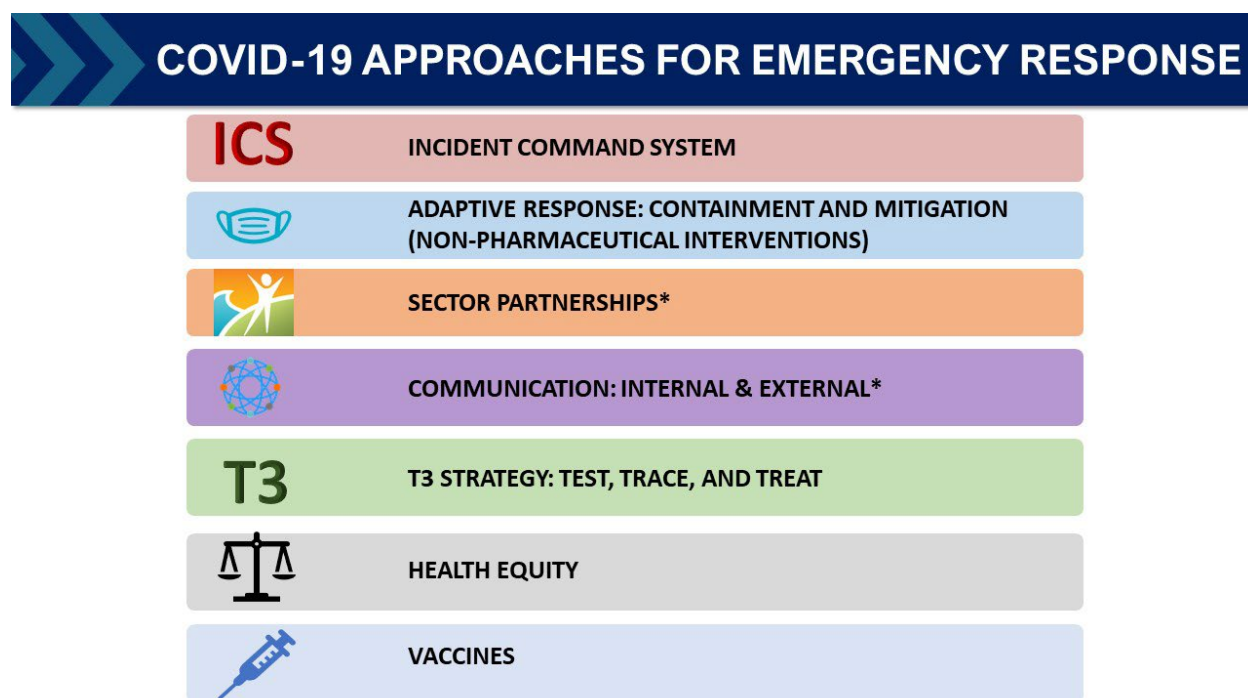
Figure 1: The County of San Diego's Strategic Approaches to COVID-19 Emergency Response

Reopening

In early May 2020, California Governor Gavin Newsom unveiled the Pandemic Resilience Roadmap outlining a staged approach to reopening. The County established its own Reopening Task Force on May 11, 2020 to begin planning for alignment with State guidance. This Task Force was comprised of County subject matter experts in the areas of public health, legal and regulatory, public information, education and outreach, and more. Throughout the response, the County's

Reopening Task Force offered expertise to regional businesses and organizations to provide guidance on reopening plans. The State of California retired the Resilience Roadmap later in the summer and instituted the Blueprint for a Safer Economy, which went into effect on August 31, 2020. As seen in Figure 2, The Blueprint detailed a color-coded, risk-based tier system to guide the tightening and/or easing of COVID-19 prevention restrictions for business operations and other social and economic events or activities. The system laid out metrics that each California county was required to meet to advance to the next less restrictive tier. When the Blueprint was first introduced, each level was based on the adjusted 7-day average daily case rate and 7-day test positivity within the respective county. As with most large counties in California, the San Diego County began in the Red Tier, due to the substantial transmission rate of COVID-19. Figure 2 below represents the Blueprint tiers at the time it was retired on June 15, 2021.[2]

Higher Risk → Lower Risk of Community Disease Transmission***				
Measure	Tier 1 Widespread (Purple)	Tier 2 Substantial (Red)	Tier 3 Moderate (Orange)	Tier 4 Minimal (Yellow)
Adjusted Case Rate for Tier Assignment** (Rate per 100,000 population* excluding prison cases^, 7 day average with 7 day lag)	> 10	6 - 10	2 – 5.9	< 2
Test Positivity^ (Excluding prison cases^, 7 day average with 7 day lag)	> 8%	5 – 8%	2 – 4.9%	< 2

Figure 2: COVID-19 Transmission Tiers

Vaccinations

Through the fall of 2020, the County of San Diego conducted planning for the anticipated receipt, storage, and distribution of COVID-19 vaccinations. As part of this preparation, the County developed strategies to support vaccination efforts and worked with local providers to establish a COVID-19 Clinical Advisory Group, which provided guidance, expertise, and recommendations for vaccine distribution, particularly from a health equity lens. Planning for the Clinical Advisory Group occurred from late November into early December 2020.

The first shipment of COVID-19 vaccines arrived in the County on December 14, 2020, with 28,000 doses of the Pfizer-BioNTech vaccine. The County implemented the CDPH's phased approach to

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[2]"Blueprint for a Safer Economy." California Department of Public Health. June 15, 2021.
https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/COVID-19/COVID19CountyMonitoringOverview.aspx

categorize eligibility beginning with healthcare workers in Phase 1A. Table 1 below shows the eligibility requirements of each phase.

Table 1: Vaccination Phases for the County of San Diego

Phase	Eligible Groups
Phase 1A (As of December 16, 2020)	» Healthcare Professionals » Couriers for vaccines and emergency supplies » Janitorial workers providing support to the healthcare sector » Vaccinators

Phase 1B	» Persons aged 75 years and older (as of January 18, 2021)
	» Persons 65 years of age and older (as of January 23, 2021)
	» Persons at risk of occupational exposure (as of February 27, 2021)
	  » Emergency services/first responders
	  » Childcare and education
	  » Food and agriculture
	» Janitorial workers in all other sectors

Phase 1C (As of March 15, 2021)	» People ages 16-64 deemed to be at high risk with qualifying health conditions » People living in congregate residential settings » Public transit workers
Phase 2	» General population 50 years of age and older (As of April 1, 2021) » General population 16 years of age and older (As of April 15, 2021) » U.S. Citizens living in Baja California (As of May 6, 2021) » General population 12 years of age and older (As of May 13, 2021)[3]

Initial doses were administered to Phase 1A eligible healthcare personnel beginning on December 16 with the opening of the first vaccination site at the County's Health Services Complex and Psychiatric Hospital. Skilled nursing facilities residents and staff were also prioritized in the initial vaccination phase.

The County opened its first COVID-19 Vaccination Super Station at Petco Park on January 11, 2021, in partnership with University California San Diego Health, San Diego Padres, and the City of San Diego to expand vaccinations to thousands of eligible people within the County. This vaccination superstation was also the first of its kind in the State of California. Utilizing CDPH's tiered system, the County expanded eligible groups for vaccination throughout the winter and

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[3]"Know Your Vaccination Phase." County of San Diego. May 13, 2021.
https://www.sandiegocounty.gov/content/dam/sdc/hhsa/programs/phs/Epidemiology/covid19/vaccines/Know%20Your%20Vaccination%20Phase_ENG.pdf

spring of 2021 as more vaccines became available and additional sites and super stations were opened. The County reached one million doses of COVID-19 vaccines administered to residents by March 5, 2021, and one million residents (approximately 38% of eligible County residents) were considered fully vaccinated by April 29, 2021. As of May 3, 2021, San Diego County had the highest per-capita doses administered among Southern California counties, at 102.6 doses per 100 individuals 16 years of age and older.

Entrance to the San Diego County COVID-19 Vaccination Super Station at Petco Park

The County implemented several activities to ensure vaccinations were reaching all regions of the County equitably. For example, Project SAVE (Scheduling Assistance for Vaccine Equity) set aside a certain number of appointments each day for individuals at high-risk of COVID-19 in eligible groups. This pilot program, which was launched in February 2021 in the South Region, continued to expand in March 2021. Using the Healthy Places Index as a guide, the County determined 39 Health Equity Zip Codes to guide vaccine site placement and monitor vaccination rates in zip codes with higher burdens of COVID-19 and communities with less access to care. Using data analysis of case rates and access needs, the County identified the South region as the initial priority for Project SAVE appointments. Project SAVE utilized Community Health Workers to provide access to these dedicated appointments and provide referrals to no-appointment events, using their backgrounds, experiences, language, and culture to best serve their communities as a trusted source for vaccine information. As of November 2021, vaccination rates were highest in the South region of the County because of focused health equity strategies such

as Project SAVE. For additional information on the County's health equity strategies for vaccination, please see Appendix B: Response Documents.

California retired the Blueprint for a Safer Economy on June 15, 2021, removing capacity and social distancing restrictions, and allowing most business sectors to resume regular operations. Subsequent to this action, the County aligned with the State accordingly. Prior to the retirement of the Blueprint, the County had moved to the Yellow Tier on June 9, meaning there was minimal spread of COVID-19 within the region (less than two cases per 100,000 residents per day).

In the summer of 2021, COVID-19 infections began to surge with the new Delta variant. The County continued efforts to vaccinate residents and add sites, achieving the benchmark of 70% of residents ages 12 and older fully vaccinated by July 28, 2021. In September, the U.S. Food and Drug Administration authorized the first booster dose (of the Pfizer-BioNTech COVID-19 vaccine) for older and at-risk adults who had been fully vaccinated and received their second dose at least six months prior. The County began giving booster doses to eligible residents on September 27, 2021. Figure 3 shows a high-level summary of COVID-19 through December 2021:

Key Events Timeline

February 14, 2020
County of San Diego Proclaims a Local Emergency related to COVID-19.

March 9, 2020
County Public Health Laboratory detects first positive test in a county resident.

May 11, 2020
County establishes Reopening Task Force.

July 28, 2021
County achieves benchmark of 70% of residences ages 12 and older fully vaccinated.

January 31, 2020
World Health Organization declares a global public health emergency.

March 4, 2020
The State of California declares a state of emergency.

April 28, 2020
County announces roll out of its Test, Trace, Treat strategy to fight the COVID-19 pandemic.

January 11, 2021
County opens its first COVID-19 Vaccination Super Station at Petco Park.

Figure 3: Key Events throughout the COVID-19 pandemic response.

By the end of December 2021, 78.2% of San Diegans were fully vaccinated, and 88.2% of residents ages five and older had received at least one dose. Additionally, nearly 750,000 booster doses had been administered. The County of San Diego's response efforts and model was highly successful overall, culminating in various achievement awards that commended specific response

aspects and programs[4]. The National Association of Counties[5] recognized the County of San Diego for the following[6]:

» Academic Detailing by ZIP Code: A Novel Approach to Reduce COVID-19 Health Disparities-Health and Human Services
» Collaboration Between Pharmacy and County to improve COVID-19 Vaccination Access-Health and Human Services
» Community Health Worker Model/ Project SAVE- Office of Strategy and Innovation
» COVID-19 Cross-Border Vaccination Efforts- Health and Human Services
» Mobile Monoclonal Antibody Team- Health and Human Services
» Monoclonal Antibody Regional Centers: Collaborating for Equitable COVID-19 Therapy-Health and Human Services
» Operationalizing the *Live Well San Diego* Framework in Response to a Pandemic - Health and Human Services
» The County of San Diego COVID-19 Vaccination Strategy- Health and Human Services
» Meter Lab COVID-19 Safe Operation Plan- Agriculture, Weights & Measures
» Zoning Flexibility During COVID-19 Impact- Planning and Development Services
» County of San Diego COVID-19 Emergency Rental Assistance and Utility Program - Housing and Community Development
» County of San Diego COVID-19 Security Deposit Assistance Program - Housing and Community Development
» Establishment of a Response Team for COVID Cases at Places of Employment - Public Health Services
» Migrant Protection Program/ Entry Without Inspection COVID-19 Response Team - Public Health Services[7]

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[4] "County Wins 61 National Achievement Awards for Outstanding Programs". County News Center. May 23, 2022. https://www.countynewscenter.com/county-wins-61-national-achievement-awards-for-outstanding-programs/
[5] "Announcing 2022 Achievement Award Winners". National Association of Counties. https://www.naco.org/achievement-awards/2022-best-category
[6] "Awards". San Diego County 2020-21 Annual Report. https://www.sandiegocounty.gov/content/sdc/annualreport/en/awards.html
[7] Other awards and recognition were granted over time as the County strove to support the community. An additional list can be found in Appendix B: Response Documents

Event Timeline

The COVID-19 pandemic was unprecedented in length for an emergency response activation. The following is an in-depth timeline of key events from the first U.S. Case in January 2020 through June 2022.

2020

JANUARY

» **January 20:** The Centers of Disease Control confirms the first U.S. case of the 2019 novel coronavirus, taken from samples taken on January 18 in the state of Washington.

» **January 21:** The Medical Operations Center activates at a Level 3 to monitor the virus following confirmation of the first case within the U.S.

» **January 29:** The Policy Group requests activation of San Diego 211 for the 2019 novel coronavirus response.

» **January 31:** The World Health Organization International Health Regulation Emergency Committee declares the coronavirus outbreak a Public Health Emergency of International Concern.

FEBRUARY

» **February 1**: The Medical Operations Center is elevated to Level 2 activation in response to the outbreak.

» **February 5:** Under Federal quarantine order, the first repatriation flight to the county from Wuhan, China arrives at Marine Corps Air Station Miramar (Miramar) with 167 repatriated passengers; several patients under investigation for the 2019 novel coronavirus are identified from the flight.

» **February 7:** The second charter flight arrives from Wuhan, China to Miramar with 65 repatriated passengers.

» **February 14:** The County of San Diego proclaims a Local Emergency and declares a Local Health Emergency in response to the 2019 novel coronavirus outbreak, which was given the name COVID-19 by the World Health Organization on February 11. County, Centers of Disease Control, and University California San Diego Health hold a joint press conference.

» **February 19:** The Local Emergency Proclamation and Declaration of Local Health Emergency are ratified by the San Diego County Board of Supervisors.

MARCH

» **March 2:** The County creates the COVID-19 Educational Materials website to educate the public on general COVID-19 safety facts and information.

» **March 4:** The State of California declares a State of Emergency.

» **March 5:** The County holds the first COVID-19 press conference to provide information and actions for San Diego County residents, accessible via Facebook Live, YouTube, Twitter (live), and County News Center. Daily press conferences began on March 16, 2020.

» **March 9:** The Public Health Laboratory detects the first positive COVID-19 test in a county resident, which was later confirmed by the Centers for Disease Control and Prevention. The County places handwashing stations and portable restrooms across the region and takes other COVID-19 prevention steps.

» **March 10:** The Office of Emergency Services Emergency Operations Center is activated at Level 3 and the Medical Operations Center continues at Level 2 activation.

» **March 11:** The World Health Organization declares the COVID-19 outbreak a global pandemic.

» **March 13:**

   » The County's first COVID-19-related Public Health Order goes into effect, aligning to State guidance, restricting gatherings greater than 250 people.

   » The President of the United States invokes the Stafford Act and declares a national emergency for the COVID-19 outbreak.

   » The first County testing site opens as a pilot at the Live Well San Diego Health Center in Oceanside.

   » School districts across the county begin announcing school closures to prevent the spread of COVID-19.

» **March 16:**

   » The County establishes the Public Health Temporary Lodging Program.

   » Office of Emergency Services Emergency Operations Center is elevated to Level 2 activation, and the Medical Operations Center elevated to Level 1 and is relocated to the Emergency Operations Center.

» **March 17:**

   » In accordance with State public health guidance, the County Public Health Order limits gatherings to no more than 50; implements no in-house restaurant dining and no classes at public or private schools, colleges and universities; and places restrictions on and conservation of resources at hospitals.

   » Drive-up testing facility opens at the Qualcomm Stadium.

» **March 18:** 1800 passenger cruise ship arrives in port requiring self-quarantine of passengers. Marine Corps Air Station Miramar is designated as the "hub" to receive repatriated American citizens and American citizens from cruise ships. Health and Human Services Care Site stands ready to receive those that need quarantine.

» **March 19:** The Governor of California issues a statewide Stay-at-Home Order to slow the spread of COVID-19.

» **March 20:**
  » Office of Emergency Services Emergency Operations Center is elevated to Level 1 activation.
  » The Nurse Helpline was stood up with the initial intent to provide guidance to the public and healthcare systems to identify those who qualified for COVID testing in partnership with 211.
» **March 24:** Federal Quarantine Order at Miramar is lifted by the Centers of Disease Control.
» **March 25:**
  » The U.S. Senate passes the Coronavirus Aid, Relief, and Economic Security Act to provide $2 trillion in aid for state and local governments, hospitals, and small businesses and becomes public law signed by the President on March 27.
  » Miramar Federal Quarantine mission is ended.
  » The County includes COVID-19 Daily Status Charts, with test, case and hospitalization totals, in daily press events and shares with public on https://coronavirus-sd.com/.
» **March 26:** The County creates the [COVID-19 Testing Website](#) to provide the public information on local testing efforts.
» **March 27:** The County launches Live Well @ Home, a website that provides San Diego County residents with resources and activities for staying healthy, active and engaged during COVID-19 stay-at-home orders.

APRIL

» **April 1**: A temporary shelter for individuals experiencing homelessness opens at the San Diego Convention Center. The operation, called Operation Shelter to Home, is led by the City of San Diego and supported by the County. The operation provides socially distanced sheltering and health services to protect vulnerable persons from COVID-19.
» **April 6**: Healthcare Provider Status Taskforce is implemented to establish a reliable communication platform and process to assess functionality and needs with healthcare entities that are not part of the San Diego County WebEOC system (non-hospital), particularly with focus on the needs of long-term care and skilled nursing facilities.
» **April 9:** The County releases interactive COVID-19 Dashboard on www.coronavirus-sd.com, with tests, cases, hospitalizations and deaths over time, and cases by city and ZIP code.
» **April 16:** San Diego Public Health Laboratory receives additional equipment for COVID-19 testing allowing a higher number of specimens in a shorter period and the ability to test more rapidly in the field.
» **April 19:** Phase ONE of the County's COVID-19 Public Outreach Campaign is initiated focusing on staying home, flattening the curve, and prevention messaging.

- » **April 24:** Alternative Care Site located at the University of California San Diego with a 350-bed facility is set up in newly constructed student housing for lower acuity patients in the event the healthcare system became overwhelmed.
- » **April 26:** Federal Medical Station set-up is completed and opens a 202-bed alternative care site at Palomar Hospital, Escondido, in collaboration with Federal, State, and local partners. The County now has 552 available alternate care site beds.
- » **April 28:** The County announces and initiates its Test, Trace, Treat Strategy to address three crucial areas of the response: Test, Trace, and Treat.

MAY

- » **May 1:** Test, Trace, and Treat Dashboard is launched with snapshot data on testing, trace including investigations performed, and treat data (individuals and cumulative in isolation in Public Health Rooms).
- » **May 4:** The Governor of California issues executive order (N-60-20) directing the State Public Health Officer to issue a risk-based Framework addressing degrees of activity and capacity restrictions based on positivity rate, adjusted case rate, and/or health equity metrics under Blueprint for a Safer Economy.
- » **May 11:** The County announces and initiates its South Bay Saturation Strategy, a health equity strategy designed to address rising COVID-19 cases in heavily impacted areas by providing free, accessible testing.
- » **May 11:** The County Re-Opening Task Force is established.
- » **May 14:**
  - » The Great Plates Delivered program is officially announced at the daily press conference. First meals are delivered on May 16, 2020.
  - » County Fire supports response and begins testing for first responders.
- » **May 15:** The Rapid Response Team is operational to address outbreaks within congregate care facilities (long-term care shelters, behavioral health facilities, jails).
- » **May 19:** The County submits the *COVID-19 Variance Attestation* for an accelerated implementation of *California's Roadmap to Modify the Stay-at-Home Order*, simultaneously protecting the public's health, while supporting the economic viability of the region and the County *Containment Plan* including mandatory protective measures for hygiene and sanitation, social distancing, face coverings, and screening at workplaces and public places. The Plan incorporates the County Test, Trace, and Treat Strategy to decrease COVID-19 morbidity and mortality through testing, tracing, and treatment (including isolation), and promotes "accessible COVID-19 testing for everyone".
- » **May 19:** Phase TWO of the County's COVID-19 Public Outreach Campaign is initiated focusing on safe messaging as socio-economic reopening begins and emphasizes the importance of continued prevention measures.
- » **May 20:** County submits to State Public Health Officer and Director of California Department of Public Health the County of San Diego's Proposal for a Pilot Program for Further Acceleration of California's Resilience Roadmap.
- » **May 26:** County Fire expands testing to the public at Julian, Pine Valley, Valley Center, Borrego Springs, and Potrero stations.

» **May 30:** County Fire supports the response and conducts testing at select County library locations.

JUNE

» **June 1:** County reserves hotel rooms across the region for anyone who is symptomatic and experiencing homelessness or unable to quarantine or isolate from their families as part of the Temporary Lodging Program.

» **June 2:** The County Board of Supervisors approve a set of 13 triggers to modify Health Officer Orders. The variety of data indicators would lead public health officials to pull back on the reopening of the local economy.

» **June 3:** The County announces Triggers for Modifying Health Officer's Order during COVID-19 update press conference. COVID-19 Triggers Dashboard is added to www.coronavirus-sd.com.

» **June 4:** County partnership with San Diego State University expands contact tracing to include community health workers working in underserved communities to help cases and household contacts safely isolate and quarantine.

» **June 12:** The County announces new website, in partnership with 211 San Diego, for the public to schedule free COVID-19 tests. Testing schedule and interactive testing locations map added to www.coronavirus-sd.com/testing.

» **June 15:** Department of Human Resources and Health and Human Service Agency Human Resources assigned a dedicated COVID-19 Human Resources team responsible for supporting all aspects of human resources. The team implemented expedited recruitment, hiring, and onboarding staffing processes specific to the response as well as expanded the use of contract agencies to supply the various staff and skills needed.

JULY

» **July 1:** Phase THREE of the County COVID-19 Public Outreach Campaign is initiated with continued prevention emphases on masks, targeting primarily young adults (18-30) and Hispanic/Latino audiences given case rates.

» **July 7:** The Youth Emergency Readiness Ambassadors program, a partnership with Health and Human Services Agency, Community Emergency Response Teams, and Office of Emergency Services, is launched, which increased the number of hard-to-reach youth in San Diego County who were prepared to respond in an emergency by having age and culturally appropriate peers conduct youth-develop outreach.

» **July 10:** The County begins its partnership with Helix Lab with the goal of expanding access to reliable, rapid COVID-19 testing to 2000 a day with a goal of a continued ramp up to 10,000 tests per day.

» **July 29:** The Governor of California releases COVID-19 Employer Playbook for a safe reopening.

» **July 31:** Alternative Care Site located at the University of California San Diego was stood down.

AUGUST

» **August 6:** County reports record number of 652 cases in a single day.

» **August 17:** Isolation Support Nurse Help Line goes live with Nurse Case Managers who notify individuals of positive results, share isolation guidance and provide case management to ensure they have the resources to support their isolation period.

» **August 31:** The State of California institutes the Blueprint for a Safer Economy, which includes a colored, metric-based tier system for tightening and/or easing COVID-19 prevention restrictions for business operations and other social and economic events or activities. San Diego County enters the Red Tier, similar to most large counties within the State due to high transmission.

SEPTEMBER

» **September 28**: County opens recruitment of paramedics and Emergency Medical Technicians to assist at test sites.

OCTOBER

» **October 5:**

  » County recruits Student Nurses to assist at test sites.

  » County creates an additional COVID-19 testing website for other organizations in San Diego County offering testing.

» **October 6:** The State of California adds Health Equity Metric to Blueprint for a Safer Economy Tier Framework. In order to move to a less restrictive tier, a county must meet the case rate and test positivity thresholds for that tier for the prior two consecutive weeks, and the county's Health Equity Quartile Health Places Index census tracts must also meet test positivity thresholds for the less restrictive tier during those same weeks.

» **October 15:** The County identifies six strategies to support vaccination including enrollment, training, distribution, communication, partnerships, data collection and inquiry response strategies.

» **October 21:** The County submits Targeted Equity Investment Plan to State, demonstrating targeted investments to eliminate disparities in levels of COVID-19 transmission and promote equitable recovery.

NOVEMBER

» **November 30:** California Occupational Safety and Health Act department publishes COVID-19 Prevention Emergency Temporary Standards for the workforce.

DECEMBER

» **December 8:**

  » The County Health and Human Services Agency submits the "COVID-19 Vaccination Plan for San Diego County" to the State.

  » The County establishes the COVID-19 Clinical Advisory Group to provide guidance for vaccine distribution and recommendations from a health equity lens.

  » The County creates the COVID-19 Vaccines Website to provide guidance and information on COVID-19 vaccines and eligible phases for vaccine distribution in San Diego County.

» **December 11:** The U.S. Food and Drug Administration begins issuing Emergency Use Authorizations of COVID-19 vaccines, beginning with the Pfizer-BioNTech vaccine.

» **December 14:** The first shipment of COVID-19 vaccines arrives in San Diego County. The first phase of vaccinations is available for eligible healthcare workers and employees and residents of long-term care facilities.

» **December 16:** The first County vaccination site opens at the Health Services Complex and Psychiatric Hospital for Phase 1A-eligible healthcare personnel.

» **December 18:** County reports a record number of positive cases at 3,611 in one day, with hospitalizations rising and Intensive Care Unit capacity for Southern California at 0.0%.

» **December 19:** The first COVID-19 Vaccine Perception Poll was administered to learn about the beliefs and attitudes of San Diegans regarding the COVID-19 vaccines.

» **December 21:** County receives first shipment of Moderna COVID-19 vaccine.

» **December 29:** California Department of Public Health Releases All Facilities Letter on Crisis Care Continuum Guidelines.

» **December 30:** First Responder vaccinations begin, and a new COVID-19 variant B.1.1.7 (Alpha) is reported in San Diego County.

2021

JANUARY

» **January 7**: Highest number of daily cases during the winter surge was reported, a record 4,550 cases, bringing the region's total to 185,062.

» **January 11:** The County opens a first-of-its-kind vaccination superstation at Petco Park in partnership with University California San Diego Health, San Diego Padres, and the City of San Diego. The superstation enables the administration of up to 5,000 doses per day. Vaccination sites continue to expand across the county.

» **January 12:** The County Board of Supervisors adopt a resolution to reorient and restate the County's response to COVID-19; one that adheres to a continued, data-driven response; works collaboratively with the State; and emphasizes a more equitable response to the pandemic by prioritizing funding using a health equity lens when appropriate.

» **January 13:** First Vaccine Dashboard is presented at County press conference.

» **January 14:** The County exceeds 100,000 close contact investigations.

» **January 21:** The County expands vaccination capacity in the South Bay region by opening a second vaccination superstation in Chula Vista and a smaller clinic in National City.

» **January 27:** The County of San Diego begins the pilot program of the State's MyTurn vaccine notification system; residents can sign up for notifications to know when they are eligible and can make an appointment for vaccines.

» **January 28:** County launches via its COVID-19 website new interactive map showing vaccination sites and offering the public the opportunity to pick a location and connect directly to appointment scheduling.

FEBRUARY

» **February 2:** County provides 75 employees to staff San Diego 211 to support the influx of calls regarding vaccine questions.

» **February 8:** Project SAVE (Scheduling Assistance for Vaccine Equity) is launched. Contracted Community Health Workers conducted outreach and identified individuals for Project SAVE appointments, which were set aside for populations that are vulnerable and at high-risk for complications from COVID-19.

» **February 9:** The County continues robust social media communication and is the only county in the nation to have more than 100,000 Twitter followers, 50,000 Facebook followers and 50,000 Instagram followers.

» **February 9:** County, in partnership with San Diego 211, initiates the Homebound San Diegans Vaccination program.

» **February 19:** The County creates an additional COVID-19 vaccination website for other organizations in San Diego County offering vaccinations.

» **February 22:** Homeless San Diegans at Convention Center receive a COVID-19 vaccine first dose under Operation Shelter to Home as part of efforts to protect vulnerable populations.

» **February 27:** U.S. Food and Drug Administration issues Emergency Use Authorization for the third COVID-19 vaccine, Janssen/Johnson & Johnson.

MARCH

» **March 5:** The County reaches 1 million doses of COVID-19 vaccines administered in San Diego County.[8]

» **March 8:** First shipment of single dose Janssen vaccine arrives in the region allowing for expanded access and distribution to populations who might have difficulty receiving a second shot (e.g., homebound people, people experiencing homelessness).

» **March 24:** Operation Shelter to Home ends at San Diego Convention Center.

» **March 30:** Health equity program Project SAVE is expanded to zip code regions of 92058, 92105, 92115, 92113, 92102, and 92114.

APRIL

» **April 7:** The County creates the COVID-19 Vaccine Educational Materials website to educate the public on COVID-19 vaccine safety and efficacy.

» **April 19:** COVID-19 treatment options are added in South Bay. Second Monoclonal Antibody Treatment Center opens in partnership with San Ysidro Health, federal, state and community partners.

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[8] May not include all administered doses and individuals vaccinated due to reporting delays. Total doses administered includes vaccines that have been recorded in SDIR and CAIR, including Federal Pharmacy Program. Some healthcare providers, including Veteran's Affairs, the Department of Defense, some tribal entities, and some prisons do not report to SDIR.

» **April 29:** One million San Diego County residents are fully vaccinated, representing 38.1% of San Diegans 16 years of age and older. The percentage fully vaccinated is comparable to the national and State rates, about 37% and 38% of the eligible population, respectively.

MAY

» **May 4:** The County begins contracting with additional seven organizations utilizing Community Health Workers to ensure not only all populations, but all six Health and Human Services regions of the County are provided with culturally and linguistically appropriate information and resources, focusing on areas with vulnerable populations.

» **May 7:** New County initiative enables businesses and community organizations to host mobile vaccination events by requesting a mobile vaccination team to come to their worksite in an effort to increase access to COVID-19 vaccinations, especially for employees whose schedules make it difficult to visit traditional vaccination sites.

» **May 20:** Over 40 million pieces of Personal Protective Equipment have been distributed by County Warehouse since January 2020 to all healthcare facilities and entities within San Diego who could not procure those items themselves.

» **May 21:** The State publishes Beyond the Blueprint for Industry and Business Sectors (Including Guidance for Mega Events) with effective date of 15 June 2021. This document outlines recommendations for businesses and the general public on how to protect themselves from COVID-19. The County aligns to this guidance.

JUNE

» **June 1:** The Delta variant becomes the dominant COVID-19 variant in the U.S., kicking off a third wave of infections during summer 2021.

» **June 8:** The County Board of Supervisors adopts the framework for the use of American Rescue Plan Act funding.

» **June 12:** County reaches its goal of vaccinating 75% of San Diego County residents ages 12 or older with at least one dose of vaccine.

» **June 13:** A second Vaccine Perception Poll was administered once the COVID-19 vaccines were readily available to the public to further understand attitudes and beliefs about the vaccines.

» **June 15:** California retires the Blueprint for a Safer Economy, which lifts capacity and physical distancing restrictions for most businesses and activities in the region, allowing almost all sectors of the economy to return to pre-pandemic capacity limits.

JULY

» **July 13:** Following national trends, the Delta variant is anticipated to become the most common strain locally, particularly amongst the unvaccinated.

» **July 23:** There is a significant spike in COVID-19 cases with 1,264 new confirmed cases reported to the County on July 22, the highest number since February 5, 2021, and the County is operating a collection of geographically distributed no-cost vaccination sites.

AUGUST

» **August 4:** Over 2 million San Diego residents have been fully vaccinated, and additional sites open.

» **August 26:** 1,865 cases reported, the highest number of daily reported cases during the Delta wave.

SEPTEMBER

» **September 2:** The County creates the Treatment for COVID-19 website to educate the public on COVID-19 treatment options available to them.

» **September 27:** Boosters of the Pfizer vaccine become available to fully vaccinated, eligible residents.

OCTOBER

» **October 7:** County testing sites institute self-swabbing procedures for the ease of the public and to facilitate faster processing.

» **October 13:** Eighty percent of eligible San Diegans 12 years of age and older are fully vaccinated with the primary series (one dose Johnson & Johnson or two doses of Moderna or Pfizer).

» **October 14:** County Health Care Providers work with the Rapid Response Team and Champions for Health to coordinate booster doses for facilities with immobile or bed bound patients.

» **October 20:** The U.S. Food and Drug Administration authorizes the use of booster doses of the Moderna and Johnson & Johnson COVID-19 vaccines.

» **October 26:** COVID-19 boosters are available for qualified persons via the County, retail pharmacies and providers.

» **October 29:** FDA authorizes Pfizer vaccine for emergency use in children 5 through 11 years of age.

NOVEMBER

» **November 6:** A third Vaccine Perception Poll was administered once booster doses and vaccines for children were authorized to further gage how attitudes and beliefs about COVID-19 vaccines have changed over time.

» **November 19:** FDA expands eligibility for COVID-19 booster doses for all individuals 18 years of age and older after completion of primary vaccination.

DECEMBER

» **December 2:** California Health Alert Network issues an alert identifying Omicron as a variant of concern.

» **December 9:** First Omicron variant case identified in San Diego.

» **December 21:** County publishes Preparing Youth for COVID-19 testing in English and Spanish on the county website.

» **December 29:** U.S. Food and Drug Administration authorizes oral medication for treatment of outpatient with mild to moderate COVID-19, approved for those at risk for progressing to severe disease.

2022

JANUARY

» **January 3:** FDA expands eligibility for Pfizer-BioNTech COVID-19 booster dose to 12 years and over.

» **January 4:** The County assisting the State of California Emergency Medical Services Authority in opening surge beds for overflow at general acute care hospitals.

» **January 5:** County requires verification of booster doses for all County employees, temporary workers and volunteers.

» **January 6:** County Facility Vaccinator Project is underway assisting Skilled Nursing Facilities with self-sufficiency with COVID and flu vaccines.

» **January 7:** 19,009 cases reported, marking the peak of the winter 2021-2022 Omicron wave and the highest daily reported number since the beginning of the pandemic in 2020.

» **January 18:** The Biden Administration announcing the distribution of free at-home rapid antigen COVID tests for Americans. At-home rapid antigen tests are more widely available and reported case numbers based on PCR tests are generally accepted as underrepresenting the true number of cases in the community.

» **January 19:** The Medical Operations Center enhanced to full activation Level 1, at direction of the Policy Group and in response to an unprecedented increase in patient care demands, staffing shortages, and prolonged emergency medical services transfer of care times, that have demonstrated significant strain throughout the entire healthcare system.

» **January 27:**

    » Multiple COVID outbreaks have occurred in January at Long Term Care Facilities and the County continues to support and has identified four post care sites that can accept COVID-19 positive patients thus relieving hospital bed congestion.

    » Eighty percent of eligible San Diego County residents five years of age and older are fully vaccinated with the primary series (one dose Johnson & Johnson or two doses of Moderna or Pfizer).

FEBRUARY

» **February 3:** Monoclonal Antibody Regional Centers have ceased treatment with REGEN-COV and BAM-ETE as these treatments are highly unlikely to active against the Omicron variant which is circulating as a very high frequency across the United States.

» **February 14:** The indoor mask mandate for fully vaccinated people except for schools, health care settings, shelters and correctional institutions is lifted as COVID-19 Omicron variant cases and hospitalizations are significantly reduced across California.

» **February 15:** Monoclonal Antibody Regional Centers offer sotrovimab, a monoclonal antibody that is effective against the Omicron variant.

» **February 23:** Over 5,000 San Diego County residents have died due to COVID-19 complications since the first local case was identified in March 2020 and vaccines continued to be urged.

MARCH

» **March 5:** The final day of intakes for temporary lodging at Public Health Hotels.

» **March 23:** 2.95 million or 93.7% of San Diegans age 5 and older are at least partially vaccinated (have received at least one dose).

» **March 30:** The Medical Operations Center transition from Level 1 to Level 2 with reduced current case rates and hospitalizations.

APRIL

» **April 4:** The Housing for COVID Isolation Program scheduled to originally end in March will remain available for high-risk placements of COVID-19 positive cases.

» **April 6:** The County expands services to support a safety net for underserved and vulnerable populations using mobile testing and vaccination units.

» **April 22:** The County of San Diego Health and Human Services is partnered with the California Department of Public Health to support CalScope, a populations-based study to learn how many Californians have antibodies to the virus that causes COVID-19 and how populations immunity to the virus may change over time.

MAY

» **May 9:** Monoclonal Antibody therapies will be made available to Long Term Care Facilities using County mobile van services.

» **May 17:** Pfizer-BioNTech COVID-19 vaccine booster dose is approved for children aged 5 through 11 years**.**

JUNE

» **June 6:**

  » A new dashboard was created to enhance the collection of data from Long-Term Care Facilities and from the Medical Reserve Corps.

  » Long Term Care Facilities experiencing an uptick in outbreaks however no increase in hospitalizations nor deaths.

» **June 13:** Boosters doses recommended for older adults to reduce infections and severe outcomes.

» **June 17:** The FDA authorizes emergency use authorization for Moderna and Pfizer vaccines for children down to 6 months of age.

» **June 20:** COVID-19 vaccines become available in San Diego County for children as young as 6 months old at pediatrician's offices, community clinics and some retail pharmacies.

» **June 27:** Telebriefing provided for Long-Term Care Facilities addressing best practices for safe ventilation and ventilation rebate programs that are available to assist the facilities.

Report Development Methodology

After Action Reporting involves a thorough data collection methodology to determine what was expected to occur during an emergency response, what occurred and how planning and preparedness can be improved for the next emergency response. Hagerty and the County utilized a multi-month process of stakeholder engagement to bring together different perspectives from across the response. This assessment culminated in observations and findings that Hagerty could analyze for their strengths, weaknesses, opportunities and challenges, to provide actionable recommendations for the County to improve its emergency planning, training, and future exercises programs.

Hagerty utilized a three-phase data collection process to conduct the assessment, using the following methods:

» Document review
» After-Action Interview
» Survey

Figure 4 shows the project timeline from project kickoff (2021) through the delivery of this report:

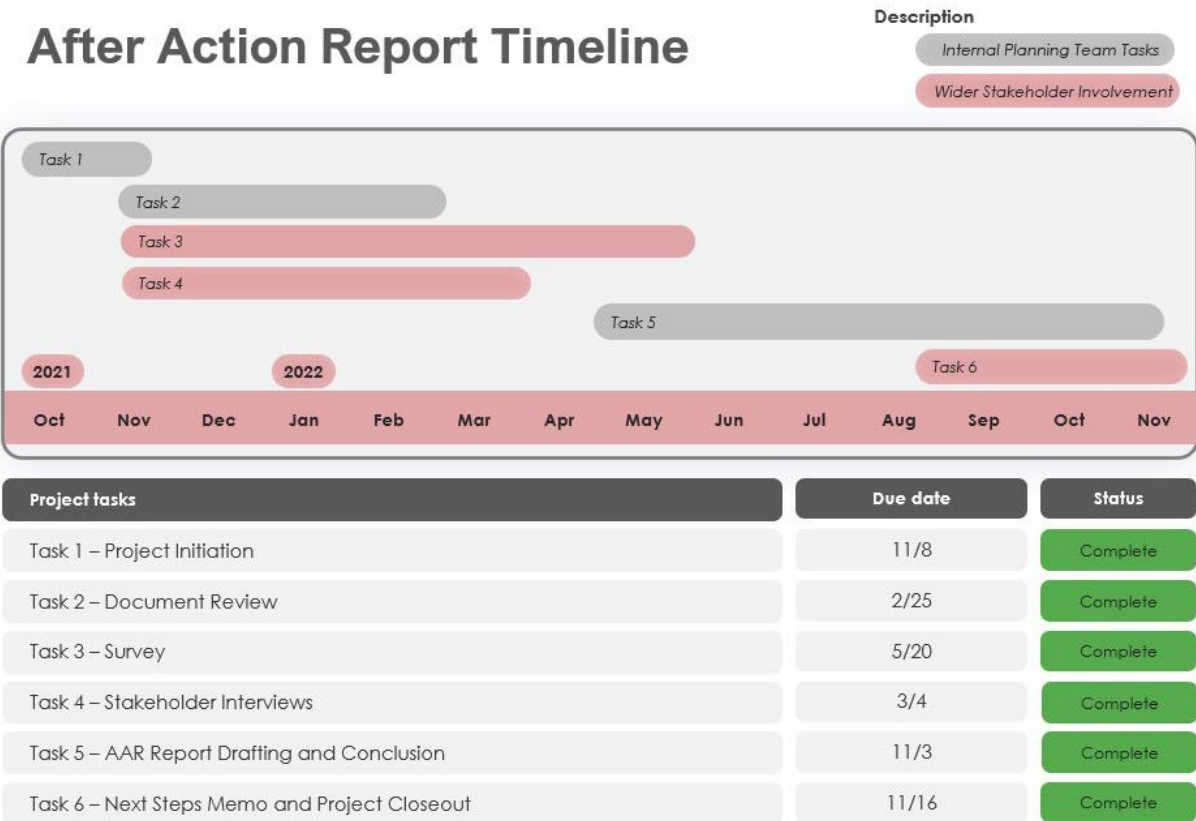| Project tasks	Due date	Status
Task 1 – Project Initiation	11/8	Complete
Task 2 – Document Review	2/25	Complete
Task 3 – Survey	5/20	Complete
Task 4 – Stakeholder Interviews	3/4	Complete
Task 5 – AAR Report Drafting and Conclusion	11/3	Complete
Task 6 – Next Steps Memo and Project Closeout	11/16	Complete

Figure 4: County of San Diego COVID-19 Response After Action Report Project Timeline

Document Review

The Document Review process included an evaluation and analysis of 311 relevant existing plans, documents, policies, and guidance publications to aid in determining the County's level of preparedness and the success of its response. The review process enabled Hagerty to gather vital information to provide well-informed subsequent recommendations.

Below are examples of categories of documents that were reviewed during the Document Review process:

- » Historical Documents (4 document reviewed)
  - » Hepatitis A Outbreak After Action Report
  - » H1N1 After Action Report
  - » 2007 San Diego County Firestorms After Action Report
  - » 2003 San Diego County Firestorms After Action Report
- » Planning Documents (68 documents reviewed)
  - » Emergency Operations Plans
  - » Department specific Continuity of Operations Plan
- » Operations Documents (243 documents reviewed)
  - » Incident Action Plans
  - » Communications with County businesses and public
  - » Job aids (e.g., training documents, role descriptions)
  - » Standard Operating Procedures
  - » Operational planning documents, etc.

After-Action Interviews

Hagerty facilitated 51 discussion-based interviews with both internal and external stakeholders currently or previously involved in some aspect of the County's COVID-19 operations. These interviews aimed to gather data from stakeholders about the preparation, response, and recovery activities for COVID-19 that identify best practices and areas for improvement in the following six focus areas:

- » Response Strategy
- » Operational Area Coordination
- » Public Information Management
- » Data Reporting
- » Community and Business Support and Recovery
- » County Continuity of Operations and Functions

These meetings allowed Hagerty to:

» Identify elements of the response process that were successful and should be maintained in future response efforts.

» Identify elements of the response process that were challenging.

» Identify areas of all-hazards planning and capability development for which stakeholders require further guidance, explanation, and/or training.

After-Action Surveys

Hagerty created and disseminated two online surveys to collect and analyze individual perspectives on the County's response efforts. An internal survey was disseminated to 1204 County employees and received 218 responses. An external survey was disseminated to partners working with the County on the COVID-19 response an received 20 responses. Hagerty then conducted a thorough analysis of the data.

The employee and external partner survey tools allowed Hagerty to solicit feedback from a sample of employees regarding their perception of how each department and the County developed and executed their plans, policies, procedures, and general operational knowledge of the COVID-19 pandemic response.

Results and Assessment

The following section presents an assessment of the focus areas identified by the County of San Diego for this evaluation. Most focus areas are broken down into a series of sub-focus areas as demonstrated in Table 2:

Table 2: COVID-19 Response Assessment Focus and Sub-focus Areas

Focus Area	Sub-Focus Areas
Response Strategy	Hepatitis-A After Action Report Lessons Learned Operational Area Emergency Operations Center Medical Operations Center Test, Trace, Treat, and Vaccination Operations Public Health Laboratory Operations Education and Community Outreach Community Partnerships
Operational Area Coordination	Planning Incident Command System Implementation Policy Group and COVID-19 Subcommittee
Public Information Management	Joint Information Center Operations
Data Reporting	
Community and Business Support & Recovery	Care and Shelter Branch Operations Reopening Compliance Finance Contracting
Continuity of Operations Plans & Functions	Staffing Facility and Real Estate Management

This after-action assessed each focus area using three distinct evaluation techniques. These included (1) Documentation Review, (2) Stakeholder Interview Process, and (3) After-Action Survey.

In some cases, key findings may apply to more than one of the focus areas; to the greatest extent possible, this document seeks to align key findings to the sections where they are most relevant.

Response Strategy

Hepatitis-A After Action Report Lessons Learned

Some of the findings are categorized as Hepatitis-A After Action Report Lessons Learned from the County's prior experience with public health response operations. These findings will specifically focus on the County's implementation of best practices and avoidance of pitfalls from the previous response.

During the Hepatitis-A outbreak, the County of San Diego developed and implemented innovative approaches to thwart the spread of the disease, providing effective practices that could be recreated and augmented in future health emergencies like COVID-19. These strategies were rooted in the transmission of the Hepatitis-A virus spreading mostly from person-to-person through fecal-oral contact in underserved communities including transient, homeless, and drug using populations. COVID-19 was also spread through person-to-person contact however, it differed by means. The spread occurs when an infected person breathes out droplets containing the virus. The three main ways the droplets spread include breathing in air close to an infected person exhaling, having small droplets and particles containing the virus land on eyes, nose, or mouth, and touching eyes, nose or mouth with hands that have the virus on them. While the COVID-19 pandemic was transmitting at an unprecedented rate, some of the same strategies could be successfully implemented, especially when performing outreach to at-risk populations.

Responding to the Hepatitis-A outbreak also played a critical role in establishing and improving upon countless partnerships at all levels of government and the private sector. These relationships translated into the COVID-19 response immediately, putting the County steps ahead of most other jurisdictions. The Hepatitis-A After Action Report identified previous areas for improvement and provided recommendations to consider during the next response.

One of the recommendations from the report stated:

"Develop a notification process to communicate pertinent information to municipalities and other governmental agencies to assist in response to emerging public health issues."

Prompt notification engages stakeholders and provides information across the County. Providing timely, pertinent information ensures a common operating picture that allows jurisdictions to participate in regional response efforts as early as possible. During COVID-19, the County created sector specific briefing meetings with subject matter experts to improve information sharing between the local jurisdictions and other community partners during this response.

At the beginning of the COVID-19 response, establishing appropriate partnerships with County, State, Federal, and other stakeholders was a major factor in setting up the County for success. Prior to the onset of COVID-19, the County and City established a Memorandum of Understanding outlining roles and responsibilities during response operations based on previous experience. The findings in this report acknowledge the benefit of having pre-established relationships with necessary stakeholders that the County developed in response to the Hepatitis-A outbreak.

Another one of the recommendations from the Hepatitis-A After Action Report stated:

"For future public health outbreaks with the potential for regional impacts, the County should enhance its use of incident management structures to coordinate regional actions. One key structure should be a policy group of County and regional executive leadership from affected jurisdictions that convenes regularly during the outbreak."

Organizing key players into support structures at the beginning of a response sets the tempo for regional coordination and decision-making. The structures should be flexible and are meant to be adapted within different operations to declare official health emergencies, procure/allocate resources, and conduct public outreach and education.

The County implemented guidance documents and Incident Command System structures that were modified for COVID-19 operations. This included bringing in additional key staff and senior leaders. A COVID-19 Subcommittee was established to improve the decision-making process during this response. The Subcommittee consisted of special staff such as Data, Reopening, and Compliance Leads and two supervisors, representing the Board of Supervisors and informing policy decisions. Evidence from after-action interviews, along with document reviews, highlighted the increased efficiency in response efforts yielded from this activity.

The effort to apply the lessons from previous experience positively impacted organization, planning, partnerships, documentation, Test, Trace, Treat operations, and overall coordination.

STRENGTH

The Hepatitis-A response recommended that Health and Human Services Agency staff receive Incident Command System training. The County successfully provided training aiding the initial response operations and staff organization by providing familiarity with the structure needed to begin response efforts efficiently. County Office of Emergency Services conducted Incident Command System trainings with Health and Human Services Agency Leadership in June 2019, prior to the onset of COVID-19.

STRENGTH

The County established decision-making structures and subcommittees early in the response to serve as an advisory board, enabling the County to quickly make informed policy decisions. The

County established these structures prior to any confirmed cases based on the recommendation from the lessons learned in the Hepatitis-A Outbreak After Action Report.

Operational Area Emergency Operations Center Operations

The Federal Emergency Management Agency defines an Emergency Operations Center as "The physical location at which the coordination of information and resources to support incident management (on-scene operations) activities normally takes place". [9] This centralized point should create easy pathways for stakeholders to seek pertinent information, coordinate resources, and maintain situational awareness through reported and documented data from community leaders. The Emergency Operations Center supports critical missions throughout the longevity of responses until returning to steady state operations.

The Operational Area Emergency Operations Center Operations findings in this report specifically focus on the County of San Diego's Emergency Operations Center initial activation, operational coordination, and operational support throughout the COVID-19 response.

These findings illustrate the strengths and areas of improvement for information sharing, stakeholder involvement, and logistical support to County testing and vaccination sites.

Interviews with stakeholders acknowledged the positive impact of a centralized point to look for support throughout the response. The Emergency Operations Center improved the process of requesting logistical support and resources for County partners by removing red tape, which typically hinders support efforts.

STRENGTH

The Emergency Operations Center established a daily morning meeting to ensure open communications between all internal parties, allowing response personnel to discuss data that had been collected, set daily planning objectives, and identify any other items of importance for consideration. This was successfully conducted to maintain a common operating picture amongst County response staff.

STRENGTH

The Emergency Operations Center enhanced information sharing efforts by creating and implementing a COVID-19 inbox where constituents could ask questions, allowing Emergency Operations Center staff to vet and research answers and create a database of Frequently Asked Questions to help ensure effective communication to the public.

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[9] Glossary. Federal Emergency Management Agency.
https://training.fema.gov/programs/emischool/el361toolkit/glossary.htm#:~:text=Emergency%20Operations%20Center%20(EOC)%3A,operations)%20activities%20normally%20takes%20place.

STRENGTH

The County expedited logistical needs to ensure quick turnaround for emergency requests. Using WebEOC and the removal of complexity from the decision-making process, the County was able to distribute personal protective equipment to County jurisdictions effectively and efficiently set up sites with proper medical materials and appropriate transportation methods, keeping vaccines in good temperature. This contributed to the overall success of establishing testing/vaccination sites.

STRENGTH

The County implemented uninterrupted virtual operations by allowing the Emergency Operations Center and staff time to adjust to virtual platforms instead of going directly into full-scale virtual operations. The adjustment period included providing brief introductory lessons with tips on using Microsoft Teams in daily Emergency Operations Center briefings. This structure allowed staff to work effectively and safely by maintaining social distancing; it also improved internal communication and can be used in future Emergency Operations Center activations.

STRENGTH

The Emergency Operations Center and Medical Operations Center continuously performed checks and balance reviews to ensure there was no duplication of effort or dual filing of incoming requests to remedy the challenge of differing logistical processes. These efforts also showed value when they were able to meet the logistical needs of entities that did not have access to WebEOC, like long-term care facilities and other medical facility partners.

Recommendation 01

Continue to provide tabletop exercises, training, and quarterly drills tailored towards collaboration between the different response structures for public health and emergency management, particularly with municipal partners. Demonstrate to municipal emergency management leadership the correct, direct communication lines for specific types of reporting, information sharing, and subject matter experts involved in disaster response operations. The direction should specifically delineate the types of information sharing requirements at each centralized point such as the Emergency Operations Center, Joint Information Center, and Medical Operations Center. Additionally, providing external partners with a Public Health Liaison will provide clear lines of communication for sharing accurate and timely information.

> COVID-19 was uniquely large and complex in nature. Around the country it was challenging for public health and emergency management agencies to align. In San Diego County, there is a culture of mutual preparedness that allowed for a successful joint response. However, there were times when both survey and interview respondents felt the two groups operated in silos, particularly early in the response. Additionally, though City

emergency managers and healthcare professionals had access to their respective sector calls weekly, there was a day to day disconnect between the partners. These disconnects between public health, County Office of Emergency Services, and local jurisdictions were impacted by the institutionalized barrier through WebEOC, as local jurisdictions were communicating with County Office of Emergency Services and not the Medical Operations Center unless they had a direct connection to staff within the Medical Operations Center or access to WebEOC. The disconnect stemmed between Test, Trace, Treat and Vaccine partners when trying to communicate effectively as well. Test, Trace, Treat, and Vaccine operations were established through their own structure outside of the incident command structure creating some confusion among to external agencies.

Recommendation 02

To prepare for national supply shortages, the County can further develop Memorandum of Understandings and contracts with local manufacturers and vendors, ensuring items can be manufactured and acquired locally as needed. Warehousing personal protective equipment in anticipation of another public health event may be beneficial on a small scale.

COVID-19 created an unprecedented need for personal protective equipment that strained supply chains throughout the country. Early in the pandemic, resource shortages became a challenge at the national level, impacting communities down to the County level. Before the County was able to provide resources, stakeholders were competing to meet their immediate needs. Despite the national challenges, the County of San Diego was able to provide over 51,756,965 items of personal protective equipment and over 2,321,257 test collection kits through the course of the 2-year response to thwart effects from the shortages.

Recommendation 03

The use of the Medical Reserve Corps Volunteer Program should be better institutionalized and appropriately staffed with Health and Human Services Agency and other agencies that are likely to respond to emergencies. The program should continue to engage volunteers in working with the County agencies outside of disasters, ensuring divisions are more open to integrating volunteers into operations by increasing familiarity with their capabilities and giving the opportunity to cross train volunteers prior to leaning on them in critical emergency situations. As the focus of the Medical Reserve Corps is the pre-identification and training of medical and health volunteers prior to a response, a separate channel for spontaneous medical and health volunteers should be developed to best respond to large-scale incidents.

While some staff communicated that volunteer resources were successfully utilized, many felt that medical volunteers, specifically the Medical Reserve Corps, were not used as robustly as they could have been. This can be supported by the surplus of volunteers compared to shifts available to them. Possible reasons for this may include the availability

of temporary and staffing agency workers, requirements for longer shifts than many volunteers were willing or able to commit to, and inadequate infrastructure necessary to support the seamless integration of volunteers into complex field operations.

Medical Operations Center Operations

As the nature of every disaster varies, so should the level of response to meet the needs of affected communities. While some small incidents require little operational coordination, there are some disasters that are more complex and require a more specialized coordination center. In incidents like COVID-19, it was beneficial for the County of San Diego to support the Emergency Operations Center with a Medical Operations Center staffed with public health experts.

County stakeholders provided feedback on the initial set up and operations conducted by the Medical Operations Center throughout the pandemic. The After-Action Report team analyzed that data and developed findings that identified the strengths and recommendations for the Medical Operations Center.

After the Hepatitis-A outbreak, the County of San Diego highlighted the importance of incorporating a policy group into the Medical Operations Center consisting of jurisdictional leadership. Interviews identified communication within the Medical Operations Center as a strength during the COVID-19 response, making it easier to plan and coordinate operations.

Although the Medical Operations Center was successfully communicating with public health officials, stakeholders felt that there was a gap in communications with the local emergency managers. Interview findings also noted a lack of proper storage and distribution methods for logistical resources needed by County community members.

STRENGTH

The Medical Operations Center addressed problems by troubleshooting delayed communications with hospitals at the beginning of the COVID-19 response. Hospitals were initially unsure of what resources they should plan to receive from the State and when they would deliver. Hospitals received identified emergency management lead contact information and a confidential chain of communication where the Medical Operations Center would give hospitals advanced notice of what they would be getting, allowing hospitals to plan more effectively.

STRENGTH

The County provided strong communication with healthcare partners by reaching out directly to inform them of decisions made and any new guidance received. Additionally, County leadership created task forces and a Healthcare Outreach Sector to distribute the information, further ensuring the healthcare partners felt included and stayed informed. Healthcare partners now feel comfortable reaching out to the County to solve other issues unrelated to COVID-19.

Recommendation 04

The County should build up operational capabilities for the storage and distribution of supplies needed to respond to a medical emergency for staff at all healthcare facilities that are actively working in the response. This should include increasing storage capacities through emergency facility designation or contracts, so that large quantities of supplies are more readily accessible.

> The County did not have an adequate distribution or storage space for handling the quantity (e.g., pallets) or type (e.g., items considered hazardous materials, like hand sanitizer) of goods for distribution to County staff. The Department of Purchasing and Contracting does not have its own warehouse, while the Medical Operations Center warehouse was focused on resources for the medical system of care and was not large enough for the needed capacity.

Test, Trace, Treat and Vaccination Operations

The findings below have been identified to represent the County of San Diego's operations to test, trace, treat and vaccinate community members. The County developed the Test, Trace, Treat and Vaccine (referred to as T3V) strategy in order to combat the COVID-19 virus. The strategy served to expand capacity for testing, conduct disease control operations, provide temporary quarantine housing, and incorporate community vaccination efforts once the vaccine was distributed for use.

The County announced the creation of the Test, Trace, Treat strategy in April 2020 and added Vaccine in Fall of 2020. While the Test, Trace, Treat and Vaccine team worked closely with every element of the County's COVID-19 response including the Emergency Operations Center, it developed its own organizational structure to address the elements of its mission, folding in existing elements of the response such as care and shelter operations and contact tracing. Replicating elements of the Incident Command System structure, the Test, Trace, Treat and Vaccine team developed its own administrative, budget, data, and communications teams. For example, the in-house Test, Trace, Treat and Vaccine communications team was responsible for developing all Test, Trace, Treat and Vaccine-specific messaging, including packaged materials and the website, and was embedded in the team's operations all the way through visiting testing and vaccination sites to ensure signage was appropriate. Test, Trace, Treat and Vaccine's organizational structure served as a best practice to aid information flow and produce the desired outcomes for testing and vaccination operations.

Table 3 details the major goals and strategies of the Test, Trace, Treat and Vaccination operations:

Table 3: Goals and Strategies for the Test, Trace, Treat and Vaccination Operations

Line of Effort	Goal	Strategies
TEST	Accessible COVID-19 Testing	» Build excellence in the Public Health Laboratory and regional system through leadership, epidemiological innovation, information technology advancements, and creative solutions for expanding capacity » Develop expanded and equitable capacity for testing to reduce transmission » Conduct effective and culturally tailored communication and outreach to promote testing to increase access for all residents » Provide timely and quality data analysis to support data driven decision-making and transparency » Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Test Strategy
TRACE	Timely investigations and culturally competent contact tracing	» Establish and enhance reporting and surveillance capacity to identify cases of COVID-19 » Build capacity and engage the community for timely and culturally competent investigations and contact tracing » Respond effectively to surges in cases and identified outbreaks » Provide timely and quality data analysis to support data driven decision-making and transparency » Provide onsite infection control assessment and support to area nursing homes, long-term care facilities and other similar acute care congregate settings » Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Trace Strategy
TREAT	Containment of the spread of the COVID-19 virus in the San Diego region	» Establish, manage and sustain COVID-19 isolation, quarantine, and shelter locations to care for affected individuals, families and persons experiencing homelessness » Provide Wrap-Around services to individuals in our care including medical, behavioral health and basic needs » Assist with safe isolation and individualized services to help with completion of isolation and quarantine » Provide clinically appropriate care for vulnerable populations

Line of Effort	Goal	Strategies
		» Provide timely and quality data analysis to support data driven decision-making and transparency
		» Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Treat Strategy
VACCINE	Protect lives and livelihood	» Strategies to achieve equity, social justice and cultural responsiveness
		» Early active and sustained engagement of community partners in the development and implementation of a regionally unified COVID-19 vaccine program
		» Utilize scientific evidence, regional data and guidance from clinical leaders from the county and community
		» Proactive transparency and communication to support the flexibility of approaches during fluid pandemic environment
		» Clear goals and measurable results
		» Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Vaccine Strategy

Throughout the response, Test, Trace, Treat and Vaccine remained a dynamic, complex, and continually changing organization, examining processes, and bringing in people and the community as needed. As the team was assigned the duty of standing up the County's vaccination strategy, they used lessons learned and strategies from testing operations to inform vaccinations for all San Diegans to include those homebound and less able to visit vaccination sites. The Test, Trace, Treat, and Vaccine team created its own organizational chart for vaccinations, including a vaccine data liaison.

An example of the complexity for the Vaccine team can be seen in Figure 5, the Vaccine Organization Chart, which built off the lessons learned from the previous Test operations:

County of San Diego COVID-19 Vaccine Organizational Chart
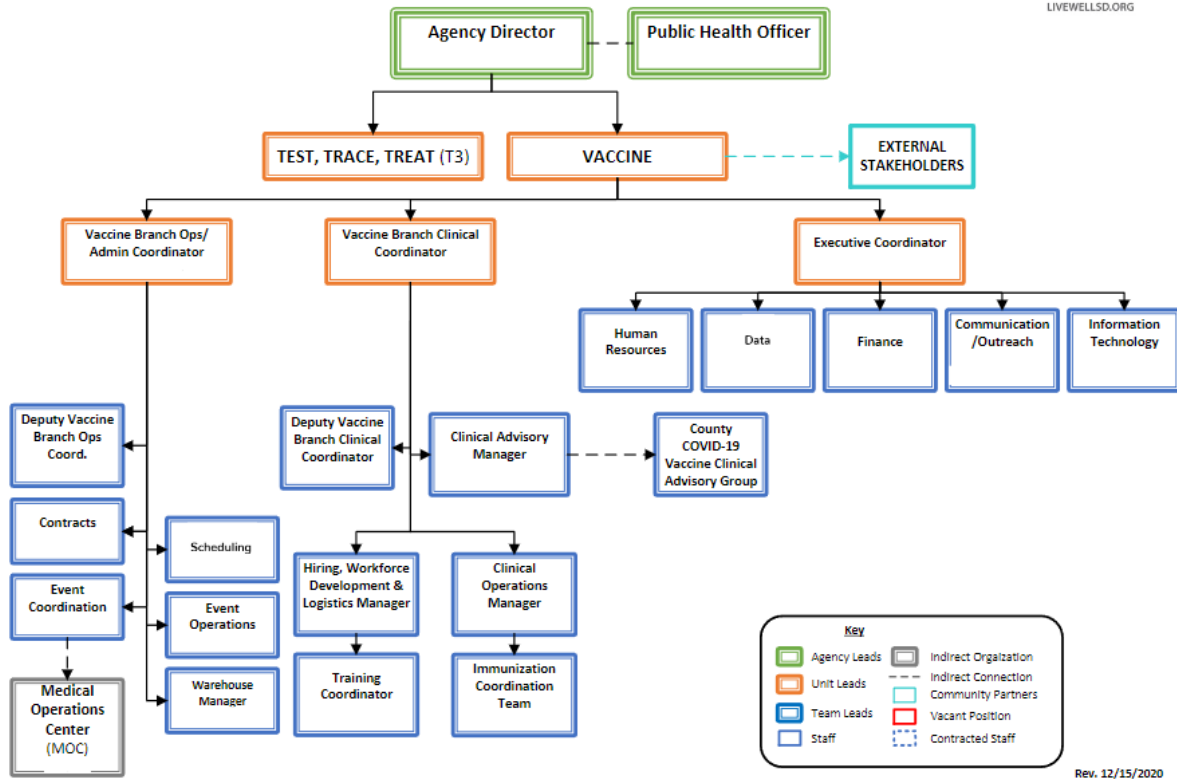
Figure 5: Example Vaccine Organization Chart for the Test, Trace, Treat and Vaccination Operations. Further examples of the response organization chart can be found in Appendix B: Response Documents.

The document review, interview, and survey findings identified this focus area as a major strength within the County of San Diego. Both internal and external stakeholders highlighted the support that the County gave to testing and vaccination sites, both County sponsored, and County operated, throughout the response. The overall communication and information dissemination amongst the sites led to a cohesive response. By providing Health and Human Services Agency points of contact for County sponsored testing and vaccination sites to turn to when they needed assistance, site leads were able to access the County's knowledge of resources available and best practices that underscore serving the whole community. The County's Test, Trace, Treat, and Vaccine team continued to improve processes throughout the response as lessons were learned, ensuring they properly trained staff and turned to subject matter experts when necessary.

Similar to the challenges discussed in Operational Area Emergency Operations Center Operations Recommendation 1, some of the County personnel involved in the Trace aspect of the strategy struggled with the flow of information from the Emergency Operations Center. For example, there were some policy decisions (e.g., Public Health Order updates) or direction changes on data and Geographic Information System needs that were not communicated downward in a timely manner and were often discovered through indirect channels. This made it

difficult for the Trace personnel to clarify changes to their roles, operations, and the identification of a singular contact for information.

STRENGTH

The Test, Trace, Treat, and Vaccine team utilized its infrastructure and lessons learned from testing operations to guide the establishment of the vaccination processes once vaccines were available. The Test, Trace, Treat and Vaccine team had already learned how to set up sites and had established partnerships, making it easy to duplicate during COVID-19.

STRENGTH

The County took various roles between vaccine sites run by partners including coordination and support to better resource and aggregate efforts. This coordination led to better information sharing amongst sites with different systems and helped ensure a cohesive and consistent response overall.

STRENGTH

The County improved communication with the various County partner vaccination sites by providing points of contact from the Health and Human Services Agency for clinical and operational questions to provide guidance and decision-making authority for needs at these sites. This line of communication enabled the vaccination site leads to communicate needs directly and identify what resources Health and Human Services Agency had available to provide in a streamlined fashion, while also enabling the County to provide consistent answers. This improved support in vaccine logistics, California Department of Public Health program certification/authorization, cold chain program establishment, clinical best practices including Quality Assurance / Quality Improvement processes, regional messaging for access to the public and guidance to improve equity of access for hard to reach/underserved populations.

STRENGTH

The County implemented data-driven, equity-focused strategies for testing and vaccinations, ensuring efforts reached underserved and vulnerable community members. Utilizing Geographic Information System mapping data and the Healthy Places Index[10] to manage and target impacted communities, the County developed numerous strategies including the South Bay Saturation Strategy and ACT RIGHT Strategy to promote equity. Interviews and survey data highlighted the

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[10] To increase access to the vaccine with a focus on health equity, the California Department of Public Health (CDPH) developed the Vaccine Equity Metric (VEM). For the VEM, CDPH identified priority zip codes based on a set of criteria which included CDPH-derived scores and the California Healthy Places Index (HPI), which was developed by the Public Health Alliance of Southern California. The County of San Diego utilized HPI scores at the census tract level to re-evaluate and apply this indicator of health outcomes locally, relative to geographies within the county instead of the entire state.

prioritization of these efforts, and the County earned awards for their success in equitable Test, Trace, Treat, and Vaccine operations[11].

STRENGTH

The County developed training materials for personnel performing testing and vaccination operations. This organized training enabled more vaccinators to serve the public more efficiently while other paramedics, nurses, and health professionals were able to return to daily work.

STRENGTH

The County established a clinical advisory group for vaccinations, which brought in experts from different sectors of health care that represented diverse populations and communities. Involving community experts in discussions helped carry similar messaging, adding to the community's trust in the County's efforts.

Recommendation 05

The County should examine existing civil service rules and memorandums to identify and address barriers to hiring staff in temporary positions.

> The Test, Trace, Treat and Vaccination response brought in staff from other roles throughout the County to support its operations. However, existing County structures such as civil service rules and negotiated items in Memoranda of Understanding created challenges in hiring and promoting people in temporary positions. Certain jobs required specific skillsets that were only appropriate for some County staff, but existing rules made it difficult to pay personnel appropriately for the positions requiring temporary promotion.

Public Health Laboratory Operations

The County Public Health Laboratory served a critical role in COVID-19 testing as a function of the Test, Trace, Treat Strategy. Initially, the Public Health Lab sent all test specimens to the Centers for Disease Control and Prevention, but by the end of February it was certified by the Centers of Disease Control and Prevention as one of the first national labs to be able to test for the 2019 novel coronavirus. Over the coming months, the Public Health Lab continued to expand its testing capacity, leading the nation.

The Public Health Lab has training and experience in a variety of different public health responses within the County (e.g., Zika virus, Hepatitis A, norovirus, salmonella/foodborne disease). However, the COVID-19 pandemic posed a unique challenge to lab operations given the sheer volume of testing required. Additionally, the delivery of COVID-19 test results contrasted with prior

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[11] "Distributing COVID-19 Vaccines Equitably". County News Center. March 30, 2021. https://www.countynewscenter.com/distributing-covid-19-vaccines-equitably/

responses. Typically, the ordering physician provides test results back to the patient. However, in this case the lab was responsible for providing results as there was typically no ordering physician involved. The lab was tasked with establishing processes for managing the delivery of test results to patients to fulfill the needs of the COVID-19 response. These processes were vital to reducing the spread of COVID-19 and eventually conducted by staff leading testing operations from the Test, Trace, Treat team.

As COVID-19 cases continued to rise within the County in the late spring into summer of 2020, the County contracted with Helix OpCo, LLC Labs to provide additional testing support for the lab. This enabled the Public Health Lab to continually improve and streamline processes, creating space to focus on other populations. The expansion of the County's testing capabilities allowed the County to continue providing for the demand as case rates rose, exceeding capabilities of the State. Additionally, once test results became auto generated, the result turnaround time was significantly reduced.

STRENGTH

The County contracted with Helix for processing test results to augment the Public Health Laboratory's testing capabilities, which was constrained by physical space available in the lab to meet high demands. Helix offered tests at a reasonable cost with a 24-hour turnaround time, which allowed the County to increase capacity and meet rising demand at a significantly lower cost.

Education and Community Outreach

The Live Well San Diego vision, the County of San Diego's regional collective impact model and population health framework, relies on the contributions of over 500 officially recognized partners and other stakeholders aligned to a common agenda. Early in the pandemic, through Live Well San Diego's sector structure, the Education and Outreach Branch rapidly activated and expanded existing framework to develop 11 sectors and 10 subsectors that successfully engaged and mobilized thousands of stakeholders per week through telebriefings, emails, webpages, and presentations providing up to date COVID-19 information and resources, as shown in Figure 6:
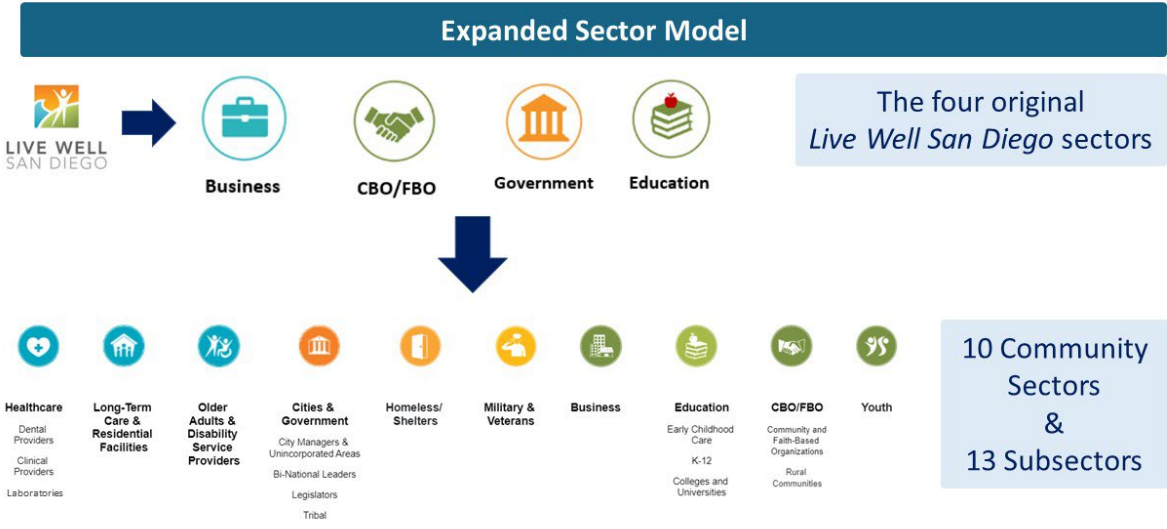
Figure 6: The Live Well San Diego Sector Model

The sectors (and sub-sectors) included: Business, Community-Based (rural), Faith, Youth, Education (Early Care, K-12, Higher Education), Government (City Managers & Unincorporated Areas, Bi-National Leaders, Legislators, Tribal Nations), Healthcare (Clinical Providers, Dental Providers), Homeless/Shelters, Long-Term Care & Residential Facilities, Military & Veterans, and Older Adults & Disability Service Providers. As the County's response to the pandemic evolved rapidly, it was essential that information continuously flowed from sectors to their stakeholders. To effectively reach the most vulnerable populations of the County, it was imperative that information was tailored to reach focused groups and address sector stakeholders and community leaders. The sector support staff collaborated to make real-time updates to the sector webpages and disseminate timely information via email. Each sector included a Medical Subject Matter Expert from the County's clinical team to ensure that stakeholders had access to clinical expertise; they responded to questions via email and real-time during the telebriefings. One of the most critical experiences stakeholders reflected on was the importance of the sector briefings and consistent communications. The guidance distributed at these briefings also incorporated feedback from stakeholders documented in ongoing needs assessment surveys. Figure 7 shows an overview of the sector engagement throughout the response:

Sector Engagement Overview
March 2020 through May 2022

10
Community Sectors

794
Total # Telebriefings Conducted

11
Subsectors

99,230
Total # Telebriefing Views

294
Completed Presentations

1,821
Total Eblasts

11,896
Total Presentation Attendees

19,848
Eblast Recipients

Figure 7: An overview of sector engagement which demonstrates the wide-reaching efforts of the Education and Community Outreach Branch.

In addition to tailoring information to specific sectors, the COVID-19 pandemic amplified the importance of culturally and linguistically appropriate communication and 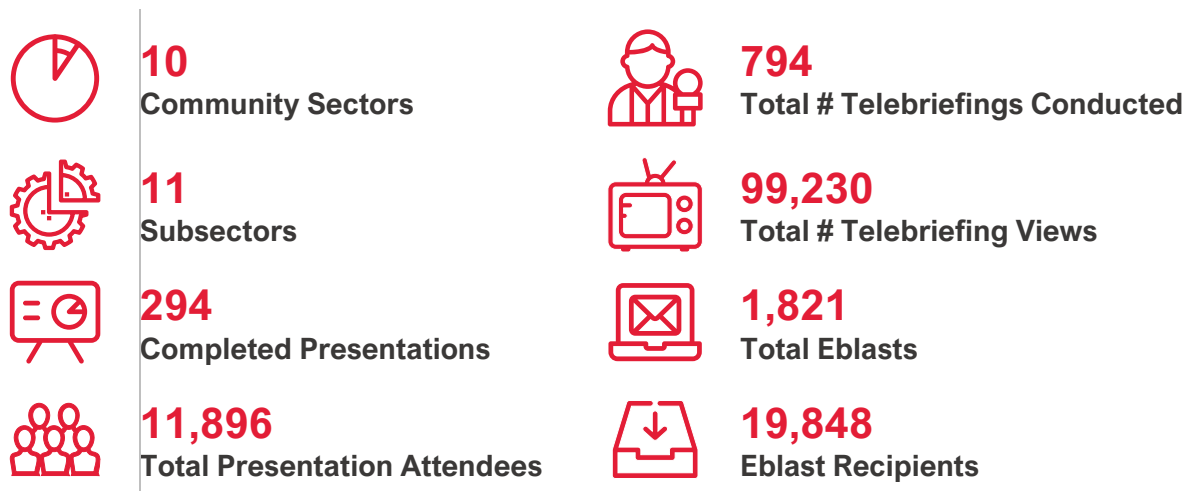outreach to deliver critical health information and resources to the diverse population that live and work in San Diego County. The County contracted with organizations that work with Community Health Workers to enhance efforts towards health and social equity and provided feedback and collaboration that is essential to reducing the spread of COVID-19 and increasing access to resources by eliminating barriers such as language or mistrust.

The County established a collaborative model to work closely with Community Healthcare Workers (also known as Promotores or lay health workers) who understand the needs and are trusted messengers of the populations most impacted by COVID-19 – African American, Asian/Pacific Islander, Latino/Latinx, and refugee communities, as well as impacted geographic areas in each Health and Human Services Agency Region. Partners used a variety of culturally relevant and inclusive strategies to address attitudes, beliefs and ultimately behaviors regarding COVID-19 prevention, testing, contact tracing, treatment, and vaccination. Through this collaboration, Project SAVE (Scheduling Assistance for Vaccination Equity) was created to address equity in vaccination rates for these priority populations. For this project, which was originally piloted in South Region and then expanded County-wide, Community Healthcare Workers provided vaccination site referrals, resource table events in neighborhoods and communities that are disproportionately impacted by COVID-19, hosted vaccination events, created campaigns to address vaccine hesitancy, and provided vaccine appointment scheduling assistance through a system where dedicated blocks of appointments were saved specifically for Community Healthcare Workers clientele. Figure 8 shows the number of individuals the Community Health Workers engaged throughout the response:

Community Health Worker Outreach

Data from August 2020 through June 29, 2022

2.9 million
People reached through focused outreach

>46,000
Individuals assisted in testing and vaccinations

>8,100
Project Save vaccine appointments made

32.4 million
Views of multimedia outreach

>515,000
Attendees across 2,090 outreach events
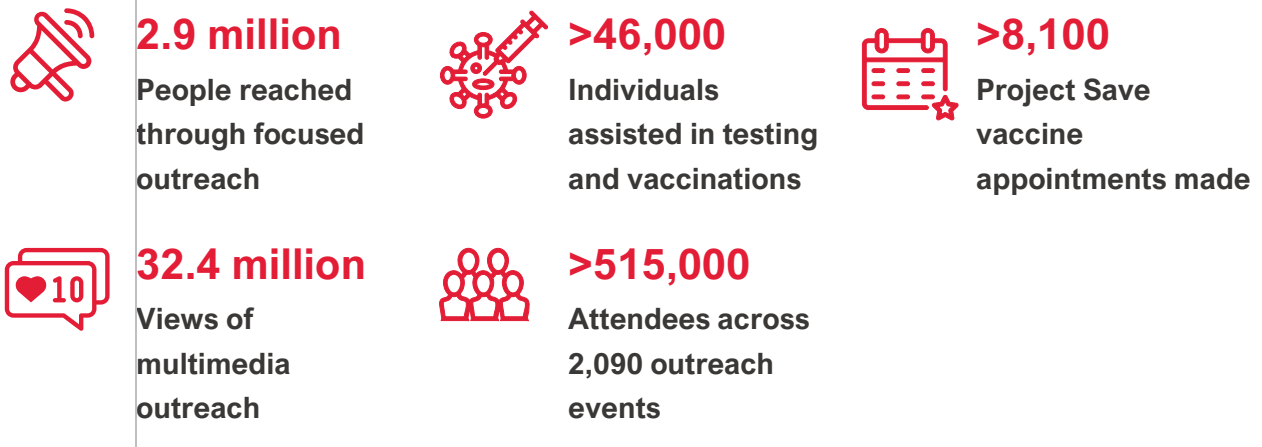
Figure 8: An example of the widespread outreach of the Community Health Workers collaboration.

STRENGTH

The government and community partnership working with Community Healthcare Workers and Promotores has bolstered the capacity and financial sustainability of small organizations and demonstrated success and high potential for sustainability in addressing health disparities and related challenges in a pandemic response and other public health areas.

STRENGTH

The County utilized its existing *Live Well San Diego* community sector structure to establish regular communications such as telebriefings, websites, and answering questions throughout the response, which was critical to establishing trust with stakeholders and ensuring accurate, timely information was distributed. Sector communications also served as an avenue for the County to connect with various communities and gather feedback on their specific needs.

STRENGTH

The comprehensive scope of the population health model engaged diverse partners and stakeholders in meaningful and effective ways by leveraging existing partnerships and integrating at-risk populations from the outset, which bolstered collaboration and developed new partnerships. This also led to the development of helpful tools, programs, and processes that effectively addressed community needs. Table 4 lists additional successes for the Education and Outreach Branch:

Table 4: Examples of successes for the Education and Outreach Branch model

Sector	Success
Community and Faith-Based Organizations	Developed instructional how-to videos on using online resources to order food delivery, practice mindfulness, stay socially connected and get basic needs while at home.
Education	Formed a robust relationship with the County of San Diego's Office of Education to form a countywide approach and enhanced services to support schools from all 42 school districts in re-opening safely and addressing cases in schools by creating guides and decision trees.
Older Adults	Aided the older adult and disabled population in bridging barriers to accessing meals (e.g., Great Plates Delivered Program), groceries, and medicine by providing outreach and education on the County's various food assistance options.
Homeless	Compiled and distributed over 30,000 COVID-19 hygiene kits to the unhoused population.
Binational	Developed the only cross-border collaboration of its kind and shared information and resources, such as a donation of 83-pallets of Personal Protective Equipment to public hospitals, clinics, and first responders throughout Tijuana.
Tribal	Developed regular communications with tribal leaders and offered one-on-one consultations to casinos on COVID-19 reopening plans.
Business	Hosted two free COVID-19 Safe Practices Certificate Programs that gave employers access to speakers on the spread of COVID-19, how to promote mental health in the workplace during the pandemic, and how to address vaccine misinformation.
Youth	Launched the Youth Emergency Readiness Ambassadors program which employed 20 young people from across the region to create and disseminate youth-focused communications that would prepare San Diego County youth for an emergency, including COVID-19.

STRENGTH

Outreach and education were heavily informed and driven by data, stakeholder feedback and ongoing assessments. The California Healthy Places Index helped focus sector and Community Healthcare Workers outreach by guiding priorities to ensure resources and information were directed to the appropriate areas and populations to have the most impactful result. COVID-19 vaccination and testing data assisted in providing specific information on how and where outreach could be enhanced.

Recommendation 06

The County should continue to ensure that all materials and information are provided in a variety of languages, at a minimum in all threshold languages and that a robust system and staffing for reviewing translations exists. Figure 9 provides a few example responses from the external survey related to translation services:

> Translation Services should have been identified early on so that we knew who the resources were and how to access them. We had to translate many documents in at least 5 languages and initially this was a challenge.

> Translations services contracts should have been expanded to ensure information was being translated faster.

> More translation services were needed.
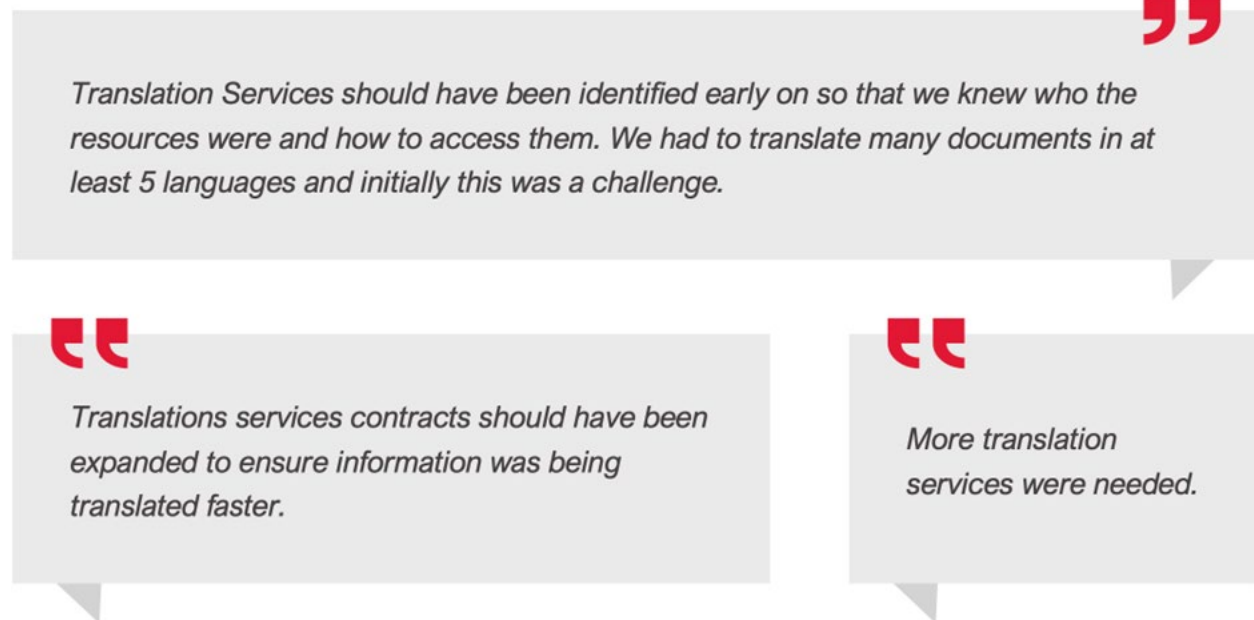
Figure 9: Sample responses from internal survey question #13 and internal survey question #57: Please describe any areas of improvement in how the County of San Diego responded to COVID-19 that you would like to provide for the After-Action Report.

Community Partnerships

Responding to any incident requires preexisting partnerships amongst subject matter experts, jurisdictional leadership, and all other potential stakeholders across the community. This focus area highlights these partnerships during the COVID-19 response and provides feedback on their incorporation into the County's operations.

After responding to a previous public health incident, the County of San Diego was able to leverage many of the same partnerships during COVID-19. These relationships expedited testing/vaccination site formations, enabled trust within leadership collaboration amongst stakeholders, and avoided common pitfalls in response operations such as exceeding capacities at health facilities.

The County wanted to ensure that the community was provided with the support and resources they needed to prepare for and prevent the spread of COVID-19, so they developed different community sectors, tailored to a variety of organizations, agencies, and groups. These included

Child Care Services, Health Professionals, Faith-Based Organizations, Schools: K-12, Older Adult and Disability, and many more.

As another way to increase information access to community members, the County provided critical information on the Partner Relay Network which was updated on a regular basis. Community agencies were able to find the information pertinent to the community members they serve, translate it appropriately, and disseminate it while also having the ability to relay information back to the County.

There was also a focus on underserved community partnerships ensuring equity amongst the different groups. By establishing liaisons with tribal nations and Federal organizations at the border, the County was able to understand cultural and governing differences.

STRENGTH

The County successfully set up testing sites by leveraging pre-established relationships (i.e., County Fire, community colleges, schools), formed through the Hepatitis-A testing efforts, to identify and meet the needs of the community. These relationships were built upon further when standing up the vaccination sites. This process allowed the County to foresee what public health communications between County partners were needed to set the sites up effectively and efficiently and allowed community members to test at significantly high rates, creating a model process for the rest of the State.

STRENGTH

The County increased effective collaboration amongst community partners at the onset of COVID-19. By establishing advisory groups, staffing partners in the Emergency Operations Center, inviting community leaders to decision making meetings, and disseminating information and trainings appropriately, community partners developed a high level of trust with the County, provided expertise, and recruited necessary personnel to help respond to the pandemic.

STRENGTH

The County developed strong and lasting relationships with tribal nations by facilitating meetings regularly, making the tribal nations feel more welcome and comfortable talking to the County. These meetings can continue after the pandemic to address other issues.

STRENGTH

The County prioritized operations and information-sharing at the border, aided by liaisons between the County and Baja California. The County was also able to provide context from State and Federal guidance to all the decisions and policies being made, which strengthened the relationship.

The County implemented strategies to avoid overwhelming hospital systems by expanding patient capacities in other facilities and following/implementing Centers of Disease Control guidance to slow the spread. The County also identified and applied the best methods for resource procurement to obtain personal protective equipment and medical supplies. This meant hospitals were able to better manage patient care.

Operational Area[12] Coordination

Planning

The success of any incident response directly correlates to the efforts put into advanced planning. The findings in this focus area detail the steps the County of San Diego took ahead of the initial response to ensure the County was prepared for a pandemic.

The County was in a very good position to respond to COVID-19 prior to the onset of the pandemic, due to their experience with previous outbreaks and lessons learned. These experiences enabled the County to quickly response to COVID-19, avoiding common pitfalls. Operational planning prepared the County for testing/vaccination site set up, information dissemination, stakeholder partnerships, healthcare facility surge capacity, staff training, documentation, data tracking, and much more. Both internal and external stakeholders found this area as an overall strength within the County.

While planning efforts greatly impact response operations, the nature of emergencies and disasters can make it hard to stay ahead while focusing on immediate needs.

The County's culture and integration between emergency management and public health had a positive impact on the response and helped break down typical silos between the two staffs as the response went on, aided by the pre-established relationship between Office of Emergency Services and Public Health. For example, integration between the Emergency Operations Center and the Medical Operations Center helped communications in operational efforts.

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[12] The San Diego County Operational Area (OA) was formed in the 1960's to assist all of the cities and the County in developing emergency plans, exercising those plans, developing Mutual Aid capabilities between jurisdictions and, in general, establishing relationships that would improve communications between jurisdictions and agencies. The OA consists of the County and all jurisdictions within the county.

STRENGTH

The COVID-19 transition plan was designed to allow for demobilization or remobilization of personnel based on key metrics, data, etc. This enabled needed staff to be pulled back from the pre-pandemic positions they had returned to during the surge periods (e.g., Delta variant).

STRENGTH

The County used knowledge and experience from previous outbreaks to strategically plan for pandemics by updating a Memorandum of Understanding between the City of San Diego and the County for the first time in 35 years, outlining the roles and responsibilities of each entity, and identifying the administrative structure of the response. Both governments were able to quickly determine their logistical responsibilities for response operations. This created an understanding of fluid roles between the two governments, and healthcare providers emphasized the successful results of being able to come together quickly to make informed decisions.

STRENGTH

Early experience gained from the County's support to the Federal Incident Management Team with screening, quarantine and isolation of evacuees from Wuhan, China gave the County a head start in appreciating COVID-19 response needs, potential challenges, and what disease transmission within the County might look like prior to any localized cases. The County was able to apply these lessons learned in establishing its response plans as well as develop strong relationships with local Federal partners. These relationships also paved the way for advanced activities such as establishing monoclonal antibody sites.

STRENGTH

The County ensured their staff were incorporating equitable solutions into response operations by requiring training and creating a panel to discuss gaps and develop solutions that could help all members of the community uniformly. Operations like disseminating guidance require unique methods for specific communities due to differences in technology accessibility, cognitive abilities, and physical barriers, all affecting individual capacity for information interpretation. By considering these implications in the planning stages, staff are more aware of community needs in both response work and daily operations.

Incident Command System Implementation

Organization is the key to settling chaos that ensues during disasters. Emergency managers utilize the Incident Command System as a structure to identify roles, responsibilities and key positions, communication pathways, resources, and overall coordination of response operations. These findings showcase the County's implementation of this structure.

By incorporating liaison roles into communications between stakeholders, interview participants felt communications with regional medical systems were strong. The information-sharing process happened in real time with clear direction on where to find further details.

The Incident Command System was supplemented by the County's establishment of a Policy Group. The Policy Group was comprised of senior administrators and executives or their appointed representatives who are authorized to commit County resources (including funds). This group provided coordinated decision making and resources allocation among cooperating jurisdictions and other agencies. They were also able to harmonize County policies and provided strategic guidance/direction when supporting incident management activities.

Maintaining flexibility is necessary to adapt to the conditions of any disaster. The County's Disaster Service Worker model brought in additional staffing for the response, however Emergency Operations Center staff found there was an inconsistent level of training for these workers, especially among those who had not had prior response experience.

Figure 10 demonstrates a County Organizational Chart from November 2020:
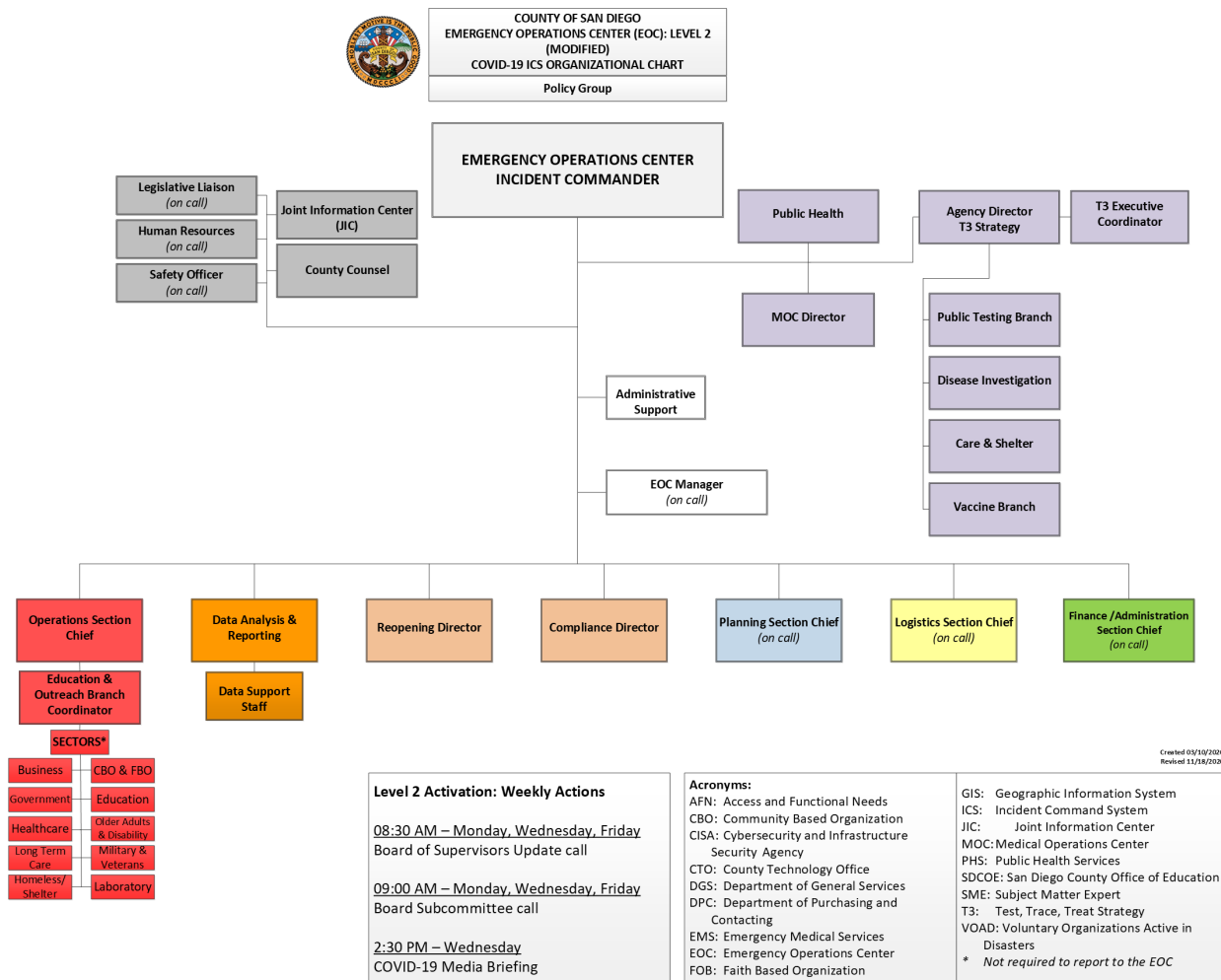
Figure 10: An example County Incident Organization Chart from November 2020 demonstrating the complexity of the response. Additional organizational charts can be found in Appendix B: Response Documents.

As the response continued, the organization grew and adapted based on lessons learned earlier in the response. Eventually, Test, Trace, Treat and Vaccination branch developed its own structure, absorbing other sections of the response as needed.

STRENGTH

The County maintained a strong relationship with the regional medical system by assigning a liaison from the Medical Operations Center that was embedded into the Incident Command System Emergency Operations Center structure. This enabled real-time communications, which was especially important as the County was trying to acquire more personal protective equipment and make sure the hospital system knew they were equitable in allocation and apportionment of requests.

The County successfully leveraged the expandable nature of the Incident Command System to meet the needs of the whole community during their COVID-19 response. The pandemic required the County to establish additional branches and units to accomplish response activities and align with State and Federal COVID response guidance, including reopening, compliance, and the integration of the Test, Trace, Treat and Vaccination operations.

Recommendation 07

Continue to annually review the County's Disaster Service Worker training requirements and recommend additional trainings based on current hazard trends and perceived gaps. Consider regularly offering ICS-300 and 400 courses for interested staff to increase the number of Disaster Service Workers trained in the Incident Command System for expanding and complex incidents.

Policy Group and COVID-19 Subcommittee

When making decisions during an emergency incident, leaders are sometimes given only partial information and a limited time to make decisions. Per the Incident Command System and normal County of San Diego standard operation procedures for Level 1 activation, the County stood up a Policy Group. Due to the nature of this crisis, and from a lesson learned from Hepatitis-A, a COVID-19 Subcommittee was also established and led by the County Chair of the Board of Supervisors. An additional Supervisor was also selected by the Board to add depth to the senior level leadership within the Subcommittee. The Subcommittee supported the Policy Group in making strategic resource and policy decisions. The supervisors within the Subcommittee also represented the other three Board Supervisors and routine meetings were established between the Subcommittee and other Board offices to share information and provide response operation updates. The Subcommittee leadership also spearheaded public information efforts through dedicated local press conferences. These findings focus on the performance of these groups during the response to COVID-19.

There were many strengths within the utilization of these groups. Assessment data highlighted the benefits of trustworthy communication methods, consistent meetings, and the accurate interpretation of guidance. Policy, guidance, and data-driven decisions constantly changed and evolved throughout the response due to the frequent changes in the pandemic development. Maintaining these groups provided decision space for changes to policy and guidance to be made and further communicated to affected community members.

The County convened the Policy Group to declare a local emergency and local health emergency early based on their experience with the Hepatitis-A outbreak. This enabled the County to quickly mobilize/activate community partners and build trusted communications channels, allowing the

County to provide situational awareness to stakeholders and establish trust before they relied on other sources.

STRENGTH

The County had a clear process for making decisions by elevating issues to the subcommittee. The establishment of the COVID-19 Subcommittee required leaders to meet frequently (and on short notice when needed) without requiring the entire Board of Supervisors to convene to make a decision every time direction or guidance changed, which happened frequently. The subcommittee was able to provide or support resolutions to issues faced in response operations.

STRENGTH

The County made the decision to align with Federal and State COVID-19 Response guidelines and orders to keep a documented paper trail on all decisions and why they were made. This decision also reduced complexity for many stakeholders and community members like tribal nations, who followed and implemented Federal guidance.

STRENGTH

Lawyers from County Counsel had seats in the room with the subcommittee to help serve the needs of the long-term response. County Counsel's inclusion ensured all actions and Public Health Orders aligned with pertinent legal guidance.

Public Information Management

Joint Information Center Operations

Public information management was an integral component of the County's response. As a novel virus, information regarding COVID-19 and its impact was constantly changing. Guidelines for managing the spread, particularly early in the response, would change at times over the course a few hours. The rapidly evolving situation presented a challenge for public information professionals at all levels of government. As part of public information management, the County established its COVID-19 Joint Information Center to centralize public information operations. The Joint Information Center coordinated with all different response components including Test, Trace, Treat and Vaccination and the community sectors established by the County. Through the activation of the Joint Information Center, the County compiled, coordinated, and relayed COVID-19 information to the public and media with the goals of promptness and accuracy at the center of all efforts.

As in all emergency activations, at the beginning of the response communication personnel worked out of the Emergency Operations Center's designated Joint Information Center. That space offered direct access to the area where the Policy Group was located, greatly aiding in quick access to information from decision makers, key members of the incident command staff,

and other experts. When the entire COVID-19 Emergency Operations Center moved to accommodate space for other incident response operations, the Joint Information Center moved to a room next door to the space used by incident command to assure the same level access and proximity to subject-matter experts and other key staff.

Many Joint Information Center respondents noted the positive impact of working closely with their team day to day. This "bullpen" style setup ensured consistency in answers and provided individual Joint Information Center staff with the expertise and knowledge of colleagues. Proximity to subject matter experts also served as a key resource as the Joint Information Center obtained information and crafted messaging, developed marketing material and other collateral, drafted talking points, planned social media, and worked on responses to media and high-profile inquiries. Importantly, this high-level of access and invitation to meetings helped mitigate the silo effect that comes naturally with teams taking on different aspects of the response.

County leaders and public health officials served a public-facing role throughout the response in relaying information to the public through multiple forums (e.g., press conferences, meetings). In addition to traditional media and other web pages, the County was able to expand on its existing social media followings – among the largest in the nation for a government entity – by delivering public messaging across multiple platforms. However, the pressure on data professionals for precise and up-to-the-minute data under extreme time constraints, information critical to inform public communications, created challenges in the demands of daily press conferences.

STRENGTH

The County successfully established a Joint Information Center to answer external and media questions. Joint Information Center staff worked closely to one another within the same room and in close proximity to subject matter experts and County officials, allowing them to hear information other people were receiving and direct questions as they came into the appropriate staff member.

STRENGTH

The County prioritized the flow of accurate and actionable information in its communications with the public. This approach included holding near-daily virtual forums and communicating guidance as encouraged by health officials to gain public trust. As part of wider COVID-19 response efforts focused on health equity, the County also emphasized equity in communications by identifying gaps with underserved populations and providing solutions where needed. These community meetings and communications were constructive and allowed the County to build better relationships and more trust for future engagements. These meetings also helped shape communications/outreach materials so that they were responsive to the unique needs of San Diego County's strong and diverse communities.

STRENGTH

The Joint Information Center had proximity and access to key personnel (e.g., doctors and data staff) at all times. Access to subject matter expertise on demand helped inform the Joint Information Center's work on messaging and media relations. Joint Information Center participants had access to nearly all meetings and discussions, which allowed the entire team to stay up to date. This proximity model also helped build trust and familiarity between Joint Information Center staff and subject matter experts which should be replicated in future long-term responses, such as earthquakes, where access to information is critical. It also creates personal relationships and subject matter experts frequently would stop by the Joint Information Center to say hello and engage in discussion.

STRENGTH

County leaders on the COVID-19 Subcommittee took a primary role in relaying information to the public through press conferences, town halls and other means. By standing out in front of the response effort publicly, the Subcommittee was able to absorb external pressure for the response. In doing so, they allowed the rest of the County responders to focus on their daily tasks and efforts, shielding them from political and media pressures.

STRENGTH

The County successfully leveraged its robust social media following. The County conducted efforts (e.g., paying for advertisements in certain regions and for specific high-risk populations around the County) to expand public messaging as needed. Social media messages were crafted taking into consideration the platform being used and timing of when posts would have the highest chance of being read. Critically, no information would be pushed out on social media until it was confirmed.

Data Reporting

The tracking and analysis of COVID-19 information, including case rates, testing, vaccinations, hospitalizations, outbreaks, and more, was integral throughout the COVID-19 response. The County's data staff developed both regularly updated and ad hoc products through a process including collection, analysis, and quality assurance to condense complicated public health information into easily understandable products like the Board of Supervisors COVID-19 updates. Data was also communicated to the public through the COVID-19 Watch, Weekly Coronavirus Disease 2019 (COVID-19) Surveillance Report. Data products were presented publicly through press conferences, meetings, forums, and websites to display COVID-19 updates for County residents. An Open Data Portal was also utilized to provide machine readable data to external partners enabling users like the public, media, and academic researchers to download data for analysis daily. As the state implemented Blueprint metrics for economic reopening, the County

made the decision to internally calculate those metrics and provide to the state, so that all test and case data would be accurately included in calculations for Blueprint tier designations. Internally, data deliverables played a significant role throughout the response in informing decision making, identifying impacted populations, and guiding the allocation of resources in San Diego County (e.g., tests, vaccines) in an equitable fashion. To achieve this, the County leveraged multiple teams across the response to provide data up to the central Emergency Operations Center data team.

With the extent and length of the COVID-19 response, data reporting was required on a scale much greater than previous response efforts. For large volumes of data, such as testing and vaccination numbers, personnel working on data deliverables felt Information Technology capabilities were not robust enough to meet data collection needs. This included the challenge of parsing data in priority situations for leadership and media requests, especially as data was often reported in disparate formats requiring more time for transformation and analysis. Additionally, due to the number of people involved in the response and cadence of data required, staff faced obstacles in prioritizing requests, reviewing products for quality, and sharing products appropriately.

STRENGTH

The County publicly published daily data products including information on cases, testing, vaccinations, hospitalizations, and more, which were presented in public forums such as press conferences as well as posted online. In addition, the County responded to numerous data requests from media, partners, and other constituents throughout the response in close coordination with the Joint Information Center. Although some respondents found the County's website difficult to navigate and decipher due to the volume of COVID-19-related webpages, many community members and external partners acknowledged the County's website as being user friendly and educational on COVID-19 data and resources, which included as a priority presenting information as it related to ethnic and equity populations. The team, while stretched, regularly took a step back to review pages for outdated information and to improve the clarity of the information presented. Figure 11 represents external stakeholder feedback related to the utility of the County's COVID-19 website:

The www.coronavirus-sd.com website was a good source for updated data and information:

50%
Strongly Agree

20%
Agree

25%
Neutral

5%
Not Applicable/Don't Know

The www.coronavirus-sd.com website was clear and easy to navigate:

40%
Strongly Agree

30%
Agree

15%
Disagree

10%
Neutral

5%
Not Applicable/Don't Know
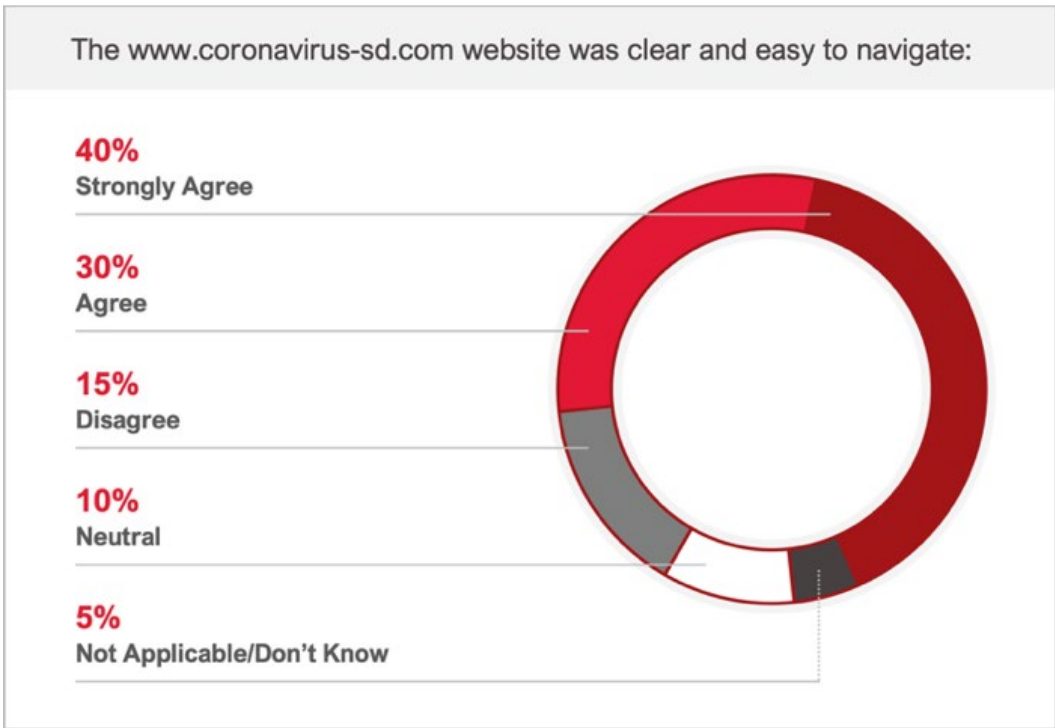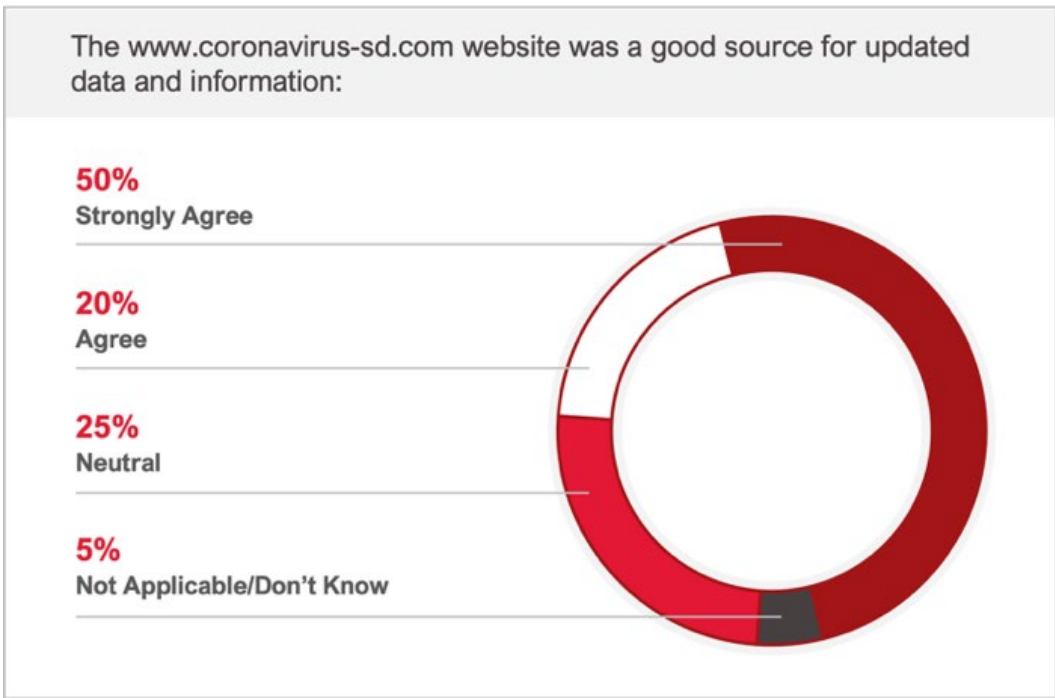
Figure 11: On a scale of 1 to 5, with 1 being strong disagreement and 5 being strong agreement and N/A for not applicable, please evaluate the following statements.

Recommendation 08

The County should continue to invest in the development and improvement of emergency response dashboards through increasing training and access to standardized data visualization tools. Being able to quickly parse and display data automatically can help reduce the burden on

data teams trying to turn around graphics and visuals in support of daily press conferences, media/public questions, and other ad hoc reports.

COVID-19 presented a unique challenge for public information and data reporting, as a wide array of data needed to be reported daily for different meetings, presentations, and documentation. As COVID-19 cases rose, the desire for frequent updates to key data from media and community leaders grew. The County needed to rapidly format graphics and presentations with statistics and information for daily press conferences and news articles, a situation that lessened but did not go away as the frequency of the press conferences was reduced. The ability to provide data-focused answers fed into requests for more data, in particular from media. Many interview participants involved in the execution of daily press conferences noted the quick turnaround time needed on presentations and graphics for daily press conferences was a challenge that sometimes led to delays. On-site technical staff to ensure equipment is working – from printers to monitors – is critical.

Recommendation 09

The County should add additional capacity within the various departmental data units and the Emergency Operations Center Data Team, and fully integrate data leadership into all significant response meetings, including Subcommittee meetings.

Early in the response, as information about COVID-19 was evolving quickly, members of the Policy Group would directly request data from Emergency Operations Center data team members outside their normal Incident Command reporting structure. This meant the data team was receiving requests, and occasionally duplicate requests, from multiple fronts in an unorganized way and lacked a way to determine prioritization of requests. Data associated respondents perceived their unit was not adequately involved or invited to contribute to response-related meetings, particularly earlier on in the response, that would allow them to further coordinate and clarify requests to ensure products could be appropriately prioritized and that data was being visualized in the most optimal way to address the request. Some staff also noted occasional confusion on who final data products were able to be shared with, especially as requests came in from multiple people.

Recommendation 10

The County's data collection leaders should develop, standardize, and train on data management processes and procedures for emergency response operations.

Interview and survey respondents noted that the volume of required data and people involved in the COVID-19 response created challenge for continually producing and updating data products at a high-quality level. Interview respondents noted the cadence at which updated data was needed for press conferences reduced the time staff had available for ensuring accuracy of the data, and they perceived that many people involved

in the response outside of the typical data functions lacked an understanding of data management processes and how new data requests impacted the Data Unit's ongoing work. Numerous products were required on a daily base. As new requests continued, the Data Unit's workload increased and reduced or eliminated time for a full quality assurance review prior to publishing.

Recommendation 11

The County should develop a central data repository comprised of data to be used during public health emergency response operations. Development should also include considerations for creating a process and infrastructure with which to share data quickly and easily with external sources (e.g., state contractors, County contractors like laboratory partners for testing). All County staff involved in data processes should be trained on using the central data.

> Respondents across interview groups related to data reporting, including testing and vaccination operations, felt the County did not have an efficient and integrated system for data collection because they did not have the appropriate Information Technology capabilities and Information Technology staff were not embedded into the operations. This led to the County's need to reactively augment with contractors. The County was working with large volumes of data from multiple sources, which required a concentrated effort and staff time to figure out who had data, how to speak the same technical language, and how to manage requests from media and different stakeholders.

Community and Business Support & Recovery

Care and Shelter Branch Operations

The County of San Diego's Test, Trace, Treat strategy included different components to address issues associated with COVID-19. One of these components that was implemented with the strategy was the Care and Shelter Branch. With the goal of "flattening the curve" by supporting people in need of isolation due to exposure or high-risk factors for COVID-19, the Care and Shelter Branch developed a number of programs to provide integral services to vulnerable populations throughout the community. These programs were established to support the isolation, quarantine, alternate care, and recovery for community members.

The County's Temporary Lodging Program provided hotel rooms for individuals with high-risk conditions or without homes or a place to shelter to protect them from COVID-19. The goal of the public health hotel rooms was to reduce burden on the healthcare system by providing a safe lodging alternative for individuals in need of isolation and quarantine. Healthcare teams stayed on site to assist individuals staying in these hotels. The Isolation Support Nurse Help Line served as the County's first contact for individuals who tested positive for COVID-19 and assisted in providing isolation protocol and resources for residents. Care and Shelter Branch Staff also

managed the Temporary Lodging Hotline to assess residents' needs for temporary lodging for isolation.

The County's Temporary Lodging Program served a critical function in protecting individuals at risk without a home or place to shelter with safe lodging. Although there were initial lessons learned in behavioral health needs at the hotels, the County was able to provide for guest and health services, including cleaning, daily meals, and daily wellness checks for all guests. Additionally, in coordination with the City of San Diego, Operation Shelter to Home was a large non-congregate shelter at the San Diego Convention center for individuals experiencing homelessness.

The Care and Shelter Branch also led preparations for potential hospital surges by establishing alternate care sites for patients. The County coordinated with state and federal partners for the establishment of a 202-bed Federal Medical Station alternate care site.

STRENGTH

The Care and Shelter Branch supported the health and safety of individuals experiencing homelessness by offering non-congregate sheltering solutions to prevent the spread of COVID-19 among vulnerable populations. These solutions included working in partnership with the City of San Diego on a large non-congregate shelter at the San Diego Convention Center, which also provided healthcare services and had the ability to isolate and quarantine individuals as needed, as well as the establishment of the Temporary Lodging Program, which provided sheltering in hotel rooms for high-risk individuals.

Reopening

The County established its Reopening Task Force on May 11, 2020, to begin planning for the socio-economic reopening of the County businesses, facilities, and other organizations. This Task Force was comprised of County subject matter experts in the areas of public health, legal and regulatory, public information, education, and outreach, and more. On May 20, 2020, the County submitted to the State its Pilot Program to Further Accelerate Resilience Roadmap. This plan highlighted the County's preparedness to deploy a pilot program using an acceleration reopening plan in conjunction with an aggressive and innovative COVID-19 containment plan. The containment plan included mandatory protective measures (e.g., hygiene, face coverings, social distancing, sanitation protocols, and screening at workplaces and public places), and incorporated the County Test, Trace, Treat Strategy. Despite submitting this plan, the County was unable to implement it given State restrictions. As a result, the County made the deliberate decision to follow state and federal guidance for reopening. Directly aligning to the State's COVID-19 prevention guidance enabled the County to avoid confusion and to promote a clear basis of decision making at the regional level. The County first aligned with California's Resilience Roadmap, which was introduced in May 2020. The Resilience Road Map required every business,

school, service organizations, and other socio-economic entities to develop a safe reopening plan to reopen. The County Reopening Task Force developed a standard Safe Reopening Plan template that enabled businesses to develop their plans and post / publish them for public view and consumption efficiently and effectively. This template was considered a best practice and utilized by other jurisdictions both within and outside the County. The Resilience Roadmap was retired later in the summer. In its place, the California Department of Public Health released California's Blueprint for a Safer Economy becoming effective on August 31, 2020. The Blueprint for a Safer Economy providing a tiered system for reopening based on virus transmission until the Blueprint was retired on June 15, 2021 and replaced with the State's Beyond the Blueprint for Industry and Business Sectors. Given the level of effort the County had invested in the safe reopening of local businesses, schools, religious and community activities, the Reopening Task Force was asked to participate in multiple State policy guidance development working groups. This allowed the County to influence the outcome of COVID-19 guidance documents and the associated socio-economic restrictions.

Both internal and external stakeholders recognized the County's commitment to serving the needs of organizations and businesses through its communication on new guidance as early as they received information. County staff made themselves available to answer questions or track down answers on behalf of local organizations. The Reopening Task Force also served as a resource for organizations of all sizes by providing and reviewing reopening plan templates upon request.

STRENGTH

The County offered support to local businesses and organizations to advise on reopening plans to align with state requirements. This support included developing a safe reopening plan template, offering to review and provide feedback on any reopening plans, and identifying a point of contact on the Safe Reopening team for businesses/organizations to go to with any questions or feedback. The County would also assist businesses in trying to clarify guidance coming from the state and provide as much advance notice as possible to new guidance. Many external interview and survey respondents acknowledged the County's reopening staff for being of great benefit in answering their questions and being available when needed.

Compliance

The County of Supervisors directed staff to establish the Safe Reopening Compliance Team (Compliance Team) to ensure County businesses, service organizations, schools, and other socio-economic entities remained compliant with the County COVID-19 Public Health Orders and other State COVID-19 prevention guidelines to help prevent the transmission of COVID-19. As part of its main responsibilities, code enforcement officers on the Compliance Team managed business outreach in response to complaints of entities acting in non-compliance with the Public Health Order. The County also coordinated with local jurisdictions on enforcement and compliance

actions. During the early months and years of the pandemic, the County needed to reallocate many staff to a variety of functions to respond to the pandemic in a variety of areas. Further, County departments that were identified as providing essential services were required to continue providing those services. To establish the Compliance Team, the County reallocated six individual staff members to function as supervisors of 30 – 40 temporary staff throughout the existence of Compliance Team. The existing County staff assigned to this program prepared standard operating procedures, and training materials for these new temporary Code Enforcement Officers. As the State Health Order gave the authority to enforce COVID-19 prevention guidelines to sworn law enforcement, the Compliance Team Code Enforcement Officers were primarily established to provide education and awareness, guide entities on how to modify operations to comply with the Health Order, and issue Cease and Desist Orders if compliance was not achieved. A mobile application was created for Compliance Team members to document inspection findings and compliance. There was a base level of training provided for official report writing since the focus of these members was on voluntary compliance, education, and guiding entities into compliance without enforcement. Occasionally, temporary staff members that filled many code enforcement roles were in receipt of inconsistent public health guidance and compliance documentation that were designed to help facilitate sworn law enforcement taking enforcement actions. While there were some cases with inconsistent documentation, this was a small percentage of the overall cases, as the goal of voluntary compliance was achieved in most instances.

The Compliance Team served as the regional hub for complaints regarding the Public Health Order, taking on responsibility for the local cities within the region. A single hotline for the entire region was established, along with an email address to submit complaints. The Compliance Team responded to complaints, coordinating with local jurisdictions on customized approaches for communication, roles and responsibilities, and approach to enforcement actions. Regular calls were held with cities at a variety of levels ranging from law enforcement within cities, front line staff and managers, as well as city managers.

After receiving complaints about a potential non-compliant entity, code enforcement officers were responsible for conducting field inspections and speaking directly with business owners about the Public Health Order. Due to the frequently changing health orders, it was often difficult to help those in violation to understand the most recent changes in the Health Order. Following interactions with businesses, service organizations, schools and other entities, the Compliance Team effectively communicated issues about non-compliant entities to leadership, who would respond by writing letters to these entities when necessary.

STRENGTH

The Safe Reopening Compliance Team (Compliance Team) had good communication up through Incident Command to help address non-compliant entities. This was aided by senior management having direct access to Incident Command and a relatively flat management structure within the

Compliance Team allowing for rapid transmittal of information. This communication structure allowed the Public Health Officer or another designated person to quickly respond when faced with a non-compliant organization.

The Compliance Team also communicated effectively with other jurisdictions in the region. As the team held weekly or biweekly meetings and/or communications with each local city on enforcement cases, this communication structure was also used to provide updated information on changes with the Public Health Order, and compliance concerns. These regional partners also participated on many joint inspections, leveraging a local presence to encourage voluntary compliance, and where appropriate take escalated enforcement.

Recommendation 12

The County should develop training materials related to understanding Public Health Orders and how to address public health-related code enforcement to prepare for future responses. Training materials should be socialized amongst full-time employees but be ready for use by any temporary employees hired during a response.

> Due to high staffing demands across the County, the Compliance Team utilized many temporary staff for the majority of the program. Given the varying levels of experience and skill sets among temporary staff, as well as the quick onboarding of team members to immediately respond to the compliance activities throughout the early months of the pandemic, there was a lack of training in aspects such as report writing that would be used by sworn law enforcement to substantiate certain violations. As a result, initial inspection reports were produced without a formal approval process, and before a standardized template could be developed later in the response. The level of knowledge required to effectively conduct code enforcement processes in line with the County Public Health Orders and associated State COVID-19 Prevention guidelines were difficult with the limited time and training available for temporary staff. To help prepare for a future public health emergency, the County has now included a full-time code enforcement officer in Epidemiology, and some elements of the compliance can remain with this position.

Finance

Guided by lessons learned through previous public health responses (e.g., Hepatitis-A) and early onset direction from the Board of Supervisors, the Finance team was brought in early to establish the structure for capturing COVID-19 expenses, which included the setup of segregated project codes. While the Finance team was embedded in the Incident Command System structure, other County Finance groups often served as an extension of the team. The Finance team's role was key as leaders at the federal level recognized the financial burden of responding to COVID-19 on jurisdictions across the country. The federal government passed legislation making significant funding available to address a broad range of COVID-19 response efforts, including the

Coronavirus Aid, Relief, and Economic Security Act and American Rescue Plan Act. The County's Finance team developed guidance and systems to ensure federal funding was being used to its greatest extent to support numerous programs. In addition to establishing processes with other County departments, the Finance team developed reporting guidance for federally funded COVID-19 programs. Funding also came from Federal Emergency Management Agency, the County General Fund, direct State allocations, program specific Federal and State allocations, Public Health grants and more. Flexibility in managing funding plans was key to allow the County to shift funding resources as needed in order to maximize all available revenue streams.

In addition to funding costs associated with the direct public health aspect of the response, such as testing and vaccinations, several programs were established under Board direction to also address the economic and social impacts of the pandemic. These programs aimed to provide equitable support for communities, businesses, and vulnerable populations most impacted by the pandemic. Early and clear Board direction helped ensure a framework for spending large direct allocations of Coronavirus Aid, Relief, and Economic Security Act and American Rescue Plan Act dollars was in place early on so that a range of programs including various grant programs like the small business grant program and childcare provider grant program could be stood up quickly to get needed resources out to the community.

Additionally, in anticipation of receipt of the American Rescue Plan Act allocation, the County hosted five virtual 90-minute community workshops in March 2021. These workshops gave the public the opportunity to provide feedback on the potential uses of anticipated funds. Incorporating feedback received, a proposed American Rescue Plan Act "In-Concept" framework was presented to the Board in April, with a revised County American Rescue Plan Act Framework adopted in June of 2021 after the Treasury's release of the Interim Final Guidelines to implement the American Rescue Plan Act.

STRENGTH

The Finance Department received clear guidance and approval from the Board of Supervisors early in the response on the framework for spending direct County allocations of the Coronavirus Aid, Relief, and Economic Security Act and American Rescue Plan Act funding. This guidance included receiving input from community members on how to spend the American Rescue Plan Act funds.

STRENGTH

The Finance team integrated recovery consultants into their response operations to augment resources and leverage their expertise to establish a process that would withstand audits, help expedite FEMA claims, and strategize on identifying appropriate sources for programs as needed. Their expertise also included guidance on how to specifically design programs according to the funding compliance making the team successful.

STRENGTH

The County established processes with different County agencies to advise and review COVID-19-funded programs to ensure available federal funding, such as through the Coronavirus Aid, Relief, and Economic Security Act or the American Rescue Plan Act, was being utilized properly. For example, County Counsel was involved to advise and ensure consistency on federal funding, while the Auditor and Controller office established a process to assess each claim for federal funding to safeguard the County from inadvertently using a funding source when it was not applicable.

Recommendation 13

The County should plan for additional capacity to operationalize the financial processes in a large response effort concurrently or immediately subsequent to establishing financial tracking guidance.

> While the County acted early on to set up the structure and guidance for capturing and claiming costs, staff to operationalize the new structure on the backend, including staff to compile, package, review and submit all the documentation for claiming were not brought on and assembled as quickly in the process.

Contracting

The Emergency Operations Center's Logistics Branch worked with contractors to support the procurement of supplies supporting County agencies in both their response efforts and in keeping their own employees safe and healthy. Logistics Branch staff faced challenges similar to jurisdictions across the nation as widespread demand for personal protective equipment and other services were met with limited supply as every jurisdiction needed to procure the same goods and services (e.g., masks, hand sanitizer, cleaning services). While COVID-19-related procurement was occurring at a larger volume compared to other incidents, the County faced the distribution and storage of supplies at an unprecedented scale. Logistics staff utilized both internal and external relationships in support of contracting and logistics efforts, including maintaining a close relationship with the Medical Operations Center.

While goods and services were in high demand for much of the pandemic, especially early in the pandemic as jurisdictions across the nation needed to stock up on goods for the response, suppliers began reaching out to try and fulfill needs. To handle the influx of offerings from various suppliers, the Logistics Branch developed an innovative online tool to pre-vet potential contractors before moving forward with procurements. Logistics staff also communicated amongst one another regularly with daily meetings to ensure the County's needs were being met. This coordination was especially significant to overcome challenges posed by the speed and scope of the response in confirming requirements for requested supplies prior to making purchases.

County Logistics staff established an open-ended tool using SurveyMonkey for potential vendors to provide information on their offerings, which was used by staff to properly vet vendors prior to any procurement. This system helped manage the overwhelming number of offerings coming into the County, not all of which were legitimate, and still follow procurement procedures (i.e., getting quotes).

Recommendation 14

The County should ensure each department establishes a pre-identified list of staff or positions to serve as points of contact/subject matter experts for department purchasing requests to provide clarity on requirements. Once identified, these lists should be socialized amongst each department's staff and with the Department of Purchasing and Contracting.

> Logistics staff agreed the scope of the COVID-19 incident created challenges in understanding and confirming requirements for requested purchases. Staff needed to identify the right point of contact/subject matter expert to better understand scope of the goods and services requested and confirm that purchases would correctly fulfill the need. However, there were sometimes multiple layers of communication between policy-level decision makers and staff at lower levels, who had different levels of visibility into requirements. This challenge was exacerbated by the rapid speed with which goods and services needed to be validated and procured.

Continuity of Operations Plans (COOP) and Functions

Staffing

To meet the workforce needs of the response, employees from across the County's agencies and departments were pulled in to support the COVID-19 operation. All County employees are designated as Disaster Service Workers, meaning they can be assigned to support response and recovery efforts for declared emergencies such as COVID-19. In addition to the Disaster Service Worker program, many County employees stepped up to the plate and volunteered to support the response. Across all aspects of the operations, from those working outside at testing sites to those sitting in COVID-19 subcommittee meetings, County employees dedicated long hours and commitment to serving the needs of the County in the pandemic.

The County provided resources to alleviate staff burden, such as providing mental health resources or identifying backup staff for Emergency Operations Center and Medical Operation Center section leads and Policy Group members. Many respondents across multiple agencies and departments acknowledged staffing challenges, such as being short-staffed or unable to find staff with the correct qualifications and experience to fulfill certain roles. As the COVID-19 response persisted into the long-term, these challenges contributed to staff burnout. Given the

many unknowns about the infectiousness and effects of the virus in the early months, some County employees remained worried as to how their health could be protected, especially those at greater risk interacting with others in field positions.

Unique to the COVID-19 response was the transition to remote work that all staff across the County participated in unless required by their positions to be in person. Respondents across multiple focus areas in both interviews and surveys appreciated the County's transition to using Microsoft Teams. However, at the start of the pandemic, County staff faced different levels of preparedness for the transition to remote work in terms of equipment on hand (e.g., laptops) and existing Continuity of Operation Plans. For example, some departments already included remote work in their existing continuity plans, while others had no pre-existing planning for transitioning to a virtual environment.

Throughout the pandemic, the County maintained essential services to continue the mission to serve the community. Some services experienced a slow-down in activity due to staffing or other factors related to the pandemic. Mitigating actions were implemented, such as prioritizing the highest risk clients or reducing the frequency of visits or using tele-visits. These actions supported some COVID deployed staff to continue core services for a portion of their hours while also attending to the pandemic response needs.

STRENGTH

The County established continuity in the Emergency Operations Center and Medical Operations Center early on by providing backup staff for section leads and Policy Group positions. When someone was out, operations were able to continue smoothly as backup staff filled the role, and staff could maintain focus on established priorities.

STRENGTH

The County encouraged the use of the Employee Assistance Program to support employee wellness and mental health. The Employee Assistance Program included a specialized team of six clinicians to help support employee self-care and resilience.

Recommendation 15

The County should ensure all department Continuity of Operations Plans include considerations for remote work, including a list of technology and equipment employees would need to work effectively.

> Remote work served as an effective option for many County employees to continue both regular County operations and COVID-19 response operations while maintaining employee health and safety. While most response activations do not require the same level of social distancing and long-term response as COVID-19 posed, remote work remains a viable option for future public health or other responses where staff may not travel to an office (e.g., major earthquakes). Departments across the County indicated varying levels

of preparedness to transition to remote work based on available technology and existing Continuity of Operations Plans. For example, the Department of Purchasing and Contract already had remote work as their primary Continuity of Operations Plan and staff were equipped with laptops, cell phones, and personal hotspots, while Department of Human Resources staff were not set up to work remotely prior to COVID-19 and some staff were unable to connect to Information Technology and computers immediately. Amidst heavy supply demand nationwide, Information Technology staff were challenged to acquire and distribute equipment for all agencies as the transition to remote work began early in 2020.

Recommendation 16

The County should ensure department Continuity of Operations Plans are regularly reviewed and kept up to date regarding essential personnel and the qualifications required by those positions. Additionally, during continuity activations, essential personnel should have any regular tasks not essential to their core function removed from their workflow to reduce burden. Figure 12 illustrates County staff perception on the adequacy of staffing throughout the response.

Your section/position/role was adequately staffed throughout the response:

10.1% Strongly Agree

18.3% Disagree

35.3% Agree

19.7% Strongly Disagree

16.5% Neutral
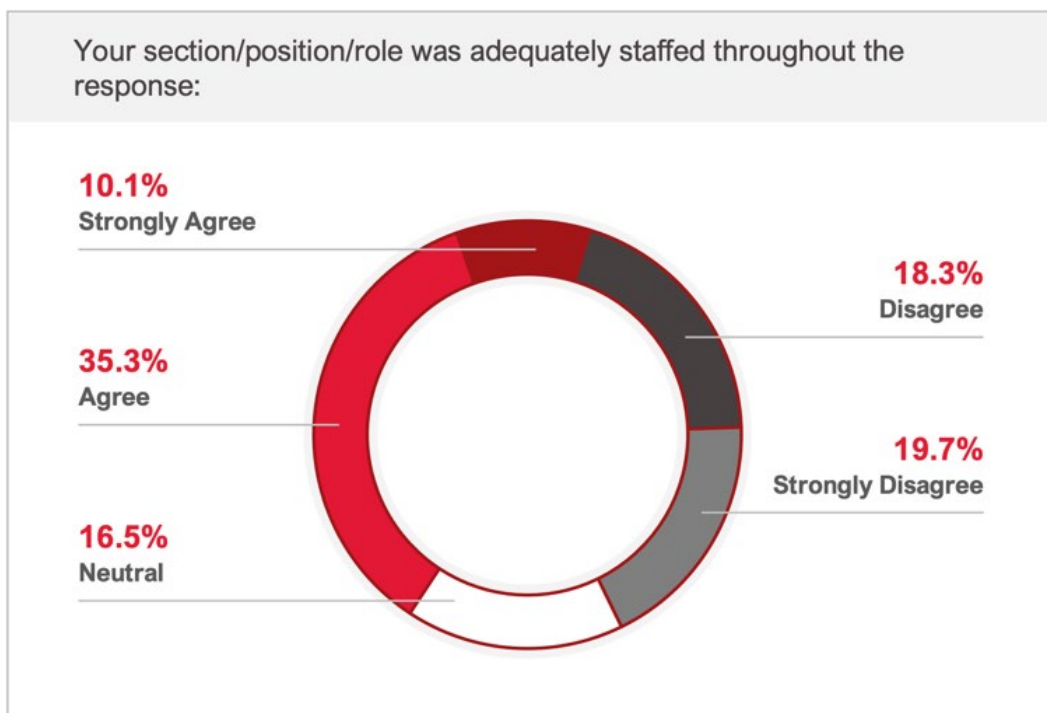
Figure 12: Responses from internal survey question #3: Rate the extent to which you agree with the following statements - Your section/role was adequately staffed throughout the response.

The lack of available staffing in general means managing workloads in long-term responses is challenging. Adequately trained staff may be unavailable to relieve key personnel, and cross-training is not always an option for certain positions requiring specific skills, qualifications, and certifications. Many County departments and areas of the response struggled with being short staffed, especially given the near-constant need for additional personnel. Many key positions did not have backup staff, and onboarding staff were not always properly trained or were unable to

transition into new positions smoothly due to the fast-paced cadence of the response. Low levels of staff contributed to burnout, frustration, and continuity issues when someone left a role.

Facility and Real Estate Management

With the spread of the COVID-19 virus, the County took measures to prevent or slow transmission within its own facilities. Many County staff were able to transition to remote work, but many others continued to work in offices or other facilities as required by the needs of their jobs. The County worked diligently to ensure proper masking, social distancing, and other personal protective equipment protocols were in place to protect the health and safety of employees. For example, to protect personnel working in the Emergency Operations Center every day, Office of Emergency Services worked with Department of General Services Facility Management Operations and was able to create an alternate facility layout that allowed Emergency Operations sections to spread across the County Operations Center campus, using offices that were empty due to remote work.

The Department of General Services worked diligently throughout the pandemic to ensure that facilities and support operations were adapted to meet the ever-changing needs of the County. One of the primary general services functions was space and footprint support, utilizing County property for the COVID-19 response effort. Major contributions from the Department of General Services Real Estate Services and Property Management included news conference and board of supervisor meeting support at the County Operations Center, setting up public testing sites, leasing and preparing dorms at University California San Diego for housing vulnerable populations, and warehouse support, and COVID-19 vaccine storage. The Department of General Services also worked with partner agencies to provide COVID-19 vaccine storage, which included identifying sites, negotiating with landlords, completing electrical work to meet refrigerator requirements, and establishing a back-up power plan. Following setup, the Department of General Services also provided maintenance and 24-hour response for the vaccine storage sites.

In addition to the footprint, the Department of General Services provided operations support. One example of this was the distribution of personal protective equipment such as sneeze guards, thermometers (handheld and temperature portals), social distancing signage, and hand sanitizer dispensers to prepare facilities for return to work. Building Maintenance Teams provided installation and guidance for Heating, Ventilation, and Air Conditioning and air scrubbers, including converting buildings to the recommended MERV 13 air filtration. The Department of General Services provided security guard support at hotels, testing stations, and vaccination storage facilities. General Services Fleet Operations Services staged gear and refrigerated trailers for the Medical Examiner's office and the Office of Emergency Services and created a plan for a more efficient use of County vehicles. In the event of a COVID-19 positive test or area outbreak, the Department of General Services Contracts team provided the deep-cleaning service for affected areas. The department was also critical in establishing County testing and vaccination sites providing subject matter expertise for site agreements and other infrastructure and real estate related activities.

As the COVID-19 Emergency Operations Center activation extended into the long-term, the County recognized the need to plan for the potential of additional incidents, such as wildfires, that would require activation of the Emergency Operations Center. The COVID-19 response operation was moved to a separate County building to create a "second Emergency Operations Center," which was set up to physically imitate the initial Emergency Operations Center as best as possible. Department of General Services provided electrical work, furniture reconfiguration, hand washing station installation, and Computer/TV connections and building access. This move allowed the County to respond to effectively respond to wildfire and heat events that occurred while maintaining the ongoing COVID-19 response.

STRENGTH

In advance of wildfire season, the County successfully implemented continuity practices by standing up a second Emergency Operations Center to allow for potential dual activations, mirroring the original facility for the COVID-19 response while maintaining the Emergency Operations Center for other responses. This setup meant the County was ready to respond to additional incidents without interference or competition for resources and space within the County Emergency Operations Center facility.

STRENGTH

The Emergency Operations Center avoided COVID-19 outbreaks amongst staff by successfully implementing preventative measures such as social distancing around the entire County campus and proper enforcement of masks. These measures included the creation of a pandemic Continuity of Operations Plan for the Office of Emergency Services facility layout, which includes templates for spreading out in any events that require social distancing.

Improvement Plan

Recommendations outlined in this After-Action Report are consolidated into an Improvement Plan to facilitate implementation and tracking of the individual actions. The Improvement Plan that accompanies this After-Action Report allows for the assignment of responsibility and leadership. This offers a quick reference for action-oriented recommendations intended to improve capability and future County responses.

The County of San Diego utilized an Improvement Plan Review Team to review recommendations outlined in the Improvement Plan. The County will conduct further review and analysis of the recommended areas of improvement and develop precise action plans to address all recommendations.

This Improvement Plan includes sixteen recommendations and provides a roadmap for where County of San Diego could allocate resources and funding in the short-, intermediate-, and long-term. This plan should be reviewed and updated regularly to adjust priorities based on new and/or changing needs of the County.

Improvement Plan

Table 5: County of San Diego COVID-19 Response Improvement Plan

	Recommendation and Description	Functional Area	Responsible Agency (Primary)	Responsible Agency (Secondary)
01	Continue to provide tabletop exercises, training, and quarterly drills tailored towards collaboration between the different response structures for public health and emergency management, particularly with municipal partners. Demonstrate to municipal emergency management leadership the correct, direct communication lines for specific types of reporting, information sharing, and subject matter experts involved in disaster response operations. The direction should specifically delineate the types of information sharing requirements at each centralized point such as the Emergency Operations Center, Joint Information Center, and Medical Operations Center. Additionally, providing external partners with a Public Health Liaison will provide clear lines of communication for sharing accurate and timely information.	Operational Area Emergency Operations Center Operations	Office of Emergency Services	Public Health Preparedness and Response
02	To prepare for national supply shortages, the County can further develop Memorandum of Understandings and contracts with local manufacturers and vendors, ensuring items can be manufactured and acquired locally as needed. Warehousing personal protective equipment in anticipation of another public health event may be beneficial on a small scale.	Operational Area EOC Operations	Department of Purchasing and Contracting	Public Health Preparedness and Response
03	The use of the Medical Reserve Corps Volunteer Program should be better institutionalized and appropriately staffed with Health and Human Services Agency and other agencies that are likely to respond to emergencies. The program should continue to engage volunteers in working with the County agencies outside of disasters, ensuring divisions are more open to integrating volunteers into operations by increasing familiarity with their capabilities and giving the opportunity to cross train volunteers prior to leaning on them in critical emergency situations. As the focus of the Medical Reserve Corps is the pre-identification and training of medical and health	Operational Area EOC Operations	Public Health Preparedness and Response	Office of Emergency Services

Recommendation and Description	Functional Area	Responsible Agency (Primary)	Responsible Agency (Secondary)
volunteers prior to a response, a separate channel for spontaneous medical and health volunteers should be developed to best respond to large-scale incidents.			
04 The County should build up operational capabilities for the storage and distribution of supplies needed to respond to a medical emergency for staff at all healthcare facilities that are actively working in the response. This should include increasing storage capacities through emergency facility designation or contracts, so that large quantities of supplies are more readily accessible.	Medical Operations Center Operations	Public Health Preparedness and Response	Department of Purchasing and Contracting
05 The County should examine existing civil service rules and memorandums to identify and address barriers to hiring staff in temporary positions.	Test, Trace, Treat & Vaccination Operations	Department of Human Resources	Health and Human Services
06 The County should continue to ensure that all materials and information are provided in a variety of languages, at a minimum in all threshold languages and that a robust system and staffing for reviewing translations exists.	Education and Community Outreach	County Communications Office	Health and Human Services
07 Continue to annually review the County's Disaster Service Worker training requirements and recommend additional trainings based on current hazard trends and perceived gaps. Consider regularly offering ICS-300 and 400 courses for interested staff to increase the number of Disaster Service Workers trained in the Incident Command System for expanding and complex incidents.	Incident Command System Implementation	Office of Emergency Services	Department of Human Resources
08 The County should continue to invest in the development and improvement of emergency response dashboards through increasing training and access to standardized data visualization tools. Being able to quickly parse and display data automatically can help reduce the burden on data teams trying to turn around graphics and visuals in support of daily press conferences, media/public questions, and other ad hoc reports. *	Data Reporting	Office of Emergency Services	Public Health Services
09 The County should add additional capacity within the various departmental data units and the Emergency Operations Center Data Team, and fully	Data Reporting	Office of Emergency Services	Public Health Services

Recommendation and Description	Functional Area	Responsible Agency (Primary)	Responsible Agency (Secondary)
integrate data leadership into all significant response meetings, including Subcommittee meetings. *			
10 The County's data collection leaders should develop, standardize, and train on data management processes and procedures for emergency response operations. *	Data Reporting	Office of Emergency Services	Public Health Services
11 County should develop a central data repository comprised of data to be used during public health emergency response operations. Development should also include considerations for creating a process and infrastructure with which to share data quickly and easily with external sources (e.g., state contractors, County contractors like laboratory partners for testing). All County staff involved in data processes should be trained on using the central data repository. *	Data Reporting	Public Health Services	County Technology Office
12 The County should develop training materials related to understanding Public Health Orders and how to address public health-related code enforcement to prepare for future responses. Training materials should be socialized amongst full-time employees but be ready for use by any temporary employees hired during a response.	Compliance	Planning and Development Services	Public Safety Group
13 The County should plan for additional capacity to operationalize the financial processes in a large response effort concurrently or immediately subsequent to establishing financial tracking guidance.	Finance	Finance Support Services Division, HHSA	Public Health Services
14 The County should ensure each department establishes a pre-identified list of staff or positions to serve as points of contact/subject matter experts for department purchasing requests to provide clarity on requirements. Once identified, these lists should be socialized amongst each department's staff and with the Department of Purchasing and Contracting.	Contracting	Department of Purchasing and Contracting	Office of Emergency Services
15 The County should ensure all department Continuity of Operations Plans include considerations for remote work, including a list of technology and equipment employees would need to work effectively.	Continuity of Operations Plans and Functions	Office of Emergency Services	Department of Human Resources

	Recommendation and Description	Functional Area	Responsible Agency (Primary)	Responsible Agency (Secondary)
16	The County should continue ensure department Continuity of Operations Plans are regularly reviewed and kept up to date regarding essential personnel and the qualifications required by those positions. Additionally, during continuity activations, essential personnel should have any regular tasks not essential to their core function removed from their workflow to reduce burden.	Continuity of Operations Plans and Functions	Office of Emergency Services	Public Safety Group

The County Office of Performance Evaluation and Analytics will be in direct support of the responsible agencies for recommendations related to the Data Reporting Functional Area

Appendices

Appendix A: Glossary of Common Terminology

Terminology	Definition
211 San Diego	2-1-1 San Diego's service includes substance abuse treatment, care for children or aging parents, reporting graffiti, food assistance, and housing and financial assistance. Information is available 24/7 through a stigma-free, confidential phone service, as well as a searchable online database at www.211sandiego.org.
After-Action Review	An after-action review is a qualitative and quantitative review of actions taken in response to a critical action review. The purpose of an after-action review is to analyze the management of or response to an incident, exercise, or event by identifying strengths to be maintained and built upon, as well as identifying potential areas of improvement.
All-Hazards Approach to Emergency Planning	An all-hazards approach is an integrated approach to emergency preparedness planning that focuses on capacities and capabilities that are critical to preparedness for a full spectrum of emergencies or disasters, including internal emergencies and a man-made emergency (or both) or natural disaster.
Continuity of Government	Continuity of Government is a coordinated effort within each of the executive, legislative, and judicial branches to ensure that governance and essential functions continue to be performed before, during, and after an emergency.
Continuity of Operations	Continuity of Operations is an effort within individual departments and agencies to ensure that Primary Mission Essential Functions (PMEFs) continue to be performed during a wide range of emergencies, including localized acts of nature, accidents and technological or attack-related emergencies.
Emergency Operations Center	An Emergency Operations Center is a physical or virtual location from which leaders of a jurisdiction or organization coordinate information and resources to support incident management activities (on-scene operations).
Incident Command System	The Incident Command System is a widely applicable management system designed to enable effective, efficient incident management by integrating a combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure.

Improvement Plan	An Improvement Plan is a document that includes a consolidated list of corrective actions, responsible parties, and a timeline for completion. This plan identifies actions that government entities and stakeholders will take to increase emergency preparedness and improve response capabilities in the future.
Medical Operations Center	A Medical Operations Center is a single point of shared situational awareness and information that can implement effective command and control for the medical response to a large-scale mass casualty incident or other scenario.
Operational Area	The San Diego County Operational Area (OA) was formed in the 1960's to assist all of the cities and the County in developing emergency plans, exercising those plans, developing Mutual Aid capabilities between jurisdictions and, in general, establishing relationships that would improve communications between jurisdictions and agencies. The OA consists of the County and all jurisdictions within the county.
Public Information Officer	Public Information Officers are the communications coordinators or spokespersons of certain governmental organizations. The primary responsibility of a PIO is to provide information to the media and public as required by law and according to the standards of their profession.
Test, Trace, Treat and Vaccination	Test, Trace, Treat and Vaccination (sometimes referred to as T3-V) is the County of San Diego's organizational structure responsible for developing and implementing COVID-19 response strategies alongside the Emergency Operations Center and Medical Operations Center.
WebEOC	WebEOC is a crisis information management system used by the County of San Diego Office of Emergency Services and provides secure real-time information sharing.

Appendix B: Response Documents

The following Appendix represents some of the key documents reviewed by Hagerty for the After-Action Report assessment phase. They are included in this report as an appendix to provide additional detail. Documents include:

» Proclamations of Emergency
» Hepatitis-A After Action Report Action Plan
» California Health Alert Network Bulletins
» Additional County Awards List
» Test, Trace, Treat, and Vaccination Strategy Documents
» Education and Outreach Branch One-Pagers

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DECLARATIONS

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NICK MACCHIONE, FACHE
DIRECTOR

HEALTH AND HUMAN SERVICES AGENCY
PUBLIC HEALTH SERVICES
3851 ROSECRANS STREET, MAIL STOP P-576
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WILMA J. WOOTEN, M.D., M.P.H.
PUBLIC HEALTH OFFICER

DECLARATION OF LOCAL HEALTH EMERGENCY

Whereas, a novel coronavirus, COVID-19, causes infectious disease and was first detected in Wuhan City, Hubei Province, China in December 2019. Symptoms of COVID-19 include fever, cough, and shortness of breath; outcomes have ranged from mild to severe illness, and in some cases death. The Centers for Disease Control and Prevention considers the virus to be a very serious public health threat.

Whereas, Chinese health officials have reported tens of thousands of cases of COVID-19 in China, with the virus reportedly spreading from person-to-person. COVID-19 illnesses, most of them associated with travel from Wuhan, are also being reported in a growing number of international locations, including the United States.

Whereas, on January 30, 2020, the World Health Organization declared the outbreak a "public health emergency of international concern." On January 31, 2020, United States Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the nation's healthcare community in responding to COVID-19.

Whereas, on February 2, 2020, the federal government initiated the suspension of the entry of foreign nationals who were in China within the past fourteen days. United States citizens, residents, and their immediate family members who were in the Hubei province and other parts of mainland China are screened upon their entry into the United States. Those without symptoms traveling from areas of China (other than Hubei province) are allowed to continue to their final destination, but are requested to self-quarantine in coordination with local public health officials for up to fourteen days. Federal quarantine of some individuals traveling from Wuhan is presently occurring at the Marine Corps Air Station (MCAS) Miramar.

Whereas, there are currently two confirmed cases of COVID-19 in San Diego County. Although these two cases are part of a federal quarantine at MCAS Miramar, due to the large population and geographic location of San Diego County, combined with the worldwide spread of COVID-19, there is a potential threat of introduction of COVID-19 in San Diego County.

Now, therefore, pursuant to Health and Safety Code section 101080, the San Diego County Health Officer declares:

1) The potential introduction of COVID-19 in San Diego County is a threat to the public health within the meaning of Health and Safety Code section 101080.

2) A local health emergency is declared in San Diego County.

This declaration shall remain in effect for no longer than seven days unless ratified by the San Diego County Board of Supervisors and continued for an additional time period.

Date: February 14, 2020

WILMA J. WOOTEN, M.D., M.P.H.
Public Health Officer
Director, Public Health Services
County of San Diego

PROCLAMATION OF
EXISTENCE OF A COUNTY-WIDE LOCAL EMERGENCY
(UNINCORPORATED AND INCORPORATED AREAS
OF SAN DIEGO COUNTY)
AND
REQUEST TO THE GOVERNOR OF THE STATE OF
CALIFORNIA
TO PROCLAIM A STATE OF EMERGENCY
AND TAKE OTHER SPECIFIED ACTIONS

RECITALS

R1. The California Emergency Services Act, including but not limited to Government Code section 8630 and the County of San Diego Emergency Services Organization Ordinance (Code of Regulatory Ordinances, sections 31.101 *et seq.*) empower the Chief Administrative Officer of the County of San Diego as Director of Emergency Services, to proclaim the existence or threatened existence of a local emergency when said County is affected or likely to be affected by a public calamity and the Board of Supervisors is not in session; and

R2. The Chief Administrative Officer of the County of San Diego as Director of Emergency Services, does hereby find that on February 14, 2020, conditions of extreme peril to the safety of persons and property have arisen within San Diego County. A novel coronavirus, COVID-19, causes infectious disease and was first detected in Wuhan City, Hubei Province, China in December 2019. Symptoms of COVID-19 include fever, cough, and shortness of breath; outcomes have ranged from mild to severe illness, and in some cases death. The Centers for Disease Control and Prevention considers the virus to be a very serious public health threat. Chinese health officials have reported tens of thousands of cases of COVID-19 in China, with the virus reportedly spreading from person to person. COVID-19 illnesses, most of them associated with travel from Wuhan, also are being reported in a growing number of international locations, including the United States. On January 30, 2020, the World Health Organization declared the outbreak a "public health emergency of international concern." On January 31, 2020, United States Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the nation's healthcare community in responding to COVID-19. On February 2, 2020, the United States government suspended entry of foreign nationals who have been in China within the past 14 days. United States citizens, residents, and their immediate family members who were in the Hubei province and other parts of mainland China are screened upon their entry into the United States. Those without symptoms who were not in Hubei province are allowed to continue to their final destination, but are requested to self-quarantine in coordination with local public health officials for up to fourteen days. Quarantine of some such individuals returning from Wuha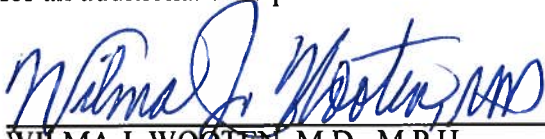n is presently occurring in Marine Corps Air Station (MCAS) Miramar. There are currently two confirmed cases of COVID-19 in San Diego County. Although these two cases are part of a federal quarantine at MCAS Miramar, due to the large population and geographic location of San Diego County,

combined with the worldwide spread of COVID-19, there is a potential threat of the introduction of COVID-19 in San Diego County; and

R3.　　The Board of Supervisors of the County of San Diego is not in session and cannot immediately be called into session; and

R4.　　The Chief Administrative Officer of the County of San Diego as Director of Emergency Services, finds that these emergency conditions will require immediate action including additional resources, services, personnel, equipment, facilities and funding to contain a threat of danger to the public health; and

R5.　　This Proclamation of Local Emergency will be ratified by the Board of Supervisors pursuant to law.

PROCLAMATIONS AND ORDERS

NOW, THEREFORE, IT IS HEREBY PROCLAIMED AND ORDERED by the Chief Administrative Officer of the County of San Diego as Director of Emergency Services, as follows:

1.　　That a local emergency exists throughout San Diego County pursuant to Government Code section 8630 and as defined by Government Code section 8558 and shall be deemed to continue to exist subject to ratification, review and termination by the Board of Supervisors pursuant to Government Code section 8630.

2.　　That during the existence of said local emergency the powers, functions, and duties of the emergency organization of this county shall be those prescribed by State law including but not limited to Government Code section 8634, County ordinances and resolutions, and the current Emergency Services Agreement and Operational Area Emergency Plan.

3.　　That a copy of this Proclamation be forwarded to the Director of the California Governor's Office of Emergency Services ("Director Cal OES") requesting that Director Cal OES find this Proclamation acceptable in accordance with State law and forward this Proclamation to the Governor of the State of California for consideration and action on San Diego County's requests that:

3.1　　The Governor of California proclaim a State of Emergency in San Diego County.

3.2　　The Governor suspend those statutes, regulations, rules and orders that may hinder response and recovery efforts.

3.3　　The Governor order that recovery assistance be made available to

San Diego County under the California Disaster Assistance Act to respond to and assist in prevention of potential spread of the Novel Coronavirus (COVID-19), and assist in treatment of those potentially affected.
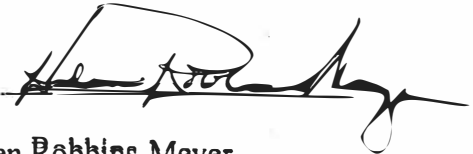
    3.4   The Governor order that the State expedite access to Federal resources and any other appropriate federal disaster relief programs for San Diego County.

    4.   The Director of the County Office of Emergency Services shall continue to assess the local emergency and, as emergency response and recovery efforts warrant, send to Director Cal OES any additional requests that the Governor suspend further statutes, rules and regulations pursuant to Government Code section 8571, and that State and Federal assistance be provided to San Diego County.

    5.   Helen Robbins-Meyer, Chief Administrative Officer, or her representative is hereby designated as the authorized representative of the County of San Diego for the purpose of receipt, processing, and coordination of all inquiries and requirements necessary to obtain available state and federal assistance.

COUNTY OF SAN DIEGO

Date/Time: 2/14/2020
5:02 p.m.

By: _____

Helen Robbins-Meyer,
Chief Administrative Officer and
Director of Emergency Services

PROCLAMATION OF A STATE OF EMERGENCY

WHEREAS in December 2019, an outbreak of respiratory illness due to a novel coronavirus (a disease now known as COVID-19), was first identified in Wuhan City, Hubei Province, China, and has spread outside of China, impacting more than 75 countries, including the United States; and

WHEREAS the State of California has been working in close collaboration with the national Centers for Disease Control and Prevention (CDC), with the United States Health and Human Services Agency, and with local health departments since December 2019 to monitor and plan for the potential spread of COVID-19 to the United States; and

WHEREAS on January 23, 2020, the CDC activated its Emergency Response System to provide ongoing support for the response to COVID-19 across the country; and

WHEREAS on January 24, 2020, the California Department of Public Health activated its Medical and Health Coordination Center and on March 2, 2020, the Office of Emergency Services activated the State Operations Center to support and guide state and local actions to preserve public health; and

WHEREAS the California Department of Public Health has been in regular communication with hospitals, clinics and other health providers and has provided guidance to health facilities and providers regarding COVID-19; and

WHEREAS as of March 4, 2020, across the globe, there are more than 94,000 confirmed cases of COVID-19, tragically resulting in more than 3,000 deaths worldwide; and

WHEREAS as of March 4, 2020, there are 129 confirmed cases of COVID-19 in the United States, including 53 in California, and more than 9,400 Californians across 49 counties are in home monitoring based on possible travel-based exposure to the virus, and officials expect the number of cases in California, the United States, and worldwide to increase; and

WHEREAS for more than a decade California has had a robust pandemic influenza plan, supported local governments in the development of local plans, and required that state and local plans be regularly updated and exercised; and

WHEREAS California has a strong federal, state and local public health and health care delivery system that has effectively responded to prior events including the H1N1 influenza virus in 2009, and most recently Ebola; and

WHEREAS experts anticipate that while a high percentage of individuals affected by COVID-19 will experience mild flu-like symptoms, some will have more serious symptoms and require hospitalization, particularly individuals who are elderly or already have underlying chronic health conditions; and

WHEREAS it is imperative to prepare for and respond to suspected or confirmed COVID-19 cases in California, to implement measures to mitigate the spread of COVID-19, and to prepare to respond to an increasing number of individuals requiring medical care and hospitalization; and

WHEREAS if COVID-19 spreads in California at a rate comparable to the rate of spread in other countries, the number of persons requiring medical care may exceed locally available resources, and controlling outbreaks minimizes the risk to the public, maintains the health and safety of the people of California, and limits the spread of infection in our communities and within the healthcare delivery system; and

WHEREAS personal protective equipment (PPE) is not necessary for use by the general population but appropriate PPE is one of the most effective ways to preserve and protect California's healthcare workforce at this critical time and to prevent the spread of COVID-19 broadly; and

WHEREAS state and local health departments must use all available preventative measures to combat the spread of COVID-19, which will require access to services, personnel, equipment, facilities, and other resources, potentially including resources beyond those currently available, to prepare for and respond to any potential cases and the spread of the virus; and

WHEREAS I find that conditions of Government Code section 8558(b), relating to the declaration of a State of Emergency, have been met; and

WHEREAS I find that the conditions caused by COVID-19 are likely to require the combined forces of a mutual aid region or regions to appropriately respond; and

WHEREAS under the provisions of Government Code section 8625(c), I find that local authority is inadequate to cope with the threat posed by COVID-19; and

WHEREAS under the provisions of Government Code section 8571, I find that strict compliance with various statutes and regulations specified in this order would prevent, hinder, or delay appropriate actions to prevent and mitigate the effects of the COVID-19.

NOW, THEREFORE, I, GAVIN NEWSOM, Governor of the State of California, in accordance with the authority vested in me by the State Constitution and statutes, including the California Emergency Services Act, and in particular, Government Code section 8625, **HEREBY PROCLAIM A STATE OF EMERGENCY** to exist in California.

IT IS HEREBY ORDERED THAT:

1. In preparing for and responding to COVID-19, all agencies of the state government use and employ state personnel, equipment, and facilities or perform any and all activities consistent with the direction of the Office of Emergency Services and the State Emergency Plan, as well as the California Department of Public Health and the Emergency Medical Services Authority. Also, all residents are to heed the advice of emergency officials with regard to this emergency in order to protect their safety.

2. As necessary to assist local governments and for the protection of public health, state agencies shall enter into contracts to arrange for the procurement of materials, goods, and services needed to assist in preparing for, containing, responding to, mitigating the effects of, and recovering from the spread of COVID-19. Applicable provisions of the Government Code and the Public Contract Code, including but not limited to travel, advertising, and competitive bidding requirements, are suspended to the extent necessary to address the effects of COVID-19.

3. Any out-of-state personnel, including, but not limited to, medical personnel, entering California to assist in preparing for, responding to, mitigating the effects of, and recovering from COVID-19 shall be permitted to provide services in the same manner as prescribed in Government Code section 179.5, with respect to licensing and certification. Permission for any such individual rendering service is subject to the approval of the Director of the Emergency Medical Services Authority for medical personnel and the Director of the Office of Emergency Services for non-medical personnel and shall be in effect for a period of time not to exceed the duration of this emergency.

4. The time limitation set forth in Penal Code section 396, subdivision (b), prohibiting price gouging in time of emergency is hereby waived as it relates to emergency supplies and medical supplies. These price gouging protections shall be in effect through September 4, 2020.

5. Any state-owned properties that the Office of Emergency Services determines are suitable for use to assist in preparing for, responding to, mitigating the effects of, or recovering from COVID-19 shall be made available to the Office of Emergency Services for this purpose, notwithstanding any state or local law that would restrict, delay, or otherwise inhibit such use.

6. Any fairgrounds that the Office of Emergency Services determines are suitable to assist in preparing for, responding to, mitigating the effects of, or recovering from COVID-19 shall be made available to the Office of Emergency Services pursuant to the Emergency Services Act, Government Code section 8589. The Office of Emergency Services shall notify the fairgrounds of the intended use and can immediately use the fairgrounds without the fairground board of directors' approval, and

notwithstanding any state or local law that would restrict, delay, or otherwise inhibit such use.

7. The 30-day time period in Health and Safety Code section 101080, within which a local governing authority must renew a local health emergency, is hereby waived for the duration of this statewide emergency. Any such local health emergency will remain in effect until each local governing authority terminates its respective local health emergency.

8. The 60-day time period in Government Code section 8630, within which local government authorities must renew a local emergency, is hereby waived for the duration of this statewide emergency. Any local emergency proclaimed will remain in effect until each local governing authority terminates its respective local emergency.

9. The Office of Emergency Services shall provide assistance to local governments that have demonstrated extraordinary or disproportionate impacts from COVID-19, if appropriate and necessary, under the authority of the California Disaster Assistance Act, Government Code section 8680 et seq., and California Code of Regulations, Title 19, section 2900 et seq.

10. To ensure hospitals and other health facilities are able to adequately treat patients legally isolated as a result of COVID-19, the Director of the California Department of Public Health may waive any of the licensing requirements of Chapter 2 of Division 2 of the Health and Safety Code and accompanying regulations with respect to any hospital or health facility identified in Health and Safety Code section 1250. Any waiver shall include alternative measures that, under the circumstances, will allow the facilities to treat legally isolated patients while protecting public health and safety. Any facilities being granted a waiver shall be established and operated in accordance with the facility's required disaster and mass casualty plan. Any waivers granted pursuant to this paragraph shall be posted on the Department's website.

11. To support consistent practices across California, state departments, in coordination with the Office of Emergency Services, shall provide updated and specific guidance relating to preventing and mitigating COVID-19 to schools, employers, employees, first responders and community care facilities by no later than March 10, 2020.

12. To promptly respond for the protection of public health, state entities are, notwithstanding any other state or local law, authorized to share relevant medical information, limited to the patient's underlying health conditions, age, current condition, date of exposure, and possible contact tracing, as necessary to address the effect of the COVID-19 outbreak with state, local, federal, and nongovernmental partners, with such information to be used for the limited purposes of monitoring, investigation and control, and treatment and coordination of care. The

notification requirement of Civil Code section 1798.24, subdivision (i), is suspended.

13. Notwithstanding Health and Safety Code sections 1797.52 and 1797.218, during the course of this emergency, any EMT-P licensees shall have the authority to transport patients to medical facilities other than acute care hospitals when approved by the California EMS Authority. In order to carry out this order, to the extent that the provisions of Health and Safety Code sections 1797.52 and 1797.218 may prohibit EMT-P licensees from transporting patients to facilities other than acute care hospitals, those statutes are hereby suspended until the termination of this State of Emergency.

14. The Department of Social Services may, to the extent the Department deems necessary to respond to the threat of COVID-19, waive any provisions of the Health and Safety Code or Welfare and Institutions Code, and accompanying regulations, interim licensing standards, or other written policies or procedures with respect to the use, licensing, or approval of facilities or homes within the Department's jurisdiction set forth in the California Community Care Facilities Act (Health and Safety Code section 1500 et seq.), the California Child Day Care Facilities Act (Health and Safety Code section 1596.70 et seq.), and the California Residential Care Facilities for the Elderly Act (Health and Safety Code section 1569 et seq.). Any waivers granted pursuant to this paragraph shall be posted on the Department's website.

I FURTHER DIRECT that as soon as hereafter possible, this proclamation be filed in the Office of the Secretary of State and that widespread publicity and notice be given of this proclamation.

IN WITNESS WHEREOF I have hereunto set my hand and caused the Great Seal of the State of California to be affixed this 4th day of March 2020

GAVIN NEWSOM
Governor of California

ATTEST:

ALEX PADILLA
Secretary of State

City of San Diego
PROCLAMATION OF LOCAL EMERGENCY
By the Mayor

WHEREAS, pursuant to San Diego Municipal Code Section 51.0105(a)(1), the Mayor is authorized to proclaim the existence of a local emergency when the City Council is not in session; and

WHEREAS, at the time of this proclamation the City Council has adjourned to their next scheduled session for Monday, March 16, 2020; and

WHEREAS, a novel coronavirus, COVID-19, causes infectious disease and was first detected in Wuhan City, Hubei Province, China in December 2019; and

WHEREAS, COVID-19 virus symptoms include fever, cough, and shortness of breath; outcomes have ranged from mild to severe illness, and in some cases death; and

WHEREAS, the Centers for Disease Control and Prevention considers the virus to be a very serious public health threat; and

WHEREAS, on January 30, 2020, the World Health Organization declared the outbreak a "public health emergency of international concern;" and

WHERAS, on January 31, 2020, United States Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the nation's healthcare community in responding to COVID-19; and

WHEREAS, on February 2, 2020, the federal government initiated the suspension of the entry of foreign nationals who were in China within the past fourteen days. United States citizens, residents, and their immediate family members who were in the Hubei province and other parts of mainland China are screened upon their entry into the United States. Those without symptoms traveling from areas of China (other than Hubei province) are allowed to continue to their final destination, but are requested to self-quarantine in coordination with local public health officials for up to fourteen days. Federal quarantine of some individuals traveling from Wuhan is presently occurring at the Marine Corps Air Station (MCAS) Miramar; and

WHEREAS, as of February 14, 2020, there were two confirmed cases of COVID-19 in San Diego County and the San Diego County Public Health Officer has determined that due to the large population and geographic location of San Diego County, combined with the worldwide spread of COVID-19, there is a potential threat of introduction of COVID-19 in San Diego County and declared a Local Health Emergency; and

City of San Diego
PROCLAMATION OF LOCAL EMERGENCY
By the Mayor

WHEREAS, on February 19, 2020, the County Board of Supervisors ratified the Declaration of Local Health Emergency; and

WHEREAS, on March 11, 2020, the World Health Organization declared the COVID-19 outbreak to be a pandemic; and

WHEREAS, the presence of the COVID-19 virus presents conditions of extreme peril to the safety of persons within the City of San Diego, and continues to directly affect the safety of persons within the City; and
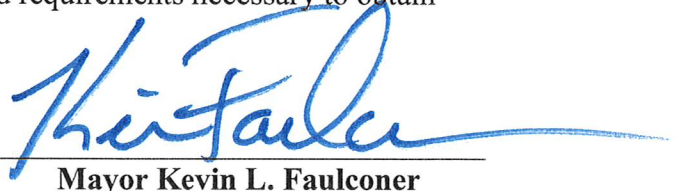
WHEREAS, these conditions warrant and necessitate the proclamation of a local emergency; NOW, THEREFORE,

IT IS HEREBY PROCLAIMED that a local emergency currently exists, and has existed since February 14, 2020, in the City of San Diego due to the continued threat of spread of the COVID-19 virus, and shall be deemed to continue to exist for seven days unless ratified by the City Council, and then until its termination is proclaimed by the City Council of the City of San Diego.

IT IS FURTHER PROCLAIMED AND REQUESTED that a copy of this proclamation be forwarded to the Governor of California in support of his proclamation that a State of Emergency exists within the City of San Diego.

IT IS FURTHER PROCLAIMED AND ORDERED that during the existence of this local emergency, the powers, functions and duties of the Mayor of this City shall be those prescribed by State law and the Charter, ordinances, resolutions and approved plans of the City of San Diego in order to mitigate the effects of this local emergency, including the receipt, processing, and coordination of all inquiries and requirements necessary to obtain available state and federal assistance.

Dated: March 12, 2020

_____

Mayor Kevin L. Faulconer

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HEPATITUS A AFTER ACTION REPORT

ACTION PLAN

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ACTION PLAN				
#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
1	In the San Diego HAV outbreak, the County led meetings, outreach and communication to coordinate actions with cities and other jurisdictions. However, a more formal incident management structure would improve coordination in future outbreaks, facilitating swift coordinated decision making. Convening a policy group of County and regional leadership from affected cities as a regular part of the County's incident command system is an essential element that should be added in future responses.	For future public health outbreaks with the potential for regional impacts, the County should enhance its use of incident management structures to coordinate regional actions. One key structure should be a policy group of County and regional executive leadership from affected jurisdictions that convenes regularly during the outbreak.	HHSA	By 11/30/2018: Develop a protocol that directs the convening of a Policy Group upon use of an Incident Command System for a public health threat
2	An effective Incident Command System (ICS) structure is important in managing a large-scale, long-lasting and unique public health emergency. The San Diego HAV outbreak demonstrated that hundreds of staff members from across County departments (in addition to thousands of partners from other entities) may be part of an emergency response.	Train additional Public Health and other County staff in emergency management structures and roles to enhance their readiness to respond to a public health emergency.	HHSA	By 6/30/2019: Provide online training on the Incident Command System and emergency response to identified staff.
3	The County has California Health Alert Network (CAHAN) San Diego, which serves as the County's routine mechanism for disseminating urgent and comprehensive medical information about emerging or continuing public health issues and issuing recommended actions to the healthcare community. A parallel notification process could be developed for non-medical notifications for when the County needs to conduct outreach to regional emergency managers and other identified contacts. This would allow affected jurisdictions to respond as early as possible to emerging public health threats.	Develop a notification process to communicate pertinent information to municipalities and other governmental agencies to assist in response to emerging public health issues.	HHSA	By 11/30/2018: Develop a protocol that prompts the notification of municipalities and other governmental agencies upon use of the Incident Command System in a regional disease outbreak.

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
4	Since the San Diego HAV outbreak, numerous other communities have been challenged by HAV outbreaks among homeless and drug using populations. As in San Diego, these communities had never previously responded to this particular character of HAV outbreak. The County's response now provides a model to help other communities stop or prevent HAV.	Share information with the Centers for Disease Control and Prevention (CDC), California Department of Public Health (CDPH), and other agencies to inform future HAV responses around the United States.	HHSA	By 8/31/2018: (1) Continue to share information with jurisdictions as requested and present at state and national conferences where possible. (2) Develop a mechanism to track the distribution of information shared with others.
5	A large percentage of the people who contracted HAV had existing CDC indications to receive the HAV vaccine, because they were either illicit drug users or had chronic liver disease. However, none had documentation of being previously vaccinated with the full HAV vaccination series.	Work with the local medical community and other stakeholders to encourage the routine review and administration of adult hepatitis A (HAV) vaccines to individuals.	HHSA	By 8/31/2018: (1) Continue to include this recommendation in all presentations to the medical community. (2) Follow up with key stakeholders to formally request the routine review and administration of adult HAV vaccines to individuals as part of sustainability efforts.
6	Currently, 60% of all immunization records are received electronically into the San Diego Regional Immunization Registry (SDIR) through San Diego Health Connect, the local health information exchange. More provider participation in San Diego Health Connect would help further bolster the SDIR's efforts to document local vaccinations.	Pursue systems and policy changes to support increased entry of adult vaccinations into immunization registries.	HHSA	By 7/31/2018: Create marketing materials for SDIR and promote to providers and systems currently not participating. By 12/31/2018: Expand the current pilot of the bi-directional interface with medical systems using the Health Information Exchange to allow for easier view and input abilities of immunization data.

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
7	With HAV occurring in homeless individuals in other jurisdictions, and homelessness being a nationwide issue, adding homeless individuals as an indicated group by CDC for HAV vaccine would help prevent future HAV outbreaks.	Work with the Centers for Disease Control and Prevention (CDC) to add homeless individuals to the nationally recommended list of those who should receive the HAV vaccination.	HHSA	*The California Department of Public Health and the County of San Diego have already added homeless individuals to the statewide list of those who should receive the HAV vaccination.* By 10/31/2018: Continue to engage the CDC through the Advisory Committee on Immunization Practices by presenting to this committee on HAV and homeless individuals By October 31, 2018.
8	The local recommendation for at-risk workers to be vaccinated will remain in place, but with the San Diego HAV outbreak cases now very low, awareness of the recommendation will wane. Continued outreach to these workers will help protect them.	Conduct ongoing outreach to service providers to make them aware of the continued local recommendation that people who work with homeless individuals or drug users should receive the HAV vaccine.	HHSA	By 9/30/2018 (same date annually): (1) Continue to include this recommendation in all presentations to the appropriate service providers, including homeless providers, behavioral health, substance use, first responders, etc. (2) Send out written communication to these providers encouraging their staff to receive the HAV vaccine on an annual basis and reassess need after two year.

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
9	The single-antigen HAV vaccine is given as a two-dose series, six months apart. It is so effective that the first dose alone confers protections for years. To have long-term immunity to HAV, a second dose is recommended.	Continue activities to promote second doses of HAV vaccine.	HHSA	Ongoing: (1) Continue to utilize 211 San Diego, the County website, and other media outlets to promote the second dose of HAV vaccine. (2) Continue to schedule and track the second dose events via Outbreak Response Management System (ORMS) through December 31, 2018.
10	The majority of inmates in County jail are illicit drug users and a significant number of homeless individuals cycle through the County jails. HAV vaccinations are recommended for these populations.	Educate all County jail inmates on HAV risks and encourage them to be vaccinated.	Sheriff's Department	By 9/15/2018: Enhance ongoing education and vaccination efforts by: 1) Revising intake questions to standardize the advisement of HAV risks and jail vaccinations 2) Working with County public health staff to expand the jail HAV educational program
11	In the San Diego HAV outbreak, the at-risk population was difficult to reach and did not routinely access traditional medical care or public information about health calls to action. Future outbreaks may involve similar individuals, with these continuing barriers.	In the event of a future disease outbreak, employ multidisciplinary field/foot teams to engage difficult-to-reach populations who may not routinely access traditional medical care and may not have access to public information about health calls to action.	HHSA	By 5/31/2019: Incorporate the field/foot team model as well as education regarding how to engage difficult to reach populations in emergency preparedness training activities.
12	Local agencies are more effective in protecting the public when they use products that kill HAV and other viruses to clean buildings and other public spaces.	Use cleaning products that are effective against HAV and other viruses in public areas and facilities.	General Services	Ongoing

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
13	The HAV outbreak showed the importance of sanitation efforts in the public-right-of way. In the unincorporated areas, a multi-disciplinary approach to addressing homeless camps that included coordination with the Sheriff's Department and the County Health and Human Services Agency effectively addressed public safety and sanitation while engaging homeless individuals with vaccinations, housing options, and other services.	Use a multi-disciplinary approach to monitor public right-of-ways and address sanitation needs.	*For Unincorporated Areas:* Department of Public Works and Department of Parks & Recreation	Ongoing
14	The California Department of Pesticide Regulations currently have no public health emergency exemptions in place to streamline public health disinfection activities	Support California Department of Pesticide Regulation (CDPR) regulatory changes to streamline public health disinfection activities to be used in future public health responses.	Agriculture, Weights and Measures	Anticipated 2019
15	While the EPA has lists of registered products effective against hepatitis B and tuberculosis, there is currently no similar list of registered products determined to be effective against HAV	Encourage the Environmental Protection Agency (EPA) to provide additional tools and resources to manage HAV outbreaks.	HHSA	By 11/30/2018: Identify CDC, EPA and any other federal departments or divisions with involvement in product classification process.
16	A future public health response may require a surge of health care professional resources, but may not necessitate a local emergency declaration. Currently, the state's Medical Reserve Corps (MRC) is specifically designed to provide registered nurses and other health care professionals with confirmed current licenses to respond to declared local or state health emergencies. Some California counties have been able to draw from the MRC's volunteer list outside of a declared emergency by developing local hiring and liability coverage protocols.	Enhance the local surge capacity available to respond to a public health need.	HHSA	By 6/30/2019: Pursue local and statewide avenues in order to utilize the MRC volunteer list outside of a declared emergency status.
17	Local homeless service providers may benefit from federal guidance on maintaining adequate sanitation and hygiene in their settings.	Encourage federal agencies to create guidance to assist homeless service providers in addressing sanitation and hygiene in their respective settings.	HHSA	By 9/30/2018: Initiate dialogue with the United States Interagency Council on Homelessness to facilitate obtaining federal guidance on sanitation and hygiene guidelines for homeless service providers.

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
18	The Regional Task Force on the Homeless (RTFH) coordinates and oversees a continuum of services for homeless people in the San Diego region. During the San Diego HAV outbreak, County officials shared information at RTFH meetings and also facilitated a working group to plan and implement strategies to combat the outbreak. Ongoing coordination with the RTFH will address the public health needs of the homeless population.	Coordinate with Regional Task Force on the Homeless and other key stakeholders to include reports on public health issues affecting vulnerable populations as a standing agenda item.	HHSA	Ongoing: Include a standing agenda item at all Regional Task Force on the Homeless Full Membership meetings on Public Health issues. *This was initiated in April, 2018 and will continue for each of the 6 meetings per year.*
19	Illicit drug use is an independent risk factor for getting HAV and has been a longstanding group recommended by CDC to be vaccinated.	Coordinate with substance use disorder treatment providers and other key stakeholders to offer vaccinations to illicit drug users.	HHSA	By 11/30/2018: Continue to work with Behavioral Health and Substance Use Providers to schedule 200 HAV vaccination events at their sites and/or at common client serving locations throughout the County.
20	To keep pace with the scale and scope of the San Diego HAV outbreak, the County had to increase its capacity for diagnostic testing and identifying strains of HAV in the County Public Health Laboratory. Equipment purchased during the declaration of the HAV local health emergency has capabilities to be used for other communicable disease diagnostics.	Maintain and continue developing the capacity of the County Public Health Laboratory.	HHSA	By 6/30/2019: (1) Continue to work with CDC to use their testing module for hepatitis testing to determine relationships between specimens in an outbreak. (2) Formalize partnerships with external organizations to build capacity in bioinformatics, which would allow Public Health Laboratory to expand analysis of specimens.

#	Issue	Recommendation	Responsible Agency/ Department	Completion Date
21	Vulnerable populations will benefit from continued access to appropriate treatment services for their individual needs.	Pursue broader solutions to addressing homelessness and illicit drug use.	HHSA	By 7/31/2018: Initiate the implementation of Drug Medi-Cal Organized Delivery System. By 11/30/2018: Establish an organized approach to homeless outreach throughout the region in partnership with the Regional Task Force on the Homeless to help people access the most appropriate housing and services to meet their needs.

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CALIFORNIA HEALTH ALERT NETWORK BULLETINS

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Fact Sheet

The following processes and factors are used to determine the magnitude and severity of an event based on a local government agency's capacity and capabilities to respond and recover.

Disaster Emergency Proclamation Process

Local Emergency Proclamation

If a local government determines effects of an emergency are beyond the capability of local resources to mitigate effectively, the local government must proclaim a local emergency.

Pursuant to *California Government Code section 680.9,* a local emergency is a condition of extreme peril to persons or property proclaimed as such by the governing body of the local agency affected by a natural or manmade disaster. The purpose of a local emergency proclamation is to provide extraordinary police powers; immunity for emergency actions; authorize issuance of orders and regulations; activate pre-established emergency provisions; and is a prerequisite to request state or federal assistance. A local emergency proclamation can only be issued by a governing body (city, county, or city and county) or an official designated by local ordinance. The proclamation must be issued within 10 days of the incident and ratified by the governing body within 7 days. Renewal of the resolution should occur every 60 days until terminated.

It should be noted a local emergency proclamation is not required for fire or law mutual aid; direct state assistance, American Red Cross assistance; a Fire Management Assistance Grant (FMAG); or disaster loan programs from the U.S. Department of Agriculture (USDA) or U.S. Small Business Administration (SBA).

State of Emergency Request

Pursuant to *California Government Code section 8625,* the Governor may proclaim a State of Emergency in an area affected by a natural or manmade disaster, when he is requested to do so by the governing body of the local agency affected, or he finds the local authority is inadequate to cope with the emergency.

A local jurisdiction should request the Governor to proclaim a state of emergency when the governing body of a city, county, or city and county determine:

- Emergency conditions are beyond the control of the services, personnel, equipment, and facilities of any single county, city, or city and county, and
- Emergency conditions require the combined forces of a mutual aid region or regions to combat.

California Disaster Assistance Act Funding Process

Request

As set forth in the *California Government Code, Title 2, Division 1, Chapter 7.5 - California Disaster Assistance Act (CDAA)*, only a governing body of a city (mayor or chief executive), county (chairman of a board of supervisors or county administrative officer), or city and county may seek financial assistance through CDAA, by order of a Director's Concurrence or Governor's Proclamation. The request for CDAA can be included in a local emergency proclamation; however, it is more appropriate to request CDAA on separate letterhead once the governing body has identified, and can certify, local resources are insufficient and the situation is beyond its capabilities.

Verification of Damages

When the governing body submits its local proclamation of emergency to the California Governor's Office of Emergency Services (OES) Regional Operations, the package should include an Initial Damage Estimate (IDE). An IDE is the local governments' identification of the impacts and local response and recovery activities. The IDE assists Cal OES to understand the jurisdictions' damages and prioritize Preliminary Damage Assessment (PDA) efforts, which in turn can lead to a state or federal disaster declaration. An Operational Area must include all its affected governing bodies (cities, towns, etc.), special districts (school districts, water districts, community services districts, etc.), and private non-profit organizations within the IDE. Cal OES Regional Operations then forwards the IDE to Cal OES headquarters, which includes a Regional Event Summary (RES) update delineating the impact of the event.

An IDE should include:
- Type and extent of public and private sector damage;
- Estimates of damages and emergency response costs; and
- Any acute public health and environmental issues

To assist the Governor in determining if funding under CDAA should be granted, the IDE and RES are reviewed, and if warranted, a State pre-assessment is conducted by Cal OES Recovery. Cal OES works with local jurisdictions' emergency management and/or public safety agencies in the Operational Areas affected by the disaster event to accomplish these assessments.

Once a determination is made, Cal OES will notify the requesting jurisdiction in a timely manner (verbally by Cal OES Region and in writing by Cal OES Recovery).

Factors Utilized in Consideration

In evaluating a local government's request for financial assistance under CDAA, a number of factors, and relevant information, are considered in determining the severity, magnitude and impact of a disaster event and developing a recommendation to the Governor. The very nature of disasters, their unique circumstances, and varied impacts impedes a complete listing of factors considered when evaluating disaster declaration requests; however, primary considerations are as follows, in no particular rank:

Factors Considered

√ Activation of Emergency Operations Plan and Emergency Operations Center
√ Amount and type of damage (includes response costs, emergency protective measures, debris removal, public infrastructure damage, number of businesses affected, and number of homes destroyed/with major damage)
√ Amount of available funding at the local level
√ Available assistance or additional programs from other sources (Federal, State, local, voluntary/NGOs)
√ Costs of event distributed per population (per capita)
√ Dispersion or concentration of damages
√ Existence of an approved Local Hazard Mitigation Plan
√ History or frequency of disasters over a recent time period
√ Imminent threats to public health and safety or the environment
√ Impact on the infrastructure of affected area(s) or critical facilities
√ Impacts to essential government services and functions
√ Level of insurance coverage in place for public facilities and homeowners
√ Per capita income and poverty level of the operational area
√ Requirement or request for regulatory, statutory or permit extension waiver or relief
√ Resource commitments (Local, Regional, State Mutual Aid Assets)
√ Unique capability of State government

Events Outside the State's Capabilities

If an incident is of such severity and magnitude that effective response is beyond the capabilities of the affected local government and the State or Indian tribal government, and supplementary assistance is necessary, the Governor may request federal assistance, including a presidential emergency or disaster declaration.

Presidential Declarations Request

Pursuant to *Title 44 of the Code of Federal Regulations*, the Governor may request the President declare an emergency or major disaster exists in the State, in accordance with the authority outlined by the Stafford Act. A Presidential Declaration is determined through evaluation of several factors, including the cause of the disaster event, damages, needs, certification by state officials that state and local governments will comply with cost sharing and other requirements, and official requests for assistance.

In requesting supplemental federal assistance, the Governor must:
- Certify that the severity and magnitude of the disaster exceeds local capabilities;
- Certify federal assistance is necessary to supplement the efforts and available resources of the State and local governments, disaster relief organizations, and compensation by insurance for disaster related losses;
- Confirm execution of the state's emergency plan;
- Certify adherence to cost-sharing requirements; and
- Conduct a joint Federal-State preliminary damage assessment (PDA) to analyze
    o FEMA: Individual Assistance, Public Assistance, and Hazard Mitigation
    o SBA: Individuals and households

To: CAHAN San Diego Participants
Date: January 24, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory: 2019 Novel Coronavirus

An outbreak of respiratory disease caused by 2019 Novel Coronavirus (2019-nCoV) has been identified in Wuhan, Hubei Province, China. As of January 24, over 900 cases and 26 deaths have been identified since the outbreak was detected in December 2019. Traveler cases from Wuhan have been identified in other areas of China, including Beijing and Shenzhen, as well as Taiwan, Thailand, Japan, South Korea, and several other countries. The first United States case was confirmed earlier this week in a Washington state traveler from Wuhan. Today, a second travel-related case was confirmed in United States in Illinois state.

The initial illnesses are believed to be related to animal exposure in a market in Wuhan, however more recent cases have demonstrated that person-to-person transmission occurs. Several cases have been seen in healthcare workers who cared for cases, though it is not clear how easily or sustainably the virus is spreading between people.

Because the largest number of cases have been identified in Wuhan, public health surveillance is currently focused on travelers from this area. Earlier this week, China announced that travel out of Wuhan has been restricted, though it is unclear at this point how comprehensive these restrictions will be. The Centers for Disease Control and Prevention (CDC) has implemented symptom screening of travelers arriving from Wuhan at five airports in the United States, including Los Angeles International Airport and San Francisco International Airport. Most travelers from Wuhan to the United States will pass through one of these airports and receive a health assessment upon arrival. If this assessment reveals no evidence of acute illness, they will be educated about the current outbreak and instructed to seek medical care if they develop illness.

San Diego County providers may care for patients who develop illness following travel from Wuhan. The following recommendations are provided for local providers:

- **Identify possible cases.** Providers should take a detailed travel history for patients with fever and acute respiratory illness to identify potential exposures. If a patient reports recent travel to China, the provider should clarify which cities and provinces were visited.

- **Isolate possible cases.** The California Department of Public Health released the attached all-facilities letter on January 23, 2020. This letter details appropriate infection control precautions that should be followed.

- **Immediately inform facility infection control AND the County Epidemiology Program** by calling 619-692-8499 during normal business hours (Monday-Friday 8 AM-5 PM), or 858-565-5255 after hours, on weekends, and County-observed holiday.

Once a provider informs the County's Epidemiology Program, staff will determine if the patient meets the criteria for a patient under investigation (PUI) for 2019 Novel Coronavirus (2019-nCoV). If the criteria for PUI are met, staff will provide guidance about the collection and delivery of clinical specimens to the Public Health Laboratory for packaging and shipping to the CDC. At this time, diagnostic testing for 2019-nCoV can be conducted only at CDC.

As this situation continues to evolve rapidly, providers should consistently monitor CDC recommendations at the CDC Novel Coronavirus website.

Additional Resources

- World Health Organization (WHO) Statement Regarding Cluster of Pneumonia Cases in Wuhan, China
- Centers for Disease Control and Prevention (CDC) 2019 Novel Coronavirus, Wuhan, China
- Centers for Disease Control and Prevention (CDC) General Information About Coronaviruses
- California Department of Public Health (CDPH) Novel Coronavirus 2019 (2019-nCoV)
- County of San Diego 2019 Novel Coronavirus (2019-nCoV)

Thank you for your participation.

CAHAN San Diego
County of San Diego Health & Human Services Agency
Epidemiology and Immunization Services Branch
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Urgent Phone for pm/weekends/holidays: (858) 565-5255
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Public-Access Website: http://www.cahansandiego.com

SONIA Y. ANGELL, MD, MPH
State Public Health Officer & Director

GAVIN NEWSOM
Governor

January 23, 2020   AFL 20-09

TO: All Facilities

SUBJECT: Health Update and Interim Guidance – 2019 Novel Coronavirus (nCoV)

All Facilities Letter (AFL) Summary

- This AFL provides information on the 2019 Novel Coronavirus (2019-nCoV)
- This AFL contains the latest Centers for Disease Control and Prevention (CDC) information on 2019-nCoV including infection control guidance, criteria for evaluation of Patients Under Investigation (PUIs), and recommendations for reporting, specimen collection, and testing. It is likely that CDC will update its guidance in the coming weeks, so please check for updates on CDC's 2019-nCoV webpage.
- At this time there are no confirmed 2019-nCoV cases in California.

Background

An outbreak of pneumonia of unknown etiology in Wuhan, China was reported to the World Health Organization (WHO) on December 31, 2019, and a novel coronavirus was soon identified as the cause. On January 21, 2020, CDC announced the first U.S. case in a traveler who had returned from Wuhan.

What is known:
- Limited person-to-person spread is occurring.
- Some healthcare workers in China have reportedly been infected.
- Although severe and fatal illness has been reported in some patients, many have had milder illness and do not require hospitalization.
- On January 21, 2020, CDC updated its interim travel health notice for people traveling to Wuhan, China from "Level 1, Practice Usual Precautions" to "Level 2, Practice Enhanced Precautions".
- CDC has implemented symptom screening of travelers arriving from Wuhan, China at three United States airports (San Francisco International Airport, Los Angeles International Airport, and John F. Kennedy International Airport in New York); screening will soon expand to Atlanta Hartsfield-Jackson International Airport and Chicago O'Hare International Airport.

- Disembarking travelers with symptoms potentially consistent with 2019-nCoV infection are being referred for further evaluation at health care facilities.
- Asymptomatic travelers are given written instructions regarding steps to take if they become ill in the 14 days after arrival from Wuhan, including calling ahead to a health care facility and explaining that they have traveled from Wuhan.
- There is no vaccine or specific treatment for 2019-nCoV infection.
- An investigational new drug known as remdesivir may be requested via CDC for compassionate use in severely ill patients. Please contact the CDC Emergency Operation Center at 770-770-488-7100 to request remdesivir.

What is not yet known:
- Attack rate of the virus, or how easily and sustainably this virus spreads person-to-person.
- Incubation period of 2019-nCoV infections; current recommendations are based on the known incubation period of 2-14 days for other coronaviruses.
- Whether infected persons are infectious before they show clinical signs and symptoms.
- Spectrum of clinical illness associated with 2019-nCoV.

Recommendations for Healthcare Facilities
Although airports are screening travelers from Wuhan at entry, it is possible travelers who become ill in the days following their arrival may present for care at health care facilities in the community. The California Department of Public Health (CDPH) is encouraging all healthcare facilities to:
- Obtain a travel history for **all** patients presenting with fever and acute respiratory illness.
- Place signage, implement travel history screening at triage, and review procedures for immediately placing symptomatic patients with a positive travel history in a surgical mask and private room, ideally an airborne infection isolation room (AIIR), wherever possible.
- Immediately contact your local health department and your facility's infection preventionist if a patient may meet CDC's criteria for PUI.
- Review infection control guidance for potential 2019-nCoV patients. Ensure facility infection control policies are consistent with the CDC's Interim Infection Control Precautions for Patients Under Investigation for 2019-nCoV.
- Review procedures for collection of laboratory specimens for 2019-nCoV testing and laboratory biosafety guidelines; your local health department will work closely with the CDPH Viral and Rickettsial Disease Laboratory (VRDL) and the CDC to coordinate testing.

Criteria for a Person Under Investigation (PUI) for 2019-nCoV
Patients in the United States who meet the following criteria should be evaluated as a PUI in association with the outbreak of 2019-nCoV in Wuhan City, China.

Clinical Features	&	Epidemiologic Risk
Fever[1] (≥38°C/100.4°F) **and** symptoms of lower respiratory illness (e.g., cough, difficulty breathing)	and	In the last 14 days before symptom onset, a history of travel from Wuhan City, China. – *or* – In the last 14 days before symptom onset, close contact[2] with a person who is under investigation for 2019-nCoV while that person was ill.
Fever[1] (>38°C/100.4°F) **or** symptoms of lower respiratory illness (e.g., cough, difficulty breathing)	and	In the last 14 days, close contact[2] with an ill laboratory-confirmed 2019-nCoV patient.

[1]Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. Clinical judgment should be used to guide testing of patients in such situations.

[2]Close contact is defined as—
a) being within approximately 6 feet (2 meters), or within the room or care area, of a novel coronavirus case for a prolonged period of time while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); close contact can include caring for, living with, visiting, or sharing a health care waiting area or room with a novel coronavirus case.– *or* –
b) having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment.

Please contact your local health department **immediately** if a PUI is identified, or if patient's status as a PUI is uncertain.

The above criteria are intended to serve as guidance for evaluation and testing. Patients should be evaluated and discussed with the local public health department on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain travel or exposure). Patients who meet PUI criteria should also be evaluated for common causes of respiratory infections and community-acquired pneumonia.

Testing for viral respiratory pathogens should be performed by molecular methods, e.g., multiplex viral respiratory testing via real reverse transcription polymerase chain reaction (RT-PCR); viral cultures should not be performed. Do not use rapid influenza diagnostic tests that are not RT-PCR based. At this time, positive results for another respiratory pathogen do not preclude testing for 2019-nCoV.

Infection Control Guidance for 2019-nCoV Infection
Although the transmission dynamics have yet to be determined, CDPH currently recommends a cautious approach to patients under investigation for 2019-nCoV. Such patients should be given a surgical mask to wear as soon as they are identified and should optimally be evaluated in an airborne infection isolation room (AIIR). If an AIIR is not available, and it is not possible to transfer the patient to a facility with an AIIR, the patient should be evaluated in a private room with the door closed, and healthcare personnel entering the room should use Standard, Contact, and Airborne precautions, plus eye protection; this means that healthcare personnel should don gloves, gown, goggles or a face shield, and a fit tested N95 or higher level respirator upon room entry.

Healthcare facilities should additionally implement procedures to minimize the number of healthcare personnel that interact with a PUI and ensure that potentially exposed healthcare personnel and patients can be identified if the PUI is confirmed to be infected with 2019-nCoV.

As healthcare employers, facilities are required to follow recommendations under the California Occupational Safety Health Administration's (Cal/OSHA) Aerosol Transmissible Diseases (ATD) Standard, Title 8 of the California Code of Regulations (CCR) Section 5199. Because 2019-nCoV meets the criteria for a novel aerosol transmissible pathogen (ATP) under the ATD Standard, employers must provide a powered air purifying respirator (PAPR) with a High Efficiency Particulate Air (HEPA) filter(s), or a respirator providing equivalent or greater protection, to employees who perform high hazard procedures on 2019-nCoV PUIs or confirmed cases.

Laboratory Biosafety for 2019-nCoV Infection
Laboratory workers should wear appropriate personal protective equipment (PPE), which includes disposable gloves, laboratory coat/gown, and eye protection when handling potentially infectious specimens.

Any procedure with the potential to generate fine-particulate aerosols (e.g., vortexing or sonication of specimens in an open tube) should be performed in a Class II Biological Safety Cabinet (BSC). Appropriate physical containment devices (e.g., centrifuge safety buckets; sealed rotors) should be used for centrifugation. Ideally, rotors and buckets should be loaded and unloaded in a BSC. Perform any procedures outside a BSC in a manner that minimizes the risk of exposure to an inadvertent sample release.

After specimens are processed, decontaminate work surfaces and equipment with appropriate disinfectants. Use any EPA-registered hospital disinfectant. Follow manufacturer's recommendations for use-dilution (i.e., concentration), contact time, and care in handling. All disposable waste should be autoclaved.

Virus isolation in cell culture and initial characterization of viral agents recovered in cultures of 2019-nCoV specimens are NOT recommended at this time.

Laboratories are also required to follow recommendations under the laboratory section of Cal/OSHA ATD Standard, Title 8 CCR Section 5199, found under subsection (f).

2019-nCoV Update Teleconference
CDPH is holding a teleconference with providers to discuss 2019-nCoV to discuss the status of this outbreak. Healthcare facilities and providers are encouraged to attend. The teleconference will be held:
- Date: Thursday, January 23, 2020
- Time: 12:00 P.M.
- Dial-in: 1-844-867-6167
- Access Code: 2633697

CDC Resources
Please refer to the following guidance for further information:
- Criteria to Guide Evaluation of Patients Under Investigation (PUI) for 2019-nCoV
- Interim Healthcare Infection Prevention and Control Recommendations for Patients Under Investigation for 2019 Novel Coronavirus
- Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with 2019 Novel Coronavirus (2019-nCoV)

If you have any questions regarding the infection prevention and control of 2019-nCoV, please contact the CDPH Healthcare-Associated Infections (HAI) Program at novelvirus@cdph.ca.gov.

Sincerely,

Original signed by Sonia Y. Angell

Sonia Y. Angell MD MPH
State Public Health Officer and Director
California Department of Public Health

To: **CAHAN San Diego Participants**
Date: **February 1, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update: 2019 Novel Coronavirus

The Centers for Disease Control and Prevention (CDC) issued the attached health advisory on the 2019 novel coronavirus and updated the interim guidance for healthcare professionals to evaluate potential cases.

San Diego County providers may care for patients who develop illness following travel from mainland China. The following recommendations are provided for local providers:

> **IDENTIFY possible cases.** Providers should take a detailed travel history for patients with fever and acute respiratory illness to identify potential exposures. If a patient reports recent travel to mainland China, the provider should clarify which cities and provinces were visited.
>
> **ISOLATE possible cases.** Immediately place symptomatic patients with a positive travel history in a surgical mask and private room, ideally an airborne infection isolation room. See the California Department of Public Health all-facilities letter issued on January 30, 2020.
>
> **INFORM facility infection control AND the County Epidemiology Program** by calling 619-692-8499 during normal business hours (Monday-Friday 8 AM-5 PM), or 858-565-5255 after hours, on weekends, and County-observed holidays.

A flow diagram that summarizes the above Identify-Isolate-Inform "3 I" approach is attached, with more information available here.

As this situation continues to evolve rapidly, providers should consistently monitor CDC recommendations at the CDC Novel Coronavirus website.

General public inquiries about the developing coronavirus situation should be directed to 2-1-1 San Diego or to the County Novel Coronavirus website.

The Center for Systems Science and Engineering at Johns Hopkins University is maintaining a very helpful map/summary of locations here. The website has case data based on information from CDC, the World Health Organization, the National Health Commission of the People's Republic of China, and Dingxiangyuan, a social networking site for health care professionals.

Thank you for your participation.

CAHAN San Diego
County of San Diego Health & Human Services Agency
Epidemiology and Immunization Services Branch
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Fax: (858) 715-6458
Urgent Phone for pm/weekends/holidays: (858) 565-5255
E-mail: cahan@sdcounty.ca.gov
Secure Website: http://cahan.ca.gov
Public-Access Website: http://www.cahansandiego.com

<p style="text-align:center">**This is an official**</p>

CDC HEALTH UPDATE

Update and Interim Guidance on Outbreak of 2019 Novel Coronavirus (2019-nCoV)

Summary

The Centers for Disease Control and Prevention (CDC) continues to closely monitor an outbreak of respiratory illness caused by a novel coronavirus (2019-nCoV) that was initially detected in Wuhan City, Hubei Province, China in December 2019.

This CDC Health Alert Network (HAN) Update provides a situational update and interim guidance to state and local health departments that supersedes guidance in CDC's HAN 426 distributed on January 17, 2020. It also adds

- guidance for clinicians caring for patients with 2019-nCoV (https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html),
- and for public health officials on the evaluation and testing of patients under investigation (PUIs) for 2019-nCoV (https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html), and
- updated infection prevention and control guidance specific to 2019-nCoV (https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html).

Early in the outbreak, many of the patients with respiratory illness caused by 2019-nCoV in China had exposure to a large seafood and live animal market, suggesting animal-to-human transmission. More recently, cases have been confirmed with no exposure to animal markets, indicating that person-to-person spread of the virus has occurred. Chinese officials report that sustained person-to-person spread in the community is occurring in China.

The first US case-patient was identified on January 21, 2020, and had recently traveled from Wuhan, China. Since that time, six additional cases have been confirmed in the United States, four among persons who traveled from Wuhan, and one a close contact of a confirmed case. Globally, reported illnesses in people with 2019-nCoV have ranged from mild (no or few signs and symptoms), to severe, including death. These findings are consistent with other coronaviruses, including Severe Acute Respiratory Syndrome (SARS) (https://www.cdc.gov/sars/) and Middle East Respiratory Syndrome (MERS) (https://www.cdc.gov/coronavirus/mers/index.html). Additional information about 2019-nCoV is needed to better understand transmission, disease severity, and risk to the general population. The goal of the ongoing US public health response is to identify and contain this outbreak and prevent sustained spread of 2019-nCoV in the United States.

Recommendations for Screening of Patients for 2019-nCoV in Healthcare Facilities

Recommendations for screening of patients for possible 2019-nCoV infection are based on (1) current knowledge of the characteristics of clinical illness observed in early cases, and (2) the geographic distribution of current cases. They reflect the current public health goal of rapidly containing and preventing transmission of 2019-nCoV illness.

Patients presenting to healthcare facilities should be assessed for exposures associated with risk of 2019-nCoV infections (e.g., travel to China or close contact with a confirmed case) and for symptoms consistent with 2019-nCoV infection (https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-

criteria.html). The assessment is intended to allow healthcare providers to make decisions about appropriate infection control and management of patients. Note that the signs and symptoms of 2019-nCoV overlap with those associated with other viral respiratory tract infections. Given the time of year, common respiratory illnesses, including influenza, should also be considered in patients who are screened. (Figure 1)

Clinicians should ask:
- Does the person have fever or symptoms of lower respiratory infection, such as cough or shortness of breath?

AND
- Has the patient travelled to mainland China within 14 days of symptom onset?

OR
- Has the patient had close contact[1] with a person confirmed with 2019-nCoV infection?

Figure 1.

Flowchart to Identify and Assess 2019 Novel Coronavirus
For the evaluation of patients who may be ill with or who may have been exposed to 2019 Novel Coronavirus (2019-nCoV)

A. **Identify** if in the *past 14 days since first onset of symptoms* a history of *either*

| Travel to China | ← OR → | **Close contact with** a person known to have 2019-nCoV illness* |

B. **AND the person has**

Fever or symptoms of lower respiratory illness (e.g., cough or shortness of breath)

if both exposure and illness are present

Isolate

1.
- Place facemask on patient
- Isolate the patient in a private room or a separate area
- Wear appropriate personal protective equipment (PPE)

Assess clinical status

2.   EXAM

Is fever present?	**Is respiratory illness present?**
☐ Subjective?	☐ Cough?
☐ Measured? _____°C/F	☐ Shortness of breath?

Inform

3.
- Contact health department to report at-risk patients and their clinical status
- Assess need to collect specimens to test for 2019-nCoV
- Decide disposition

If discharged to home

Instruct patient
As needed depending on severity of illness and health department consultation
- Home care guidance
- Home isolation guidance

Advise patient
If the patient develops new or worsening fever or respiratory illness
- Call clinic to determine if reevaluation is needed
- If reevaluation is needed call ahead and wear facemask

* Documentation of laboratory-confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries. For more clarification on the definition for close contact see CDC's Interim Guidance for Healthcare Professionals: www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html

If a patient meets these criteria:

- To minimize the risk that other people will be exposed to individuals who may have 2019-nCoV, patients who report having these symptoms should be asked to wear a surgical mask as soon as they are identified and directed to a separate area, if possible, with at least 6 feet (2 meters) separation from other persons. Patients should be evaluated in a private room with the door closed, ideally an airborne infection isolation room (AIIR), if available. Healthcare personnel entering the room should use standard precautions, contact precautions, airborne precautions, and use eye protection (e.g., goggles or a face shield). For more information about this, see CDC's *Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for 2019 Novel Coronavirus (2019-nCoV) in a Healthcare Setting* (https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html).

Clinicians should immediately notify the healthcare facility's infection control personnel and local health department. The health department will determine if this patient needs to be considered a PUI for 2019-nCoV and be tested for infection.

Criteria to Guide Evaluation and Testing of Patients Under Investigation (PUI) for 2019-nCoV
Local health departments, in consultation with clinicians, should determine whether a patient is a PUI for 2019-nCoV. The CDC clinical criteria for 2019-nCoV PUIs have been developed based on available information about this novel virus, as well as what is known about SARS and MERS. These criteria are subject to change as additional information becomes available.

Clinical Features	AND	Epidemiologic Risk
Fever[2] **or** signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	**AND**	Any person, including health care workers, who has had close contact[1] with a laboratory-confirmed[3] 2019-nCoV patient within 14 days of symptom onset
Fever[2] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)	**AND**	A history of travel from **Hubei Province**, China within 14 days of symptom onset
Fever[2] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization[4]	**AND**	A history of travel from mainland **China** within 14 days of symptom onset

These criteria are intended to serve as guidance for evaluation and testing. Patients should be evaluated and discussed with public health departments on a case-by-case basis for possible 2019-nCoV infection. Testing decisions might be further informed by the clinical presentation or exposure history (e.g., uncertain travel or exposure), and the presence of an alternative diagnosis that explains their clinical presentation.

Recommendations for Reporting, Testing, and Specimen Collection
Healthcare providers should **immediately** notify infection control personnel at their healthcare facility if a patient is classified a PUI for 2019-nCoV. State health departments that have identified a PUI should immediately contact CDC's Emergency Operations Center (EOC) at 770-488-7100 and complete a 2019-nCoV PUI case investigation form (https://www.cdc.gov/coronavirus/mers/interim-guidance.html#evaluation). CDC's EOC will assist local and state health departments with obtaining, storing, and shipping appropriate specimens to CDC, including afterhours or on weekends or holidays. Currently, diagnostic testing for 2019-nCoV can be done only at CDC. Testing for other respiratory pathogens should not delay specimen shipping to CDC.

For initial diagnostic testing for 2019-nCoV, CDC recommends collecting and testing upper respiratory (nasopharyngeal AND oropharyngeal swabs), and lower respiratory (sputum, if possible)) for those patients with productive coughs. Induction of sputum is not indicated. Specimens should be collected as soon as possible once a PUI is identified, regardless of the time of symptom onset. See *Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Patients Under Investigation (PUIs) for 2019 Novel Coronavirus (2019-nCoV)* (https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html).

Recommendations for Healthcare Providers
No vaccine or specific treatment for 2019-nCoV infection is available. At present, medical care for patients with 2019-nCoV is supportive.

Persons with confirmed or suspected 2019-nCoV infection who are hospitalized should be evaluated and cared for in a private room with the door closed, ideally an airborne infection isolation room, if available. For more information, see *Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for 2019 Novel Coronavirus (2019-nCoV) in a Healthcare Setting* (https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html).

Home care and isolation may be an option, based on clinical and public health assessment, for some persons. Please see *Interim Guidance for Preventing the Spread of 2019 Novel Coronavirus (2019-nCoV) in Homes and Communities* (https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html).

Those isolated at home should be monitored by public health officials to the extent possible. Refer to *Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for 2019 Novel Coronavirus (2019-nCoV)* (https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html) for more information.

Notes
[1]Close contact is defined as:
a) being within approximately 6 feet (2 meters), or within the room or care area, of a 2019-nCoV case for a prolonged period of time while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); close contact can include caring for, living with, visiting, or sharing a health care waiting area or room with a 2019-nCoV case
- or -
b) having direct contact with infectious secretions of a 2019-nCoV case (e.g., being coughed on) while not wearing recommended personal protective equipment.
[2]Fever may be subjective or confirmed

See CDC's updated *Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for 2019 Novel Coronavirus (2019-nCoV) in a Healthcare Setting* (https://www.cdc.gov/coronavirus/2019-ncov/infection-control.html).

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with 2019-nCoV (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to those exposed in health care settings.

[3] Documentation of laboratory-confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries.

[4] Category also includes any member of a cluster of patients with severe acute lower respiratory illness (e.g., pneumonia, ARDS) of unknown etiology in which 2019-nCoV is being considered that requires hospitalization. Such persons should be evaluated in consultation with state and local health departments regardless of travel history.

For More Information
More information is available at the 2019 Novel Coronavirus website (https://www.cdc.gov/coronavirus/2019-ncov/index.html) or by
calling 800-CDC-INFO | (800-232-4636) | TTY: (888) 232-6348

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

_____

Categories of Health Alert Network messages:
Health Alert   Requires immediate action or attention; highest level of importance
Health Advisory May not require immediate action; provides important information for a specific incident or situation
Health Update   Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, epidemiologists, HAN coordinators, and clinician organizations##

Flowchart to Identify and Assess 2019 Novel Coronavirus

For the evaluation of patients who may be ill with or who may have been exposed to 2019 Novel Coronavirus (2019-nCoV)

A.

Identify
if in the *past 14 days since first onset of symptoms* a history of *either*

Travel to China	← **OR** →	**Close contact with** a person known to have 2019-nCoV illness*

B.

AND the person has

Fever or symptoms of lower respiratory illness
(e.g., cough or shortness of breath)

if both exposure and illness are present

⬇

1.

Isolate

- Place facemask on patient
- Isolate the patient in a private room or a separate area
- Wear appropriate personal protective equipment (PPE)

2.

Assess clinical status

EXAM	**Is fever present?**	**Is respiratory illness present?**
	☐ Subjective?	☐ Cough?
	☐ Measured? _____°C/F	☐ Shortness of breath?

3.

Inform

- Contact health department to report at-risk patients and their clinical status
- Assess need to collect specimens to test for 2019-nCoV
- Decide disposition

If discharged to home

⬇

Instruct patient
As needed depending on severity of illness and health department consultation

- Home care guidance
- Home isolation guidance

Advise patient
If the patient develops new or worsening fever or respiratory illness

- Call clinic to determine if reevaluation is needed
- If reevaluation is needed call ahead and wear facemask

* Documentation of laboratory-confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries. For more clarification on the definition for close contact see CDC's Interim Guidance for Healthcare Professionals: www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html

To: **CAHAN San Diego Participants**
Date: **February 28, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update #2: Coronavirus Disease 2019 (COVID-19)

The Centers for Disease Control and Prevention (CDC) released the attached health advisory today which has updated the definition of persons under investigation (PUI) to include countries with widespread or sustained community transmission of COVID-19. The current list of countries may be updated at any time, and is maintained here.

Testing for SARS-CoV-2, the virus responsible for causing COVID-19, is now available at the San Diego County Public Health Laboratory (SDCPHL).

- Providers who wish to obtain testing should conduct a thorough medical evaluation of potential cases utilizing appropriate infection control precautions. Standard respiratory pathogen testing (especially influenza testing) and chest radiographs should be conducted as clinically indicated.
- Due to the volume of COVID-19 consultations to the County Epidemiology Unit, providers should utilize their usual infection control and infectious disease resources and protocols to determine that a patient fits the current CDC PUI definition to warrant testing for SARS-CoV-2.
- All testing **must be pre-approved** by the County Epidemiology Unit by calling 619-692-8499 during normal business hours (Monday-Friday 8 AM-5 PM), or 858-565-5255 after hours, on weekends, and County-observed holidays.
- Evidence of PUI eligibility should be documented on the CDC PUI form and submitted with a completed SDCPHL submission form. Two specimens are required (nasopharyngeal and oropharyngeal swabs) in separate viral transport media containers with the specimen source documented on the label.
- Healthcare facilities are responsible for transporting specimens and required forms to SDCPHL. Specimens will not be received or tested by SDCPHL after business hours.
- Questions about specimen submission should be directed to SDCPHL during business hours at 619-692-8500, option 1, or by email.

As this situation continues to evolve rapidly, providers should consistently monitor CDC recommendations at the CDC Coronavirus Disease 2019 website**.** General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

CAHAN San Diego

County of San Diego Health & Human Services Agency   E-mail: cahan@sdcounty.ca.gov
Epidemiology and Immunization Services Branch   Secure Website: http://cahan.ca.gov
Phone: (619) 692-8499; Fax: (858) 715-6458   Public Website: http://www.cahansandiego.com
Urgent Phone for pm/weekends/holidays: (858) 565-5255

CDC HEALTH UPDATE

Update and Interim Guidance on Outbreak of Coronavirus Disease 2019 (COVID-19)

Summary
The Centers for Disease Control and Prevention (CDC) continues to closely monitor and respond to the COVID-19 outbreak caused by the novel coronavirus, SARS-CoV-2.

This CDC Health Alert Network (HAN) Update provides updated guidance on evaluating and testing persons under investigation (PUIs) for COVID-19. It supersedes guidance provided in CDC's HAN 427 distributed on February 1, 2020.

The outbreak that began in Wuhan, Hubei Province, has now spread throughout China and to 46 other countries and territories, including the United States. As of February 27, 2020, there were 78,497 reported cases in China and 3,797 cases in locations outside China. In addition to sustained transmission in China, there is evidence of community spread in several additional countries. CDC has updated travel guidance to reflect this information (https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html).

To date, there has been limited spread of COVID-19 in the United States. As of February 26, 2020, there were a total of 61 cases within the United States, 46 of these were among repatriated persons from high-risk settings. The other 15 cases were diagnosed in the United States; 12 were persons with a history of recent travel in China and 2 were persons in close household contact with a COVID-19 patient (i.e. person-to-person spread). One patient with COVID-19 who had no travel history or links to other known cases was reported on February 26, 2020, in California. The California Department of Public Health, local health departments, clinicians, and CDC are working together to investigate this case and are identifying contacts with whom this individual interacted.

CDC, state and local health departments, other federal agencies, and other partners have been implementing measures to slow and contain transmission of COVID-19 in the United States. These measures include assessing, monitoring, and caring for travelers arriving from areas with substantial COVID-19 transmission and identifying cases and contacts of cases in the United States.

Recognizing persons at risk for COVID-19 is a critical component of identifying cases and preventing further transmission. With expanding spread of COVID-19, additional areas of geographic risk are being identified and PUI criteria are being updated to reflect this spread. To prepare for possible additional person-to-person spread of COVID-19 in the United States, CDC continues to recommend that clinicians and state and local health departments consider COVID-19 in patients with severe respiratory illness even in the absence of travel history to affected areas or known exposure to another case.

Criteria to Guide Evaluation and Testing of Patients Under Investigation (PUI) for COVID-19
Local or state health departments, in consultation with clinicians, should determine whether a patient is a PUI for COVID-19. The CDC clinical criteria for COVID-19 PUIs have been developed based on available information about this novel virus, as well as what is known about Severe Acute Respiratory Syndrome (SARS) (https://www.cdc.gov/sars/clinical/guidance.html) and Middle East Respiratory Syndrome (MERS) (https://www.cdc.gov/coronavirus/mers/interim-guidance.html#evaluation). These criteria are subject to change as additional information becomes available.

Clinical Features		Epidemiologic Risk
Fever[1] **or** signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath)	**AND**	Any person, including healthcare personnel[2], who has had close contact[3] with a laboratory-confirmed[4] COVID-19 patient within 14 days of symptom onset
Fever[1] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	**AND**	A history of travel from affected geographic areas[5], within 14 days of symptom onset
Fever[1] with severe acute lower respiratory illness (e.g., pneumonia, ARDS (acute respiratory distress syndrome) requiring hospitalization and without an alternative explanatory diagnosis (e.g., influenza).[6]	**AND**	No identified source of exposure

These criteria are intended to serve as guidance for evaluation. In consultation with public health departments, patients should be evaluated on a case-by-case basis to determine the need for testing. Testing may be considered for deceased persons who would otherwise meet the PUI criteria.

[1]Fever may be subjective or confirmed.

[2] For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation. Because of their often extensive and close contact with vulnerable patients in healthcare settings, even mild signs and symptoms (e.g., sore throat) of COVID-19 should be evaluated among potentially exposed healthcare personnel. Additional information is available in CDC's Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19) (https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html).

[3]Close contact is defined as—

> a) being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case
>
> – *or* –
>
> b) having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)
>
> If such contact occurs while not wearing recommended personal protective equipment (PPE) (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

Additional information is available in CDC's updated Interim Healthcare Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html).

Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with COVID-19 (e.g., coughing likely increases exposure risk, as does exposure to a severely ill patient). Special consideration should be given to healthcare personnel exposed in healthcare settings, as described in

CDC's Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html).

[4]Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or persons caring for COVID-19 patients in other countries.

[5]Affected areas are defined as geographic regions where sustained community transmission has been identified. Relevant affected areas will be defined as a country with at least a CDC Level 2 Travel Health Notice. Current information is available in CDC's COVID-19 Travel Health Notices (https://www.cdc.gov/coronavirus/2019-ncov/travelers).

[6]Category includes single or clusters of patients with severe acute lower respiratory illness (e.g., pneumonia, ARDS (acute respiratory distress syndrome) of unknown etiology in which COVID-19 is being considered.

Recommendations for Reporting, Testing, and Specimen Collection
Clinicians should immediately implement recommended infection prevention and control practices (https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html) if a patient is suspected of having COVID-19. They should also notify infection control personnel at their healthcare facility and their state or local health department if a patient is classified as a PUI for COVID-19. State health departments that have identified a PUI or a laboratory-confirmed case should complete a PUI and Case Report form through the processes identified on CDC's Coronavirus Disease 2019 website (https://www.cdc.gov/coronavirus/2019-ncov/php/reporting-pui.html). State and local health departments can contact CDC's Emergency Operations Center (EOC) at 770-488-7100 for assistance with obtaining, storing, and shipping appropriate specimens to CDC for testing, including after hours or on weekends or holidays. Currently, diagnostic testing for COVID-19 is being performed at state public health laboratories and CDC. Testing for other respiratory pathogens should not delay specimen testing for COVID-19.

For initial diagnostic testing for SARS-CoV-2, CDC recommends collecting and testing upper respiratory tract specimens (nasopharyngeal AND oropharyngeal swabs). CDC also recommends testing lower respiratory tract specimens, if available. For patients who develop a productive cough, sputum should be collected and tested for SARS-CoV-2. The induction of sputum is not recommended. For patients for whom it is clinically indicated (e.g., those receiving invasive mechanical ventilation), a lower respiratory tract aspirate or bronchoalveolar lavage sample should be collected and tested as a lower respiratory tract specimen. Specimens should be collected as soon as possible once a PUI is identified, regardless of the time of symptom onset. See Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Patients Under Investigation (PUIs) for COVID-19 (https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html) and Biosafety FAQs for handling and processing specimens from suspected cases and PUIs (https://www.cdc.gov/coronavirus/2019-ncov/lab/biosafety-faqs.html).

For More Information
More information is available at the COVID-19 website: https://www.cdc.gov/coronavirus/2019-ncov/index.html.

The Centers for Disease Control and Prevention (CDC) protects people's health and safety by preventing and controlling diseases and injuries; enhances health decisions by providing credible information on critical health issues; and promotes healthy living through strong partnerships with local, national, and international organizations.

_____

Categories of Health Alert Network messages:
Health Alert   Requires immediate action or attention; highest level of importance
Health Advisory   May not require immediate action; provides important information for a specific incident or situation
Health Update   Unlikely to require immediate action; provides updated information regarding an incident or situation
HAN Info Service Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, epidemiologists, HAN coordinators, and clinician organizations##

To: **CAHAN San Diego Participants**
Date: **March 5, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update #3: Coronavirus Disease 2019 (COVID-19)

This health advisory updates local providers that on March 4, 2020, the Centers for Disease Control and Prevention (CDC) updated criteria for evaluation of persons under investigation (PUI) to a wider group of symptomatic patients.

The CDC recommends that clinicians use their judgment to determine if a patient has signs and symptoms compatible with COVID-19 and whether the patient should be tested for SARS-CoV-2, the virus responsible for causing COVID-19. Most patients with confirmed COVID-19 have developed fever and/or symptoms of acute respiratory illness (e.g., cough, difficulty breathing).

In the coming weeks, it is anticipated that clinicians will have access to laboratory testing for diagnosing COVID-19 through clinical laboratories. At this time, given limited capacity and no documented community spread in the county, the San Diego County Public Health Laboratory (SDCPHL) will be testing patients with fever and acute respiratory illness who:

- Have had close contact with a confirmed COVID-19 case.
- Develop symptoms within 14 days of returning from affected geographic areas with widespread or sustained community transmission including China, Iran, Italy, South Korea, and Japan. CDC defines relevant affected areas as locations with at least a CDC Level 2 Travel Health Notice. See all COVID-19 Travel Health Notices.
- Have severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza, RSV), regardless of travel or exposure history.

Providers who wish to obtain testing at SDCPHL should:

- Conduct a thorough medical evaluation of potential cases utilizing appropriate infection control precautions. Standard respiratory pathogen testing (especially influenza testing) and chest radiographs should be conducted as clinically indicated.
- Utilize their usual infection control and infectious disease resources and protocols to determine that a patient meets the criteria listed above to warrant testing for SARS-CoV-2.
- **Obtain pre-approval** by the County Epidemiology Unit by calling 619-692-8499 during normal business hours (Monday-Friday 8 AM-5 PM), or 858-565-5255 after hours, on weekends, and County-observed holidays.

- Document all requested demographic and clinical information on the CDC PUI form and submit with completed SDCPHL submission forms for each specimen type. Two specimens are required (nasopharyngeal and oropharyngeal swabs) in separate viral transport media containers with the specimen source documented on the label.
- Healthcare facilities are responsible for transporting specimens and required forms to SDCPHL. Specimens will not be received or tested by SDCPHL after business hours.
- Questions about specimen submission should be directed to SDCPHL during business hours at 619-692-8500, option 1, or by email.

As this situation continues to evolve rapidly, providers should consistently monitor CDC recommendations at the CDC Coronavirus Disease 2019 website**.**

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

CAHAN San Diego

County of San Diego Health & Human Services Agency	E-mail: cahan@sdcounty.ca.gov
Epidemiology and Immunization Services Branch	Secure Website: http://cahan.ca.gov
Phone: (619) 692-8499; Fax: (858) 715-6458	Public Website: http://www.cahansandiego.com
Urgent Phone for pm/weekends/holidays: (858) 565-5255	

To: CAHAN San Diego Participants
Date: March 10, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #4: Coronavirus Disease 2019 (COVID-19)

This health advisory updates CAHAN participants about a presumptive positive case in a San Diego County resident and new diagnostic testing options for SARS-CoV-2, the virus responsible for COVID-19.

Presumptive Positive Case
On March 9, 2020, the first presumptive positive case of novel coronavirus disease, or COVID-19, has been identified by the San Diego County Public Health Laboratory (SDCPHL). The information currently available indicates that the case was travel related. This San Diego County resident is being cared for in a medical facility and all precautions are being taken to limit the spread of this infection and to protect the public's health. The County of San Diego Public Health Services immediately initiated the disease investigation, which includes accounting for all potential exposures to the case in the community as well as in any healthcare facility.

Key Points

- Quest and LabCorp are now testing specimens without prior approval from public health.

- San Diego County Public Health Lab (SDCPHL) will continue to test as needed.

- The only specimen accepted at SDCHL is the combined NP and OP swabs in one viral transport media tube (i.e. "two swabs in one tube").

Commercial Laboratory Testing
As of March 9, 2020, testing for SARS-CoV-2 is available through two commercial labs (Quest and LabCorp) for ordering by physicians or other authorized healthcare providers anywhere in the U.S. Providers should begin using these commercial laboratories given this update and expanded CDC guidance (see link below).

- These labs can receive specimens for testing **without prior approval** from the County of San Diego public health laboratory.
- Healthcare facilities are responsible for coordinating the transportation of specimens to the commercial labs without the involvement of the County of San Diego Public Health Services (PHS) Epidemiology Program.
- Providers are required to immediately report positive cases per Title 17, Section 2500, as a "novel virus with pandemic potential."

Local Public Health Testing

San Diego County Public Health Laboratory (SDCPHL) will continue to provide SARS-CoV-2 testing for patients with fever and acute lower respiratory illness (e.g. cough and/or shortness of breath) who:

- Have had close contact with a confirmed COVID-19 case
- Develop symptoms within 14 days of returning from affected geographic areas with widespread or sustained community transmission including China, Iran, Italy, South Korea, and Japan
- Have severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza), regardless of travel or exposure history
- Reside at a skilled nursing facility

Following CDC guidance updated March 9, 2020, SDCPHL will now only accept specimens that combine the oropharyngeal and nasopharyngeal swabs into one viral transport media tube (i.e., **"two swabs in one tube"**). Contact the SDCPHL, at 619-692-8500, for guidance on specimen collection and transport.

CDC Guidance for Testing

Providers should utilize their usual infection control and infectious disease resources and protocols, as well as CDC guidance updated March 8th, in evaluating and deciding to test patients for SARS-CoV-2.

Thank you for your participation.

CAHAN San Diego
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To: CAHAN San Diego Participants
Date: March 14, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #5: Infection Control and Prevention Guidance for Coronavirus Disease 2019 (COVID-19)

This health advisory updates CAHAN participants about updated infection control and prevention guidance from the Centers for Disease Control (CDC) and County of San Diego Public Health Services. For current testing guidance, please see the March 10th CAHAN and please refrain from referring patients to Public Health for the sole purpose of specimen collection.

Key Points

- Providers should use standard, contact, and droplet precautions.

- Facemasks are an acceptable alternative when respirators (i.e., N95) are not available and respirators should be conserved for procedures with high risk of aerosol-generation (i.e., sputum induction or bronchoscopy) when in short supply.

- Eye protection, gown, and gloves continue to be recommended. If there are shortages of gowns, they should be prioritized for procedures with high risk of aerosol-generation.

- Patients with suspected or known COVID-19 can be cared for in a single-person room. Airborne Infection Isolation Rooms (AIIRs) should be reserved for patients undergoing for procedures with high risk of aerosol-generation.

Updated Infection Control and Prevention Guidelines

The County of San Diego Public Health Services recommends that health care workers use standard, contact, and droplet precautions when caring for suspected or known cases of COVID-19.

For **low risk procedures** or procedures with low risk of aerosol-generation such as collecting Oro- and Nasopharyngeal specimens, gloves, eye protection, gowns, and either a surgical mask or N95 respirator. A gown and respirator, if in short supply, can instead be prioritized for higher risk procedures that generate respiratory aerosols and a facemask can be an acceptable alternative. Low risk aerosol generating procedures can be done in a single-person room with a closed door.

For **high risk procedures** or procedures with high risk of aerosol-generation such as sputum induction or bronchoscopy, utilize respirators, gowns, gloves, N95 respirator and eye protection in an Airborne Infection Isolation Room (AIIRs).

Of note, CDC has released updated infection control and prevention guidance. As per the CDC, facemasks are now considered an acceptable alternative when respirators are not available for healthcare workers caring for patients with suspected or confirmed COVID-19. N95 respirators are recommended for use when performing procedures likely to generate aerosol and use should be generalized to all known or suspect cases if/when supply increases. Eye protection, gloves, and gowns are still recommended for use during patient care and, if supply issues exist, gowns can be conserved for aerosol-generating procedures. Known or suspected patients for COVID-19 can be cared in a single-person room with the door closed. Use of Airborne isolation rooms (AIIRs) should be reserved for patients undergoing aerosol-generating procedures.

Please click here for the full CDC updated infection control and prevention guidance.

For current testing guidance, please see the March 10th CAHAN and please refrain from referring patients to Public Health for the sole purpose of specimen collection.

Thank you for your participation.

CAHAN San Diego
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To: CAHAN San Diego Participants
Date: March 19, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #6: Coronavirus Disease 2019 (COVID-19) Healthcare Guidance

This health advisory updates CAHAN participants about several important changes to recommendations for COVID-19 infection control, healthcare workers exposures, and diagnostic testing.

Current State
San Diego County now has 67 cases of COVID-19 among San Diego County residents, as well as 5 cases in federal quarantine and 8 cases among non-San Diego County residents. Among the total cases, there is evidence of community spread. The County of San Diego Epidemiology and Immunization Services Branch is identifying and notifying close contacts to these cases. Please visit our website for the latest case counts which are updated daily:
https://www.sandiegocounty.gov/content/sdc/hhsa/programs/phs/community_epidemiology/dc/2019-nCoV/status.html

Infection Prevention and Control
CDC infection prevention and control guidance for PPE includes the following recommendations:

- N95 respirators should be prioritized for procedures that are likely to generate a high concentration of respiratory aerosols (e.g., intubation and extubation).
- Facemasks should be used in the setting of symptomatic patients not undergoing aerosol generating procedures.
- Eye protection is still recommended for use during patient care.
- Gowns and gloves are recommended for clinical care, but if gowns are in short supply, they should be prioritized for procedures that are likely to generate respiratory aerosols.
- Face masks can be used for collecting nasopharyngeal swabs from a possible COVID-19 patient.

Aerosol generating procedures (AGPs) including intubation and extubation, bilevel positive airway pressure (BiPAP), bronchoscopy, sputum induction, and open suctioning of airways, pose a particular infection control risk. If performed, health care providers (HCP) in the room should wear an N95 or higher-level respirator, in addition to eye protection, gloves, and a gown. The number of HCP present during the procedure should be limited to only those essential for patient care and procedure support. AGPs should ideally take place in an airborne isolation rooms (AIIRs). AIIRs should be reserved whenever possible for patients who may necessitate an AGP.

CDC's updated guidance can be found here: https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html.

Healthcare Workers

On March 16, Governor Gavin Newsom issued an executive order stating:

> To address the increased demand for healthcare workers and first responders, State Departments shall authorize first responders, care providers, and workers who are asymptomatic and taking precautions to prevent the transmission of COVID-19, to continue working during the period of this emergency.

This Executive Order aligns with the latest CDC guidance that allows for asymptomatic healthcare workers who have had an exposure to a COVID-19 patient to continue to work.

Diagnostic Testing

Patients with mild illness who do not belong to a high-risk population do not need to be tested.

These patients can be counseled (by phone triage if possible) to follow up if shortness of breath or other more serious symptoms develop and stay at home away from work or school, crowds and persons at high risk until at least 72 hours after fever resolves and respiratory symptoms improve.

Testing should be considered for individuals with fever and lower respiratory tract infectious symptoms who belong to one or more of the following high-risk populations:

- Severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis.
- Any resident of or provider working in a senior living facility, including skilled nursing facilities or assisted living facilities.
- Contacts to known COVID-19 cases.
- Health care workers.
- Persons who care for the elderly.
- Persons experiencing homelessness.

Those who are tested and medically stable, but cannot be isolated at home while results are pending may be eligible for temporary lodging. Staff should call 858-715-2350 from 7am to 7pm.

Thank you for your participation.

To: **CAHAN San Diego Participants**
Date: **March 26, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update #7: Coronavirus Disease 2019 (COVID-19)

San Diego County has 297 cases of 2019 Novel Coronavirus (COVID-19) reported. There has been a rapid increase in recent daily reports of COVID-19 cases and community transmission is becoming more widespread. At this point, the County Epidemiology Unit will primarily conduct investigations of cases identified in hospitalized patients, health care workers, first responders, and residents of congregate living facilities. Providers should inform their patients of test results and give them education on disease prevention and monitoring for worsening disease (see below for more details).
Case numbers are updated daily on our website here.

Key Recommendations for Providers

- COVID-19 testing should be performed for persons who have significant respiratory illness requiring hospitalization or belong to other populations prioritized for testing (see below).
- Patients who have mild illness and do not belong to a priority population do NOT need to be tested; do not test asymptomatic exposed individuals (test is not approved for that).
- The San Diego County Public Health Laboratory (SDCPHL) can assist with testing priority populations. Due to the longer turnaround time of commercial labs, SDCPHL is willing to accept specimens from hospitalized patients that would normally be sent to commercial labs, especially if the patient is seriously ill and/or being considered for a COVID-19 drug trial.
- Quest and LabCorp are consistently reporting laboratory positive results to the County Epidemiology Unit. Providers do not need to report confirmed cases tested through these laboratories unless they belong to the priority populations below.
- Providers who provide direct patient care should monitor themselves daily for fever or respiratory symptoms; they should immediately stop working if symptoms develop and seek testing.
- All COVID-19 related deaths should be reported immediately to the County Epidemiology Unit.
- Flowcharts are attached to assist with testing guidelines: ED and Outpatient.

Priority Populations for COVID-19 Testing

- Testing should be considered for any person with a fever and cough who belong to any of the following populations:
    - Evidence of lower respiratory disease without alternative diagnosis, especially if hospitalized
    - Any resident of a senior living facility, including skilled nursing facilities or assisted living facilities
    - Persons who care for the elderly
    - Persons living in congregate settings (homeless shelters, etc.)
    - Health care workers, first responders, and other emergency workers

Cases of COVID-19 illness have been reported in San Diego County healthcare workers. Most had a history of travel or close contact with a COVID-19 case in a household. Any provider who develops fever and cough should immediately stop working and should consider being tested for confirmed COVID-19 cases. Providers who are concerned that they may have COVID-19 due to symptoms or suspected exposure to COVID-19 are encouraged to talk with their occupational health provider or the County Epidemiology (see phone numbers at bottom) to discuss potential COVID-19 testing.

Close contacts of confirmed COVID-19 cases who develop symptoms are likely to be positive for COVID-19 as well. Testing is not required if the patient is not severely ill, not in a priority population, or not at high risk for complications. Symptomatic contacts should be instructed to isolate as if a confirmed case (see below). Providers can use their discretion in testing other individuals and may consider testing people in groups at high risk for complications, such as older adults or individuals who are immunocompromised or have chronic diseases.

Education for Patients with Fever and Cough Who Do Not Belong to a Priority Testing Population

Patients with fever and cough who have mild disease, are not in a priority group, or are not at high risk for complications do not need COVID-19 testing until testing is much more widely available than it is at present. Testing mildly ill ambulatory patients usually does not change management, but it depletes scarce personal protective equipment (PPE) supplies and testing resources, as well as unnecessarily exposes other patients and healthcare personnel to infection. Mild cases should be instructed to isolate at home as if a confirmed case (see below) and to seek healthcare evaluation if they develop difficulty breathing or other symptoms of severe disease.

Education for Patients with Confirmed COVID-19 (or suspected but not tested as per above)

Providers should inform outpatients who test positive of their results, provide this patient handout with home isolation instructions and guidance for caretakers and close contacts, and the following messages. Of note, these messages can also be provided to mildly ill patients not being testing as per above.

- **Duration of isolation:** Self-isolate for at least 7 days after illness onset; must have no fever (without use of antipyretics) for at least 72 hours **AND** have symptom improvement to be released from isolation. Clearance testing is no longer recommended. Instruct patient to not leave the house during this time, except for urgently needed medical care (call ahead to alert facility of COVID+ status); have friends or family members run errands as needed. *Those who cannot be isolated at home may be eligible for temporary lodging - staff should call 858-715-2350 from 7am to 7pm.*
- **Prevent transmission in the household**: Separate from family members as much as possible; stay in a separate bedroom and use a separate bathroom, have meals delivered to the bedroom and do not spend time in same room as family members without a mask. Open windows (weather permitting) to increase ventilation. Do not allow visitors to come into the home and clean and disinfect shared surfaces/areas frequently.
- **Monitor for severe disease:** Warning signs of more severe disease include shortness of breath, chest pain, weakness, and confusion. Clinical decompensation tends to occur in second or third week of illness. Help patient decide where he/she would go for further evaluation if needed.
- **Management of household members**: Household members with close contact to the patient while symptomatic should be quarantined at home for 14 days beyond last unprotected contact

with patient (i.e., since admission to hospital or separation into different room). If needed, people on quarantine can leave the house on errands to get food, medicines or other essentials, or to exercise, but should avoid close contact with others as much as possible. They also should monitor themselves for fever, cough, body aches or other symptoms, and isolate themselves if such symptoms occur.
- **Inform contacts:** Ask patients to notify people they have had prolonged close contact with while they were having symptoms.

Testing Recommendations and Clinical Laboratory Testing Availability

Diagnosis is confirmed by polymerase chain reaction testing of appropriate clinical specimens.
- Providers should ONLY collect nasopharyngeal (NP) swab for suspect cases (OP not needed)
- Lower respiratory tract specimens should be tested if available (tracheal aspirate, bronchoalveolar lavage specimens, or sputum)

Detailed guidance on specimen collection can be found here.

In addition to the County Public Health Laboratory, multiple commercial and hospital-based labs now offer testing for COVID-19. Lab-confirmed COVID-19 requires immediate reporting to public health per Title 17 of the California Code of Regulations Section 2500, but since most large commercial labs (Quest, LabCorp) and hospital-based labs report electronically, provider reporting is not necessary unless the case is in a priority group or the specimen was run at a smaller commercial lab not listed above.

All COVID-19 deaths should be reported immediately to the County Epidemiology Unit.

As this situation continues to evolve rapidly, providers should consistently monitor CDC recommendations at the CDC Coronavirus Disease 2019 website**.**

Enroll in the Medical Reserve Corps to be notified about volunteer opportunities.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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Outpatient COVID-19-Related Visit Workflow

Patient calls with symptoms

↓

Can the visit be conducted by phone or video?

No (or pt arrives in person) →

Severe ↓ → **Refer to ED**

Yes ↓

Patient needs face-to-face encounter

Screen for COVID-19 symptoms (fever, cough, respiratory symptoms) and determine severity

Unsure / Not Critically Ill →

↓

1. Mask patient ASAP,
2. Ask pt to wash hands / use hand sanitizer,
3. Evaluate for severity

Severe ↓ → **Refer to ED**

Mild ↓

Unless in priority testing group,* mild/moderate symptoms do NOT require testing and can home isolate for 7 days from symptom onset AND 3 days after symptom resolution whichever is longer. If inability to isolate at home, call 858-715-2350 from 7am to 7pm for temporary lodging.

Clinically Stable →

↓

Patient in priority testing group* AND able to collect specimens and send to commercial lab?

Yes ↓

Collect NP swab and send to commercial lab

No →

1. Call 2-1-1, select option for nurse triage AND email MCSDcallcenter.HHSA@sdcounty.ca.gov for testing
2. Provide isolation and household guidance
3. If provider has questions call 619-692-8499, after hours 858-565-5255

Clinically Stable →

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*Priority COVID-19 Testing Groups if Symptomatic (Fever, Cough, Etc.)

- Evidence of lower respiratory disease without alternative diagnosis, especially if hospitalized
- Any resident of a senior living facility, including skilled nursing facilities or assisted living facilities
- Persons who care for the elderly
- Persons living in congregate setting (homeless shelters, etc.)
- Health care workers, first responders, and other emergency workers

LIVE WELL SAN DIEGO

Rev. 03/25/20 V5

Emergency Department Guidance
for Patients with COVID-19 Symptoms

Patient presents with COVID-19 symptoms:
Fever AND cough or difficulty breathing.

Mask patient immediately, place in separate room, don appropriate PPE, assess for severity of illness and perform diagnostic testing.

Does patient require hospitalization?

YES

NO

- Collect NP swab for COVID-19 testing to send to in-hospital lab.
- If in-hospital testing not available, call PH to arrange testing.

Is this patient priority population?
(See inset)

NO

YES

Report positive cases to PH.

Testing is not required.

- Collect NP swab for COVID-19 testing to send to in-hospital lab.
- If in-hospital testing not available , call PH to arrange testing.

Instruct patient to isolate at home until 7 days passed since symptoms first appeared AND at least 3 days passed since recovery defined as resolution of fever without use of fever -reducing medications AND improvement in respiratory symptoms (cough, shortness of breath).

Report positive cases to PH.

Priority Populations:

- **Evidence of lower respiratory disease without alternative diagnosis;**
- **Any resident of a senior living facility, including skilled nursing facilities or assisted living facilities;**
- **Health care workers;**
- **Persons who care for the elderly; and**
- **Persons experiencing homelessness.**

LIVE WELL SAN DIEGO

Rev: 03/25/20

To: **CAHAN San Diego Participants**
Date: **April 1, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update #8: Coronavirus Disease 2019 (COVID-19) - Personal Protective Equipment Guidance

Key Messages

Preserve Critical Supplies and Resources

- County of San Diego Public Health Services (PHS) is asking **all health care providers and facilities to implement measures to preserve personal protective equipment (PPE) and other critical supplies**. National and local PPE shortages are being reported in addition to constraints on laboratory tests and related resources. This health update highlights Centers for Disease Control and Prevention (CDC) [contingency and crisis strategies of optimizing the supply of PPE](#) that should be followed to preserve supplies.
- **Facemasks are no longer required for the remainder of the 2019-2020 influenza season for unvaccinated healthcare personnel as of March 31st, 2020.**
- **To preserve PPE, only refer patients to hospital emergency departments (EDs) when there is a clinical indication to do so.** Patients with mild illness suggestive of COVID-19 who could otherwise be managed outside of an ED should not be sent to EDs for the sole purpose of specimen collection. See prior testing guidance from [CAHAN #7](#).
- PHS recognizes the challenges that healthcare settings are facing with limited supplies of PPE, as well as, discrepancies in guidance from the World Health Organization (WHO), CDC, and Cal/OSHA. **These PHS recommendations are made in the setting of limited PPE currently and to preserve PPE for highest risk settings and procedures and are subject to change as PPE changes. These are recommendations and must be adapted for use in each specific healthcare facility based on need.**

Situation

The rate of new COVID-19 cases in San Diego County continues to increase (see [here](#) for local data updated daily). The community needs to collectively prepare for a surge of newly infected patients including those who are critically ill. Lessons learned from the experiences of other countries and states affected by COVID-19 indicate a need to prepare for surges of ill patients and to try to avert severe shortages of medical supplies, staffing, hospital beds, ICU level beds, and ventilators.

Major distributors have reported shortages of PPE supplies, including eye protection, gloves, gowns, N95 respirators, and face masks. Locally, the stockpile of emergency PPE supplies, managed by the Medical Operations Center (MOC) within the County's Emergency Operations Center, is limited to N95 respirators, masks, gloves, gowns, and face shields. While limited supplies are expected shortly, it is possible that the current and incoming supply may not be sufficient to meet the growing demand. When

these supplies are received, they will be distributed on a priority basis (see **Medical Operations Center** below for more information). The CDC separates PPE supply strategies into three strata; conventional capacity, contingency capacity, and crisis alternate strategies. PHS believes that regionwide most, if not all, facilities are at the point of needing to implement crisis alternate strategies for PPE but this may vary by facility. Thus, in order to preserve regional and statewide supplies of PPE, please calculate your PPE burn rate and follow CDC contingency and crisis strategies as they apply to your facilities now for each type of PPE respectively.

PPE demand is also intricately linked to testing. Testing will depend on testing capabilities of inhouse and outside laboratory services. Nasopharyngeal swabs and viral transport media may be in limited supply, as well as laboratory capacity. Priorities for testing should be given to admitted patients, as well as ambulatory patients in whom test results will assist in medical treatment decision making, regardless of living situation or healthcare worker status.

PHS recognizes the challenges that healthcare settings are facing with limited supplies of PPE, as well as, discrepancies in guidance from WHO, CDC, and Cal/OSHA. These PHS recommendations are made in the setting of limited PPE currently and to preserve PPE for highest risk settings and procedures and these recommendations are subject to change as PPE availability changes. These are recommendations and must be adapted for use in each specific healthcare facility based on need. Below is guidance from WHO, CDC, and Cal/OSHA.

- Per WHO Scientific Brief and Interim Guidance, health care workers should wear a medical mask when entering a room where patients with suspected or confirmed COVID-19 are admitted; Use a particulate respirator at least as protective as a US National Institute for Occupational Safety and Health-certified N95, European Union standard FFP2,or equivalent, when performing aerosol-generating procedures, such as tracheal intubation, non-invasive ventilation, tracheotomy, cardiopulmonary resuscitation, manual ventilation before intubation, and bronchoscopy.

- Per CDC guidance, N95 respirators or respirators that offer a higher level of protection should be used instead of a facemask when performing or present for an aerosol-generating procedure. For guidance on extended use of respirators, refer to strategies to optimize PPE supply. When the supply chain is restored, facilities with a respiratory protection program should return to use of respirators for patients with known or suspected COVID-19. Those that do not currently have a respiratory protection program, but care for patients with pathogens for which a respirator is recommended, should implement a respiratory protection program.

- Per Cal/OSHA guidance, employers covered under the Aerosol Transmission Disease standard must provide surgical masks when the respirator supply is insufficient for anticipated surges or when efforts to optimize the efficient use of respirators does not resolve the respirator shortage. Surgical masks can only be used for lower hazard tasks involving patient contact.

Actions Requested

1. *Reduce Nonessential Testing for COVID-19*
   - To preserve PPE, do NOT test symptomatic patients that can be managed at home or asymptomatic individuals, even if they may have been exposed. See prior testing guidance from CAHAN #7.

2. *Discontinue Non-essential Appointments, Procedures, and Clinics*
   - Cancel non-essential medical and dental appointments that require PPE. Expand telephone or virtual health visits for all patients who do not require in-person evaluation, including those with mild respiratory symptoms.
     - As per the American Academy of Pediatrics, pediatricians may choose to conduct well visits and imminuzations for newborns and infants and should weigh the risks and benefits of visits with older children.
   - Discontinue elective surgical procedures to protect the constrained supply of PPE and to free additional beds and staff to care for COVID-19 patients.
   - Close elective ambulatory clinics and consider repurposing staff and supplies to support and manage surge plans.

3. *Follow CDC Contingency and Crisis Strategies for Optimizing PPE*
   All facilities should immediately implement the CDC contingency and/or crisis capacity strategies as relevant to its current and anticipated supplies. Use the CDC's PPE burn rate calculator and these strategies to preserve PPE supplies and ensure that patients and staff are familiar with the contingency preservation strategies for when the PPE supplies are constrained countywide. Considerations for PPE include:
   - **Eye protection**
     - Shift eye protection supplies asmuch as possible from disposable to re-usable devices (i.e., goggles and reusable face shields, which can be cleaned).
     - Implement extended use of eye protection.
     - See Contingency and Crisis Capacity Strategies for Eye Protection for more details.
   - **Isolation gowns**
     - Shift gown use towards cloth isolation gowns.
     - Consider use of coveralls.
     - Consider use of expired gowns beyond the manufacturer-designated shelf life for training.
     - Use gowns or coveralls conforming to international standards.
     - See Contingency and Crisis Capacity Strategies for Isolation Gowns for more details.
     - If gowns are in short supply, they should be prioritized for procedures that are likely to generate respiratory aerosols
   - **Facemasks**
     - Facemasks are no longer required for the remainder of the 2019-2020 influenza season for unvaccinated healthcare personnel as of March 31st, 2020.
     - Remove facemasks from public areas and place in a secure and monitored site to provide to symptomatic patients upon check in at entry points.
     - Implement extended use of facemasks.
     - See Contingency and Crisis Capacity Strategies for Facemasks for more details.
   - **N95 respirators**
     - Follow the Public Health Guidance issued on March 19, 2020 and CDC contingency and crisis capacity strategies for N95 Respirators which includes the use of N95 respirators beyond the manufacturer-designated shelf life for training and fit testing, extended use of N95 respirators, and reuse of N95 respirators.
     - Facemasks are an acceptable alternative to respirators in the setting of shortages.
     - N95 respirators should be used for procedures that generate a high concentration of respiratory aerosols.

Medical Operations Center (MOC) and Emergency Supplies of PPE
The MOC is aware that all healthcare sectors are in need of PPE. The MOC continues to request PPE supplies from the State and Federal Government. When these supplies are received, they will be distributed on a priority basis focusing on hospitals, EMS provider agency, clinics, and long-term care facilities who are treating COVID-19 positive cases.

Additional Resources
- County of San Diego COVID-19 Health Professionals Page
- California Department of Public Health COVID-19 Page
- Cal/OSHA Interim Guidance on COVID-19 for Health Care Facilities: Severe Respirator Supply Shortage
- CDC Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings
- CDC Strategies of Optimizing the Supply of PPE
- CDC PPE Burn Rate Calculator
- CDC Resources for Healthcare Facilities during COVID-19
- CDC Healthcare Infection Prevention and Control FAQs for COVID-19
- CMS Guidance for Infection Control and Prevention of Coronavirus Disease 2019 (COVID-19) in nursing homes (REVISED)
- American Academy of Pediatrics COVID-19 Clinical Guidance Q&A (Immunizations)
- WHO COVID-19 Scientific Brief
- WHO Infection Prevention and Control Interim Guidance

Enroll in the Medical Reserve Corps and the California Health Corps to be notified about volunteer opportunities.
General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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To: **CAHAN San Diego Participants**
Date: **April 3, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory Update #9: Coronavirus Disease 2019 (COVID-19) – Guidance for Healthcare Personnel Related to Monitoring, Isolation, and Exposures

Key Messages

- All healthcare personnel (HCP) should monitor themselves twice daily for fever and respiratory symptoms because of the potential for unidentified exposure to COVID-19.
- Symptomatic HCP can return to work after specific criteria are met, which vary depending on whether testing is conducted or not. All HCP returning to work must follow masking requirements and patient care restrictions for at least 14 days after symptom onset and all symptoms have resolved.
- Asymptomatic healthcare personnel (HCP) may continue to work, but individual facilities need to balance workforce needs with the reality of community spread.

Situation

The rate of new COVID-19 cases in San Diego County continues to increase (see here for local data updated daily). Given community spread of COVID-19, increasing reports supporting asymptomatic and pre-symptomatic spread, and increased risks to HCP caring for COVID-19 patients, San Diego County Public Health Services (PHS) is providing guidance for all HCP. Occupational health programs within healthcare facilities should be aware of Centers for Disease Control and Prevention (CDC) Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 (Interim Guidance).

Actions Requested:

1. *Healthcare Personnel Monitoring*
   PHS recommends that all HCP self-monitor for fever and respiratory symptoms twice daily, including each day prior to starting work with patients. The goal of this screening is early identification of HCPs with symptoms consistent with COVID-19 to prevent possible exposures to other facility staff and patients within the healthcare facility.
   - All HCP should self-monitor twice daily, once prior to entering to worksite and the second, timed approximately 8 hours later for possible symptoms of COVID-19 (i.e., elevated temperature >100.0F and/or cough, sore throat, shortness of breath).

2. *Home Isolation for Symptomatic Healthcare Personnel*
   - If HCP note any symptoms, they should contact their supervisor immediately and isolate at home unless medically necessary to seek care.

- If any HCP develops a fever, cough, shortness of breath, or sore throat while at work, they should immediately stop working and self-isolate at home.
- Any HCP who worked while symptomatic in an acute or long-term care facility should be tested for COVID-19 through their facility. If testing is not available through their facility or primary care physician then they should email MCSDCallCenter.HHSA@sdcounty.ca.gov to request testing.
- Any HCP who are medically stable but not able to isolate at home, can be referred by their primary or occupational health provider to the County's Temporary Lodging Program by calling 858-715-2350 from 7am to 7pm.

3. *Discontinuation of Home Isolation and Return to Work for Health Care Workers*
   HCP may discontinue home isolation when both of the following time-since-symptom-onset and time-since-recovery conditions are **ALL** met:
   - **No testing conducted:**
     o At least 7 days have passed since symptom onset **AND**
     o At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath, sore throat).
   - **Testing conducted:**
     o Resolution of fever without the use of fever-reducing medications **AND**
     o Improvement in respiratory symptoms (e.g. cough, shortness of breath, sore throat) **AND**
     o Negative test (Of note this is distinct from CDC which recommends 2 negative tests. Current guidance is based on testing limitations and may be revisited later)

   After returning to work HCP should:
   - Self-monitor for symptoms, and seek re-evaluation from occupational health if respiratory symptoms recur or worsen;
   - Adhere to hand hygiene, respiratory hygiene, and cough etiquette (e.g. cover nose and mouth when coughing or sneezing, dispose of tissues in waste receptacles);
   - Wear a facemask at all times while in the healthcare facility until all symptoms are completely resolved or until 14 days after symptom onset, whichever is longer; and be restricted from contact with severely immunocompromised patients (e.g., transplant, hematology-oncology) until 14 days after symptom onset.

   For additional information, see CDC Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19 (Interim Guidance).

4. *Response to Workplace Exposures Depends on Exposure Risk Level*
   CDC guidance, in addition to Governor Newsom's 3/16 Executive Order, allows for asymptomatic healthcare workers who have had an exposure to a COVID-19 patient to continue to work.

   Individual facilities should, however, take into consideration the dynamic balance between the need for an adequate workforce, HCP and patient safety, and the reality of community spread of COVID-19.

- HCP who have had medium or high-risk workplace exposures should not work for 14 days after contact with the case, with considerations made for critical staffing shortages.
- HCP with low risk or negligible workplace exposures should continue to work with daily symptom self-monitoring.
- HCP who are close household contacts to a presumed or confirmed COVID-19 case should inform their workplace for return to work guidance and should be assumed to have medium-risk exposure.

Enroll in the Medical Reserve Corps and the California Health Corps to be notified about volunteer opportunities.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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To: **CAHAN San Diego Participants**
Date: **April 7, 2020**
From: **Epidemiology and Immunizations Services Branch, Public Health Services**

Health Advisory REVISED Update #10: Coronavirus Disease 2019 (COVID-19) - Reuse and Decontamination of N95 Respirator for Crisis Capacity Strategy

Key Messages
- When N95 respirator supply is anticipated to be exhausted using conventional and contingency strategies alone, decontamination methods can be deployed as a crisis capacity strategy until N95 respirator supply is reinstated.
- Approved decontamination methods include ultraviolent germicidal irradiation (UVGI), vaporized hydrogen peroxide, and moist heat methods.
- Healthcare Personnel (HCP) should take precautions detailed below before using a decontaminated N95 respirator.

Situation
While the COVID-19 pandemic continues, personal protective equipment (PPE) supplies, filtering facepiece respirators (FFRs) including N95 respirators, are in short supply for HCP (refer to CAHAN #8). When supplies are abundant, the Centers for Disease Control and Prevention (CDC) and the National Institute for Occupational Safety and Health (NIOSH) do not recommend that filtering facepiece respirators (FFR) be decontaminated and then reused as this practice would be inconsistent with their approved use. However, during times of shortages, a crisis capacity strategy includes considering decontamination and FFR re-use.

Action Requested
1. *Review Your N95 Respirator Utilization Rate and Prepare for Crisis Capacity Strategies During Supply Shortage.*
   CDC recommends implementing crisis strategies based upon the following assumptions:
   - Facilities understand their current N95 respirator inventory and supply chain.
   - Facilities understand their N95 respirator utilization rate.
   - Facilities are in communication with local healthcare coalitions, federal, state, and local public health partners (e.g., public health emergency preparedness and response staff) regarding identification of additional supplies.
   - Contact MOC.LOGS.HHSA@sdcounty.ca.gov to request PPE supplies.
   - Facilities have already implemented contingency capacity measures.

2. *For Crisis Capacity when N95 Respirator Supplies are Anticipated to Become in Short Supply, Consider Deploying Decontamination Methods to Ensure Continued Availability.*
   - An effective FFR decontamination method should reduce the pathogen burden, maintain the function of the FFR, and present no residual chemical hazard. Per NIOSH and CDC, UVGI, vaporous hydrogen peroxide, and moist heat show the most promise as potential methods to decontaminate FFRs.

- The respirator manufacturer should be consulted about the impact of the method on their respirators prior to considering the use of any method.
- The CDC states, "In the absence of guidance or when information is available that a respirator cannot be decontaminated without negatively impacting the performance, respirators may still be decontaminated. However, given the uncertainties on the impact of decontamination on respirator performance, these FFRs should not be worn by HCPs when performing or present for an aerosol-generating procedure."
- Therefore, unused N95 respirators should be prioritized, when available, for aerosol-generating procedures. Institutions must consider risk versus benefit regarding the use of decontaminated N95 respirators in general, for aerosol-generating procedures, and their impact on their own HCP during crisis capacity.
- Please review information from the [American College of Occupational and Environmental Medicine](#) and [CDC](#) for guidance on appropriate methods.
- When N95 supply has been reinstated, then decontamination methods no longer are advised and use of N95 should return to normal standards.

3. **HCP Should Take the Following Actions Before Using a Decontaminated N95 Respirator.**
Data are evolving and vary by decontamination strategy and FFR brand used as to how many cycles of decontamination can be used before a mask degrades, affecting fit and efficiency for the user. Please contact the manufacturer and see [CDC Table 2 Summary of the decontamination method and effect on FFR performance](#) for more information. HCPs should take the following precautionary measures prior to using a decontaminated FFR:
- Clean hands with soap and water or an alcohol-based hand sanitizer before and after touching or adjusting the FFR.
- Avoid touching the inside of the FFR.
- Use a pair of clean (non-sterile) gloves when donning and performing a user seal check.
- Visually inspect the FFR to determine if its integrity has been compromised.
- Check that components such as the straps, nose bridge, and nose foam material did not degrade, which can affect the quality of the fit, and seal.
- If the integrity of any part of the FFR is compromised, or if a successful [user seal check](#) cannot be performed, discard the FFR and try another FFR.
- Users should perform a [user seal check](#) immediately after they don each FFR and should not use an FFR on which they cannot perform a successful user seal check.

Enroll in the [Medical Reserve Corps](#) and the [California Health Corps](#) to be notified about volunteer opportunities.

General public inquiries about **reuse and decontamination of N95 respirator** and other COVID-19 management strategies should be directed to [2-1-1 San Diego](#) or to the [County COVID-19 website](#).

Thank you for your participation.

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To: CAHAN San Diego Participants
Date: April 9, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #11: Coronavirus Disease 2019 (COVID-19) - Revised COVID-19 Exposure Period, Updated Health Officer Orders, Close Contact Notification Instructions, and Death Certification Guidance

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Key Messages

- Patients with COVID-19 are considered infectious 48 hours prior to symptom onset as per the Centers for Disease Control and Prevention (CDC). Individuals with presumed or confirmed COVID-19 should notify all persons with whom they have had close contact beginning 48 hours before their symptom onset.
- In order to limit the spread of COVID-19 further, healthcare personnel (HCP) should notify close contacts or next of kin of patients that are unable to notify contacts themselves, such as those who are critically ill or who have died, about the need to quarantine. If the close contact is considered an essential critical infrastructure worker, they should talk with their employer as they may be allowed to continue working after potential exposure to COVID-19 if they do not have symptoms and take additional precautions to protect themselves and the community. Health Officer Orders for Isolation and Quarantine are available as are Home Isolation Instructions, Home Quarantine Instructions and essential critical infrastructure worker instructions.
- CDC has elevated risk of all persons in the United States to be at "some risk" of COVID-19 given the increases in community spread.
- Refer to CDC's recent Death Certificate guidance to accurately report COVID-19 as a cause of death on the death certificate when applicable.

Situation

- While people with COVID-19 are most infectious when symptomatic, there is growing evidence of asymptomatic and pre-symptomatic transmission (refer to CAHAN#9).
- In updated guidance from the CDC, the period of exposure risk to contacts is revised from the "onset of symptoms" to "48 hours before symptom onset."
- San Diego County Public Health Services (PHS) has revised the time period that a patient with COVID-19 is considered infectious to begin 48 hours before symptom onset instead of from the first day of symptom onset due to evidence of asymptomatic and pre-symptomatic community transmission.
- Additionally, the definition of a contact now includes exposure to either a laboratory-confirmed case OR a clinically compatible case in regions with widespread ongoing transmission where testing is limited.
- In order to limit the spread of COVID-19, healthcare personnel (HCP) who diagnose COVID-19 clinically or by laboratory testing should inform the patient of home isolation instructions and the Health Officer Isolation Order, advise the patient to notify close contacts with quarantine or essential critical infrastructure worker instructions. Those close contacts who are essential workers should work with their employers to determine whether a 14-day quarantine or working with symptom-monitoring is the best option. When patients are unable to notify contacts themselves, such as those who are critically ill or those who have died, HCP should notify next of kin or close contacts directly.
- During public health emergencies, such as COVID-19, accurate and timely reporting of deaths related to COVID-19 improves mortality surveillance, which assists PHS in identifying potential outbreaks and communicating necessary information to the public.

Actions Requested

1. ***Provide Isolation Instructions to COVID-19 Patients and Quarantine Instructions for Close Contacts***
   PHS recommends that individuals with presumed or confirmed COVID-19 must notify their close contacts that they should quarantine at home for 14 days after their last contact with the presumed or confirmed COVID-19 individual. If the close contact is considered an essential critical infrastructure worker, they may be allowed to continue working after potential exposure to COVID-19, if they do not have symptoms and take additional precautions to protect themselves and the community. Essential critical workers should contact their employer and visit CDC guidance regarding safety practices for critical infrastructure workers who may have had exposure to a person with suspected or confirmed COVID-19. Close contacts who are non-essential workers should all undergo quarantine.

   A close contact is defined as a person in contact with a presumed or confirmed COVID-19 case, if, within 48 hours before the presumed or confirmed COVID-19 person's symptoms began and until that person is no longer required to be isolated, they:
   (a) were within 6 feet** of a person with presumed or confirmed COVID-19 for a prolonged period***; **OR**
   (b) had unprotected contact with the body fluids and/or secretions (such as being coughed on/sneezed on, shared utensils, or saliva or provided care without wearing protective equipment) of a person with presumed or confirmed COVID-19.

   - When a HCP diagnoses COVID-19 clinically or by laboratory testing in a patient who is unable to inform close contacts, such as a patient who is critically ill or has died, the HCP must inform the patient's next of kin or the close contacts directly about the need to self-quarantine. The Public Health Officer's Orders can be provided at discharge along with provider-patient discussion. The federal Department of Health and Human Services recently issued a Limited Waiver of HIPAA Sanctions and Penalties During a Nationwide Public Health Emergency to cover these disclosures during the COVID-19 outbreak. Please refer to the following documents that can be shared with your patients and their close contacts respectively:
     - For COVID-19 Patients:
       - Public Health Officer Isolation Order
       - Home Isolation Instructions

     - For COVID-19 Close Contacts:
       - Public Health Officer Quarantine Order
       - Home Quarantine Instructions

   - If an individual is unable to isolate at home, temporary housing is available. Staff should call the Temporary Lodging Hotline by dialing 858-715-2350, 7 days per week from 7 a.m. to 9 p.m.

** According to the CDC, data are limited to define close contact. Factors to consider when defining close contact include proximity, the duration of exposure (e.g., longer exposure time likely increases exposure risk), whether the individual has symptoms (e.g., coughing likely increases exposure risk), and whether the individual was wearing a facemask (which can efficiently block respiratory secretions from contaminating others and the environment).

***According to the CDC, data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. Recommendations vary on the length of time of exposure from 10 minutes or more to 30 minutes or more. In healthcare settings, it is reasonable to define a prolonged exposure as any exposure greater than a few minutes because the contact is someone who is ill. Brief interactions are less likely to result in transmission; however, symptoms and the type of interaction (e.g., did the person cough directly into the face of the individual) remain important.

2. ***Be Aware of CDC's Modified Categorization of Risk to All Americans***
CDC has updated risk categories by removing "no risk" category and replaced with unknown risk to acknowledge that all persons in the United States are at "some risk" of COVID-19 given the increases in community spread throughout the United States. Due to increasing data on asymptomatic and pre-symptomatic spread and increased community transmission, facial coverings are recommended for the general public when leaving home and required for essential employees in specific sectors. Please refer to the Public Health Order amended on April 9, 2020 regarding facial covering in public places, this includes:
   - All essential employees who may have contact with the public at grocery stores, pharmacy/drug stores, convenience stores, gas stations, restaurants, or other business establishments that serve food, banks, or transit systems shall wear a cloth face covering.

3. ***Accurately Report COVID-19 as a Cause of Death***
If COVID-19 played a role in a patient's death, it is important that the physician report it accurately on the death certificate. Please refer to detailed instructions in recent CDC guidance for guidance with certifying deaths due to COVID-19.

Resources
   - Enroll in the Medical Reserve Corps and the California Health Corps to be notified about volunteer opportunities.
   - General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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To: CAHAN San Diego Participants
Date: April 17, 2020
From: Medical Operations Center, Emergency Operations Center – County of San Diego

Health Advisory Update # 12: Coronavirus Disease 2019 (COVID-19) – Collection and Preparation of N95 Respirators for Potential Decontamination and Reuse

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Key Messages
- In preparation for a crisis care strategy, the state of California, in conjunction with California Department of Public Health (CDPH), are procuring Battelle Memorial Institutes' Decontamination System for decontamination of N95 respirators.
- CDPH's All Facilities Letter (AFL) 20-36.1 provides guidance on how healthcare facilities can collect and prepare N95 respirators for potential decontamination using the Battelle system.
- Hospitals, healthcare centers, and other healthcare facilities who are NOT planning to reuse N95 respirators are still encouraged to collect and prepare N95 respirators for reuse in other settings after decontamination. Facilities conducting other methods of decontamination can continue their process or elect to use the state's process.
- Please refer to CAHAN #10 for additional Personal Protective Equipment guidance.

Situation
- Centers for Disease Control and Prevention (CDC) has listed N95 decontamination and reuse as a potential crisis care strategy and listed several different methods of decontamination.
- California Department of Public Health (CDPH) and California are procuring several Battelle Critical Care Decontamination System (CCDS)™ units, a vapor phase hydrogen peroxide system, which received emergency use authorization from the Food and Drug Administration (FDA) on March 29, 2020 for N95 respirator decontamination.
- CDPH has put out guidance in an All Facilities Letter (AFL) 20-36.1 encouraging healthcare facilities to collect and prepare N95 respirators for re-use.
- Hospitals, healthcare centers, and other facilities that are NOT planning to reuse N95 respirators are still encouraged to collect and prepare N95 respirators for potential reuse in other settings.
- Please note that healthcare facilities currently conducting other methods of decontamination can choose to continue their current process or elect to use the state's process.
- Additional guidance will be released by CDPH regarding this process.
- Please refer to CAHAN #10 for additional Personal Protective Equipment (PPE) guidance.

Actions Requested
1. *Healthcare Facilities Should Review CDPH Instructions in AFL 20-36.1 to Collect and Prepare N95 Respirators for Potential Decontamination and Subsequent Re-use.*
   - *A supply chain procedure will be developed for the collection of N95 respirators from healthcare facilities for the decontamination process and returned to each facility.*

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website. Thank you for your participation.

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Priority Level for Testing Criteria:
Federal, State, and County Recommendations

Revised April 22, 2020

Priority Level	Federal Testing Criteria (March 2020)	State Testing Criteria (April 19, 2020)	County Testing Criteria (April 20, 2020) (Includes below recommendations PLUS federal and state recommendations)
1	• Hospitalized patients • Healthcare facility workers with symptoms	• Hospitalized patients • Symptomatic healthcare workers • Persons identified for testing by public health contact investigations and disease control activities in high risk settings, including both residents and staff (e.g., congregate living facilities, correctional facilities)	• Residents and staff (symptomatic and asymptomatic) of congregate facilities which may include long-term care facilities, homeless shelters, substance use disorder treatment facilities, and correctional facilities

2	• Patients in long-term care facilities with symptoms
	• Patients 65 years of age and older with symptoms
	• Patients with underlying conditions with symptoms
	• First responders with symptoms
		• Screening of asymptomatic residents of congregate living facilities prior to admission or re-admission to congregate living facility (e.g., a hospitalized patient will be screened for COVID-19 prior to discharge to a congregate living facility)
		• Screening of asymptomatic healthcare workers (e.g., skilled nursing facility workers, hospital workers)
		• Symptomatic persons in essential health and public safety occupations (e.g., first responders, law enforcement, congregate living facility workers)
		• Symptomatic persons >65 years of age or with chronic medical conditions
			• Vulnerable populations (symptomatic and asymptomatic):
			  o People with HIV/AIDS
			  o People Experiencing Homeless
			  o Those in Rural Areas
			  o Racial/Ethnic Groups
			  o Native Americans
			  o Older Adults

3	• Critical infrastructure workers with symptoms • Individuals who do not meet any of the above categories with symptoms • Healthcare facility workers and first responders • Individuals with mild symptoms in communities experiencing high numbers of COVID-19 hospitalizations	• Symptomatic persons in essential infrastructure occupations (e.g., utility workers, food supply workers, other public employees)	• Asymptomatic essential workers, including first responders and others, especially as part of an outbreak investigation or in areas with medically vulnerable patient populations
4	• Non-priority: Individuals without symptoms	• Community-based testing of all low-risk symptomatic persons • Surveillance testing of asymptomatic persons	• Surveillance testing of deaths not otherwise linked to COVID-19

To: CAHAN San Diego Participants
Date: April 23, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #13: Coronavirus Disease 2019 (COVID-19)-Expansion of COVID-19 Testing

Key Messages

- Molecular assay-based testing capacity continues to increase, however limitations with reagents, related testing materials, and personal protective equipment (PPE) pose logistical challenges.
- California Department of Public Health (CDPH) testing priority guidance has been adapted locally to San Diego County below. Each organization should be aware of federal, State, and County testing guidance and implement testing strategies contingent on priority testing recommendations, including available testing, laboratory capacity, staffing, and PPE supply.
- Molecular assay-based testing guidance is expanded from prior guidance to address long-term care and other congregate facilities, homeless individuals, and surveillance testing, such as for deaths not otherwise linked to coronavirus disease 2019 (COVID-19).
- Providers should give patients who test positive a Health Officer Order as well as Home Isolation Instructions and tell patients to alert close contacts about Quarantine Instructions, if not an essential worker (See prior CAHAN #11 as well).
- As testing capacity increases, providers may choose to consider use of Centers for Disease Control and Prevention (CDC)'s test-based strategy for discontinuation of transmission-based precautions for patients who are hospitalized, severely immunocompromised, or being transferred to a long-term care or assisted living facilities, and return to congregate settings that are not healthcare facilities. As per CDPH guidance, COVID-19 patients may be transferred to skilled nursing facilities after hospital consult with the County of San Diego Public Health Services.
- Reports of testing outcomes should be reported as mandated by the Health Officer Order.
- Temporary lodging can be accessed for medically stable, independent COVID-19 patients by calling 858-715-2350 from 7 am to 9 pm.

Situation

- The number of new coronavirus disease 2019 (COVID-19) cases in San Diego County continues to increase (see here for local data updated daily).
- Molecular assay-based or Nucleic Acid Amplification Tests (NAAT) testing capacity, such as Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR), continue to increase and new, less sensitive forms of molecular assay-based testing are becoming available, such as Point-of-Care (POC) tests.
- However, limitations with reagents and other laboratory materials, and personal protective equipment (PPE) continue to challenge the ability to maximize testing.
- The Centers for Disease Control and Prevention (CDC) currently recommends prioritizing testing amongst symptomatic individuals, while the California Department of Public Health (CDPH) has expanded testing priority groups as listed in their April 19th All Facilities Letter 20-44, which have been adapted locally for the County of San Diego below.

- Each organization should be aware of federal, State, and County testing guidance and implement testing strategies contingent on priority testing recommendations, including available testing, laboratory capacity, staffing, and PPE supply.
- Due to the increase in available testing in the setting of limited PPE and lab testing supplies, the County of San Diego Public Health Services (PHS) is expanding priority testing recommendations to include long-term care and other congregate facilities, such as homeless shelters, substance use disorder (SUD) facilities, and correctional facilities, people experiencing homelessness, and surveillance testing, such as for deaths not otherwise linked to COVID-19.
  - While increased testing capacity allows clinicians to consider COVID-19 testing for a wider group of symptomatic patients, it also may allow for testing of asymptomatic or pre-symptomatic individuals in congregate settings as detailed below.
  - When testing asymptomatic individuals, providers should understand that the RT-PCR tests were validated for symptomatic individuals.

Actions Requested:

- Consider below expanded Priority Populations for RT-PCR COVID-19 testing when updating testing algorithms in your organization based on available testing, laboratory capacity and materials, staffing, and PPE supply.
  - Providers should give patients who test positive a Health Officer Order as well as Home Isolation Instructions and tell patients to alert close contacts about Quarantine Instructions, if not an essential worker. The Health Officer Orders and Home Isolation and Quarantine Instructions are available in English and other languages, click here (See prior CAHAN #11 as well).
    - Those who cannot be isolated at home may be eligible for temporary lodging, if medically stable and functionally independent. Staff should call 858-715-2350 from 7 am to 9 pm.
  - As testing capacity increases, providers may choose to consider use of CDC's test-based strategy for discontinuation of transmission-based precautions for patients who are hospitalized, severely immunocompromised, or being transferred to a long-term care or assisted living facilities, and return to congregate settings that are not healthcare facilities. As per CDPH guidance, skilled nursing facility patients may still be transferred back to their respective facilities if COVID-19 positive after hospitals consult with PHS.
  - Providers should note that newer methods of sample collection, if validated by the performing laboratory, e.g., anterior nasal and nasal mid-turbinate sampling may reduce the need for full PPE (N95 respirators, gowns, larger swab), and may be considered for access and operational reasons (i.e., if nasopharyngeal swabs are short in supply). Contact the performing laboratory prior to implementing a sample collection change. See respective CDC Guidance for Collecting, Handling, and Testing Clinical Specimens here.
  - Providers and labs should report the results of their testing to PHS. See link here for more information.
  - The below RT-PCR Priority Testing Categories are locally adapted from recent CDPH guidance:

  Priority 1:
  - Hospitalized patients
  - Symptomatic* healthcare workers
  - Persons identified for testing through public health investigations and disease control activities in high risk settings, including both congregate setting residents and staff
    - E.g., congregate living facilities, correctional facilities, SUD treatment facilities, homeless shelters

Priority 2:
- Symptomatic* persons in essential health and public safety occupations
  - E.g., first responders, law enforcement, congregate living facility workers
- Symptomatic* persons >65 years of age or with chronic medical conditions
- Screening of asymptomatic residents of congregate living facilities prior to admission or re-admission to congregate living facility
  - E.g., a hospitalized patient will be screened for COVID-19 prior to discharge to a congregate living facility
- Screening of asymptomatic healthcare workers
  - E.g., skilled nursing facility workers, hospital workers, especially as part of an outbreak investigation or in areas with medically vulnerable patient populations
- Screening of vulnerable populations not identified above (symptomatic* and asymptomatic)
  - People with HIV/AIDS
  - People Experiencing Homeless
  - Those in Rural Areas
  - Racial/Ethnic Groups
  - Native Americans
  - Older Adults

Priority 3:
- Symptomatic* persons in essential infrastructure occupations
  - E.g., utility workers, food supply workers, other public employees
- Asymptomatic essential workers, including first responders and others, especially as part of an outbreak investigation or in areas with medically vulnerable patient populations.

Priority 4:
- Community-based testing of all low-risk symptomatic* persons
- Surveillance testing of asymptomatic persons
- Surveillance testing of deaths not otherwise linked to COVID-19

*Symptoms = a fever, cough, sore throat, nausea, vomiting, diarrhea, muscle aches, fatigue, loss of taste or smell. Note that elderly people might not develop fever.

Enroll in the Medical Reserve Corps and the California Health Corps to be notified about volunteer opportunities.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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To: CAHAN San Diego Participants
Date: April 30, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #14: Coronavirus Disease 2019 (COVID-19) – Antibody Testing

Key Messages

- Antibody or serologic blood-based testing, while increasingly available, is <u>not</u> recommended for diagnosis or exclusion of coronavirus disease 2019 (COVID-19) and may <u>not</u> infer immunity in all individuals; hence, caution should be used when interpreting antibody testing results. Molecular or polymerase chain reaction (PCR) testing utilizing nasal or throat swabs to detect COVID 19 viral material during infection is still recommended for diagnosis of COVID-19.
- All positive rapid serology tests and all symptomatic negative serology tests should be confirmed for potential active COVID-19 with molecular diagnostic testing per California COVID-19 Task Force recommendations.
- Providers conducting antibody testing should use laboratory-validated tests that have received Food and Drug Administration (FDA) Emergency Use Authorization (EUA). While it is strongly encouraged that antibody tests used have FDA EUA, providers using non-FDA EUA tests should confirm, prior to use, that the test has been validated by the manufacturer.
- When using antibody testing, patients must be notified about limitations of the test.
- All antibody test results should be reported to the County of San Diego Public Health Services with test type, test result, antibody level, and patient demographics.
- The sale of fraudulent COVID-19 products should be reported for suspected fraud to the FDA's Health Fraud Program or the Office of Criminal Investigations or email FDA-COVID-19-Fraudulent-Products@fda.hhs.gov. Suspected fraud may also be reported to the San Diego District Attorney consumer fraud line at 619-531-3507.

Situation

- Current coronavirus disease 2019 (COVID-19) serology tests are either rapid serology (qualitative positive or negative lateral flow assays - similar to home pregnancy tests - to detect IgM or IgG antibodies) or laboratory requiring Enzyme Linked Immunosorbent Assays (ELISA) capable of detecting IgM, IgG, or IgA depending on the test type. Caution should be used when interpreting such tests as the potential exists for false negatives (individual is infected with COVID-19, but the test is negative) or false positives (individual is not infected with COVID-19, but the test is positive, which may occur if antibody to the "common cold" coronavirus is present). Antibody testing should not be used to diagnose acute infection.
- Per California COVID-19 Task Force, all positive rapid serology tests should be followed with molecular diagnostic testing, such as polymerase chain reaction (PCR) or an ELISA sent to a Clinical Laboratory Improvement Amendments (CLIA) certified high complexity clinical laboratory. All negative rapid serology tests *in symptomatic individuals* should also be confirmed with molecular diagnostic testing or ELISA for

potential active COVID-19 infection. For ELISA tests, if only IgM is present, consider repeating serology testing in three weeks to determine if IgG is present and perform molecular diagnostic testing for potential active COVID-19 infection.

- The Food and Drug Administration (FDA) continues to provide Emergency Use Authorization (EUA) for antibody or serologic testing through clinical laboratories. A list of COVID-19 tests that have EUA is located here. Note that none of these tests are authorized for home use or self-collection.
- All laboratories with FDA EUA have validated their test within their own laboratories; however, FDA is not validating their tests independently. Antibody tests without FDA EUA have not been reviewed or authorized by the FDA; hence, providers should verify that the test has been validated by the manufacturer prior to use.
- Antibody testing has several limitations that providers need to be aware of and clearly communicate to patients. A useful list of FAQs on serologic tests from the FDA may be found here. Antibody tests that have not received FDA EUA should have the following information provided to the patients when they are given their results:
  o This test has not been reviewed by the FDA.
  o Negative results do not rule out SARS-CoV-2 infection, particularly in those who have been in contact with the virus. Follow-up testing with a molecular diagnostic should be considered to rule out infection in these individuals.
  o Results from antibody testing should not be used as the sole basis to diagnose or exclude SARS-CoV-2 infection or to inform infection status.
  o Positive results may be due to past or present infection with non-SARS-CoV-2 coronavirus strains, such as coronavirus HKU1, NL63, OC43, or 229E.
- Providers should report all antibody test results to the County of San Diego Public Health Services (PHS) with test type, test result, antibody level, and patient name and demographics.
- The sale of fraudulent COVID-19 products is a threat to the public health. Report suspected fraud to the FDA's Health Fraud Program or the Office of Criminal Investigations or email FDA-COVID-19-Fraudulent-Products@fda.hhs.gov. Suspected fraud may also be reported to the San Diego District Attorney consumer fraud line at 619-531-3507.

Actions Requested
1. ***Providers should only use laboratory-validated antibody tests.***
   Laboratory-validated antibody tests include tests that have received FDA EUA. As per the FDA, antibody testing which has not received FDA EUA has not been reviewed by the FDA; hence providers should ascertain whether the test has been validated by the testing company prior to use.

2. ***Providers should continue to use molecular diagnostic testing for diagnosis of COVID-19***.
   While antibody testing may be indicative of past COVID-19 infection, presence of an antibody does not infer immunity and protection from future COVID-19 infection; hence, caution should be used when interpreting antibody testing. Serology can be falsely negative or positive as described above.
   o Per California COVID-19 Task Force, all positive rapid serology tests should be followed with molecular diagnostic testing, such as PCR or an ELISA sent to a CLIA certified high complexity clinical laboratory.
   o All negative rapid serology tests in symptomatic individuals should also be confirmed with molecular diagnostic testing or ELISA for potential active COVID-19 infection.
   o For negative rapid tests in asymptomatic individuals, no further evaluation is necessary; for negative ELISA in asymptomatic individual, consider repeating serology in one to two weeks.
   o For ELISA tests, if only IgM is present, consider repeating serology testing in three weeks to determine if IgG can be detected and perform molecular diagnostic testing for potential active COVID-19 infection.

3. *Providers implementing antibody testing need to communicate limitations of testing clearly to patients including:*
   o Lack of clarity on whether antibody presence indicates full, partial, or no immunity to COVID-19 and for how long (extent and length of neutralizing ability of antibodies).
   o Lack of understanding of how prior exposure to other types of coronaviruses (not COVID-19) may contribute to false positive results (cross-reactivity with other coronaviruses).
   o Inability to rule out rule in or out active COVID-19 infection, molecular testing should be used to diagnose COVID-19.
   o EUA is not the same as FDA approval under normal circumstances.

4. *Providers should report all antibody test results to PHS with test type, test result, antibody level, and patient name and demographics.*
   o Providers are required to report the positive antibody test results to PHS within 24 hours.
   o All positive and negative SARS-CoV-2 test results (including serology tests that have an FDA EUA) must be reported by laboratories.
   o Laboratories should report only the results from serologic tests that have received FDA EUA.
   o For more information on local disease reporting requirements, please see here.

5. *Providers* should notify the appropriate authorities to the sale of fraudulent COVID-19 products.
   o The sale of fraudulent COVID-19 products should be reported for suspected fraud to the FDA's Health Fraud Program or the Office of Criminal Investigations or email FDA-COVID-19-Fraudulent-Products@fda.hhs.gov. Suspected fraud may also be reported to the San Diego District Attorney consumer fraud line at 619-531-3507.

Resources and Requests
- Enroll in the Medical Reserve Corps and the California Health Corps to be notified about volunteer opportunities.
- General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.
- Additional COVID-19 related information and resources can be found on the Health Professionals Sector Page on the County COVID-19 website.

Thank you for your participation.

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To: CAHAN San Diego Participants
Date: May 4, 2020
From: Epidemiology and Immunizations Services Branch, Public Health Services

Health Advisory Update #15: Coronavirus Disease 2019 (COVID-19) – Revised Isolation Period, Clinical Symptoms, Resuming Deferred and Preventive Health Care, and CDPH Weekly SNF Infection Prevention Calls

Key Messages

- Based on evidence suggesting a longer duration of viral shedding, the Centers for Disease Control and Prevention (CDC) has recently extended the time-period for isolation of persons with coronavirus disease 2019 (COVID-19) from a minimum of 7 days since symptom onset to 10 days since symptom onset for hospitalized and other patients. Of note, this also extends return to work criteria for healthcare workers.
- The CDC has also extended the duration of isolation needed for asymptomatic individuals who test positive for COVID-19 and do not subsequently develop symptoms from 7 to 10 days.
- The CDC has expanded the list of symptoms to consider when screening and testing for SARS-CoV-2.
- The California Department of Public Health (CDPH) released Guidance on Resuming California's Deferred and Preventive Health Care.
- CDPH is hosting weekly COVID-19 Skilled Nursing Facility (SNF) Infection Prevention Calls, starting May 7, 2020.

Situation

- To discontinue isolation or transmission-based precautions, the Centers for Disease Control and Prevention (CDC) previously listed both a 'non-test-based strategy' and a 'test-based strategy.' The CDC has changed the name of the 'non-test-based strategy' to the 'symptom-based strategy' for those with symptoms and the 'time-based strategy' for those without symptoms.
- Based on evidence suggesting a longer duration of viral shedding, the CDC has extended the duration of Transmission-Based Precautions to at least 10 days since symptoms onset for hospitalized and other patients. This update captures a greater proportion of contagious patients; however, it may not capture everyone and will be revised as additional evidence becomes available. The full symptom-based strategy includes:
  - At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications; AND improvement in respiratory symptoms (e.g., cough, shortness of breath); AND, at least 10 days have passed since symptoms first appeared.
- Return to work criteria for healthcare workers have similarly been modified by the CDC to extend the duration of exclusion from work to at least 10 days since symptoms first appeared.
- The time-based strategy for asymptomatic patients who test positive for COVID-19, and continue to remain asymptomatic, now must wait 10 days to be released from isolation after the initial positive polymerase chain reaction (PCR) test.
- There has been no change to the CDC's test-based strategy for discontinuing isolation/return to work, which still requires a combination of resolution of fever, AND improvement of symptoms, AND at least two negative consecutive results from respiratory specimens collected ≥24 hours apart using PCR

testing. Choice of symptom/time-based or test-based strategy is up to the provider or healthcare facility and providers should be aware of reports of prolonged detection of RNA without direct correlation to viral culture when using the test-based strategy.

- The CDC has changed the definition of and expanded the list of COVID-19 related symptoms to now include cough **OR** shortness of breath **OR** *at least two* of the following symptoms: fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, or new loss of taste or smell. Of note, these new symptoms have been reflected in the CDC's updated evaluation and testing guidance to encourage clinicians to consider testing patients when presenting with respective symptoms.
- California Department of Public Health (CDPH) also recently updated their testing guidance which can be found here. As noted in the County of San Diego testing priorities in *CAHAN #13* *Expansion of COVID-19 Testing*, providers should consider federal, state, and local guidance as well as available testing-related materials, staff, and other resources when formulating their testing strategies.
- CDPH released Guidance on Resuming California's Deferred and Preventive Health Care. Facilities considering resuming services should closely review this guidance.
- Lastly, beginning May 7, 2020, the CDPH will be hosting weekly skilled nursing facility (SNF) Infection Prevention Calls to discuss Coronavirus Disease 2019 (COVID-19) updates.

Actions Requested

1. *Be Aware of CDC's Extended Duration of Isolation of Persons with COVID-19.*
   o Isolation for persons with COVID-19 should be extended to at least 10 days from the onset of symptoms (or initial positive test for those without symptoms).
   o **Symptomatic** patients with presumed or confirmed COVID-19 can be released from isolation when the following criteria have been met:
     - At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications **and**
     - Improvement in respiratory symptoms (e.g., cough, shortness of breath); **and**,
     - **At least 10 days** have passed since symptoms first appeared.
   o **Asymptomatic** persons with laboratory confirmed COVID-19 may be released from isolation, barring the development of symptoms, 10 days after the initial positive PCR test.
   o For those with confirmed or suspected COVID-19, providers should continue to share the Public Health Officer Isolation Order, requiring that individuals must self-isolate immediately. In addition, providers should advise patients to follow home isolation guidelines and to provide all their close contacts with home quarantine guidelines. When patients cannot contact their close contacts, providers should work with their next of kin or others to do so. These resources are available in multiple languages here.
   o If molecular (PCR) testing resources are available, clinicians are encouraged to test symptomatic patients, particularly those in highest priority groups or those at higher risk for severe disease, see the County of San Diego testing priorities in CAHAN #13, Expansion of COVID-19 Testing.

2. *Healthcare Facilities Should Update Return to Work Protocols.*
   o Facilities should update their Return to work criteria for healthcare workers as those have been modified by the CDC to extend the duration of exclusion from work to at least 10 days since symptoms first appeared. For additional information, see CDC Criteria for Return to Work for Healthcare Personnel with Confirmed or Suspected COVID-19.

3. *Healthcare Facilities and Providers Should Integrate Updated COVID-19 Symptoms into Screening and Testing Criteria*
   o The CDC definition of and expanded the list of [COVID-19 related symptoms](#) should be used to expand screening and testing criteria.

4. *Healthcare Facilities Considering Resuming Services Should Review CDPH Guidance*
   o Facilities considering resuming services should review CDPH [Guidance on Resuming California's Deferred and Preventive Health Care](#).

5. *SNF Infection Prevention Staff Should Participate on CDPH SNF Weekly Teleconference Calls.*
   o The teleconference calls will be held:
      ▪ Time: Thursdays, 12:00 P.M. – 1:00 P.M.
      ▪ Dial-in: 1-877-226-8163
      ▪ Access Code: 513711
   o CDPH's All Facilities Letter is available on the following link:
      https://www.cdph.ca.gov/Programs/CHCQ/LCP/Pages/AFL-20-50.aspx

Resources and Requests
- County of San Diego
   o Enroll in the [Medical Reserve Corps](#) and the [California Health Corps](#) to be notified about volunteer opportunities.
   o General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County [COVID-19 website](#).
   o Additional COVID-19 related information and resources can be found on the [Health Professionals Sector Page](#) on the County [COVID-19 website](#).
- CDC COVID-19 Healthcare Professionals website
   o [Information for Healthcare Professionals about Coronavirus (COVID-19)](#).
- CDPH COVID-19 website
   o Visit the [CDPH COVID-19 website](#) for state information, including [guidance documents](#) and [All Facilities Letters](#).

Thank you for your participation.

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Public Website: http://www.cahansandiego.com
County COVID-19 Website: https://www.sandiegocounty.gov/coronavirus.html
County Health Professionals Website, click here.

To: CAHAN San Diego Participants
Date: June 12, 2020
From: San Diego County Health and Human Service Agency

Health Advisory Update #16: Coronavirus Disease 2020 (COVID-19) - Test, Trace, and Treat (T3) Strategy

Key Messages
- On April 28, 2020, the County of San Diego's Health & Human Services Agency launched a Test, Trace, and Treat (T3) Strategy, which relies on the healthcare provider community, first responders and other stakeholders, in addition to public health and human services efforts, to be effective in mitigating coronavirus disease 2019 (COVID-19).
  - **Test:** As diagnostic (molecular) testing capacity increases, hospitals, community clinics, pharmacies, and other health care providers should maximize testing as much as possible for each organization.
    - Individuals should consult with their physician or medical provider regarding getting tested for COVID-19.
    - Health plans must cover COVID-19 tests that are FDA approved or authorized, or approved by the state, without prior authorization and at no cost to the enrollee. This includes follow-up (serial/sequential) tests and testing for asymptomatic individuals. Additional guidance is provided by the Department of Managed Health Care.
    - When testing is not available, patients can be referred to 2-1-1 San Diego as per guidance below.
    - As part of clinical management for patients who test positive, providers should notify patients that they will be contacted by the County Epidemiology Unit and share as applicable the Health Officer Order for Isolation and Isolation Instructions or the Health Officer Order for Quarantine and Quarantine Guidance. These documents are all found here and further guidance is provided in CAHAN #11.
    - Of note, pharmacies are now permitted to obtain test specimens.
    - Providers and laboratories should follow local reporting guidance for covid-19 cases, deaths, and Multi-system Inflammatory Syndrome in Children (MIS-C) cases. In addition, laboratories need to follow recent federal reporting requirements including demographic and other data.
  - **Trace:** Contact Tracing capacity is being significantly increased with cultural competence in mind.
  - **Treat**: Treatment includes:
    - Psycho-social support with monitoring (twice daily temperatures) for disease progression with recommendation for early medical evaluations for respiratory, cardiac, or embolic complications, if needed.
    - For isolation, the County has set up Public Health hotel rooms for temporary lodging, if needed, for those unable to safely isolate from family members.
    - Convalescent plasma with COVID-19 antibodies and Remdesivir are treatment options that may be available for hospitalized patients.
- The Actions Requested section below details methods for our healthcare community to synergize and support the regional T3 Strategy for increased economic, educational, and social activity, while minimizing COVID-19 spread, morbidity, and mortality.

Situation

- As the Coronavirus Disease 2019 (COVID-19) pandemic progresses, the County of San Diego (County) response continues to evolve. The latest epidemiological data on cases, hospitalizations, and deaths can be found here.

- While many patients seen in healthcare settings are symptomatic, scientific reports suggest cases can also be asymptomatic.[1,2,3]
- In order to effectively control dissemination of disease and associated morbidity and mortality, symptomatic and asymptomatic cases need to be quickly diagnosed and isolated, contacts identified and quarantined, and supportive treatment provided.
- The County launched a Test, Trace, and Treat (T3) Strategy on April 28, 2020 as a population health-based strategy using a collaborative effort to achieve collective impact in protecting the public against COVID-19.
- **The T3 Strategy, though initiated by the County of San Diego, relies on the healthcare provider community and other stakeholders to be maximally effective.**
- **Test:** The current state required COVID-19 testing goal for San Diego County is to increase diagnostic (also known as molecular or Polymerase Chain Reaction) testing across the county to at least 4,950 tests per day through public and private testing via hospitals, clinics, and healthcare providers. This represents 1.5 tests per 1,000 population. Health plans must cover COVID-19 tests per Department of Managed Health Care guidance. **While everyone is eligible to get tested, individuals with symptoms of COVID-19 infection or association with a high-risk group, such as those previously listed in the four testing priority groups (see CAHAN #13), should continue to be prioritized for testing.**
- Symptoms of COVID-19 infection or association with a high-risk group are no longer necessary to be tested but remain a priority. The high-risk groups include:
    o Healthcare workers, first responders, other social service employees, and people in essential jobs
    o People 65 and older
    o People with chronic medical conditions
    o People living in a residential or group setting, such as a long-term care facility or shelter
    o People exposed to infected individuals in places where COVID-19 risk is high
    o The message to San Diegans who are interested in testing is to:
        ▪ Contact their healthcare provider; or
        ▪ Go online to 2-1-1 San Diego, https://211sandiego.org/, to schedule an appointment online; or
        ▪ Call 2-1-1- to be directed to a location nearest you.
    o As antibody testing becomes more reliable and the science clearer on implications of positive antibody/serology results, antibody tests may offer greater utility in a later phase strategy. At this time, serological tests should be used primarily for prevalence studies, epidemiological investigations, and identification of plasma donors. See the California Testing Task Force Serology Testing Indications here and prior guidance (CAHAN #14).
    o The Food and Drug Administration (FDA) has created a testing overview document here.
- **Trace:** Contact tracing allows those who have been exposed to a person with lab confirmed COVID-19 disease to be identified and quarantined to prevent spread of the disease. To increase contact tracing capacity, contact tracers are being hired and trained to meet the state-required capacity goal of 450 tracers for our region. Additionally, community health outreach workers/promotoras are being hired to support contact tracing efforts. All close contacts to confirmed cases will be contacted and monitored for a period of 14 days.
- **Treat:** Treatment includes psycho-social support, monitoring of symptoms (twice daily temperatures) and early referral to medical care for worsening respiratory, cardiac, or embolic complications. Hospitalization capacity exists in the county for those requiring admission, and early intervention is beneficial. For isolation, the County has identified Public Health hotels for temporary lodging, if needed, for those unable to safely isolate from family members. Medical providers can refer patients to the Temporary Lodging Hotline by calling 211 from 7 a.m. to 9 p.m, 7 days a week. Additional hospital therapies under approved investigational methods include:
    ▪ FDA Emergency Use Authorization (EUA) of **Remdesivir**, which has shown some effectiveness. Limited doses of Remdesivir have been made available and doses have been proportionally distributed to county hospitals upon consultation with Chief Medical Officers and guidance from California Department of Public Health (CDPH), and approved by the County of San Diego Medical Operations Center.

[1] He, X. *et al.* Temporal dynamics in viral shedding and transmissibility of COVID-19. *Nat Med* **26,** 672–675 (2020).
[2] Ganyani, T. *et al.* Estimating the generation interval for coronavirus disease (COVID-19) based on symptom onset data, March 2020. *Eurosurveillance*, *25*(17).
[3] Lavezzo, E. *et al*. Suppression of COVID-19 outbreak in the municipality of Vo, Italy. *MedRXiv* (2020).

- **Convalescent plasma donations** containing COVID-19 antibodies may provide passive immunity to those actively infected with the virus.
  - This has been studied and utilized for other serious infections.
  - The FDA recently produced a consumer video [here](#).
  - Locally, the [San Diego Blood Bank COVID-19 and Convalescent Plasma Donation effort](#) allows recovered patients to donate plasma.
- **The Actions Requested section below details how our healthcare community can synergize around and support the T3 Strategy for our region to effectively increase economic, educational, and social opportunities while minimizing spread and morbidity from COVID-19.**

Actions Requested

1. **Test:**
   - **While everyone is eligible to get tested, individuals with symptoms of COVID-19 infection or association with a high-risk group, such as those previously listed in the four testing priority groups ([see CAHAN #13](#)), should continue to be prioritized for testing.**
   - Health plans must cover COVID-19 tests that are FDA approved or authorized, or approved by the state, without prior authorization and at no cost to the enrollee. This includes follow-up (serial/sequential) tests and testing for asymptomatic individuals. Additional guidance is provided by the [Department of Managed Health Care](#).
   - Healthcare facilities, centers, and providers should maximize testing for each organization.
     - Organizations should focus on testing all patients within the high-priority groups, including health care workers, first responders and other staff.
     - Where possible, healthcare facilities should consider partnerships with local congregate facilities such as skilled nursing facilities, long-term care facilities, homeless shelters, and substance use disorder treatment facilities to allow for testing in settings where spread can occur.
     - The Governor and CDPH have [authorized pharmacies to collect test specimens](#) in addition to general guidance for pharmacies located [here](#). Facilities may also partner with pharmacies to allow for additional test collection sites while processing specimens in their laboratories.
     - Providers who cannot conduct testing may refer their patients to 2-1-1 San Diego detailed above.
   - Providers should clinically manage patients who test positive and provide them with the following:
     - [Health Officer Order for Isolation](#) and [Home Isolation Instructions](#).
     - [Health Officer Order for Quarantine](#) and [Quarantine Instructions](#), if not an essential worker.
     - The Health Officer Orders and Home Isolation and Quarantine Instructions are available in English and eight other languages [here](#) (See prior [CAHAN #11](#) as well).
   - Providers should also inform patients that the County of San Diego Public Health Department will be calling to obtain information to minimize further spread, including identification of close contacts.
   - Providers and local laboratories should follow [local reporting guidelines](#) to report cases, deaths, and Multi-system Inflammatory Syndrome in Children (MIS-C) cases. In addition, laboratories need to follow recent [federal reporting requirements](#) including demographic and other data.
2. **Trace:**
   - Per above, providers are requested to notify patients of the Health Officer Order for Quarantine and Quarantine Instructions both found [here](#).
   - Providers should also inform patients that a public health nurse or communicable disease investigator from the County Epidemiology Unit will be contacting them to investigate further, including identification of close contacts.
   - County Epidemiology will make efforts to contact every identified close contact as soon as possible to request quarantine and to perform self-monitoring for a minimum of 14 days.
   - **All close contacts who have been exposed to an individual with COVID-19 for 15 minutes or more within six feet may be offered testing.**
3. **Treat:** Treatment includes psycho-social support, monitoring for disease progression, and medical therapies as provided by primary care and area hospitals. Early referral to hospital emergency departments for worsening COVID-19 infection symptoms, especially increased shortness of breath or possible indications of stroke, is encouraged.

Children may present with atypical symptoms of fever, abdominal pain, rash, swelling of hands, and feet indicative of a severe multi system inflammatory condition.

- Temporary Lodging
  - Those who cannot be isolated at home may be eligible for temporary lodging, if medically stable and functionally independent. Staff should call 211 from 7 a.m. to 9 p.m.
  - Providers, their staff, and discharge planners are asked to ensure client is medically stable as temporary lodging is a hotel, not healthcare facility. Of note, some individuals referred for housing have needed re-hospitalization.
- Remdesivir has been distributed to local hospitals proportionally based on COVID-19 cases.
- Plasma Donation
  - Please advise those who have recovered and are at least 28 days from symptom onset (or testing date if asymptomatic) to consider donating plasma to the San Diego Blood Bank. Recovered patients can access the COVID-19 and Convalescent Plasma Donation FAQ page here, which also links to the respective enrollment form if the patient chooses to proceed.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County of San Diego COVID-19 website.

Thank you for your participation.

CAHAN San Diego
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Public Website: http://www.cahansandiego.com

To: **CAHAN San Diego Participants**
Date: **August 17, 2020**
From: **Public Health Services**

Health Advisory Update #17: UPDATED Coronavirus Disease 2019 (COVID-19) Testing Guidance & Additional updates

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Key Messages

- Centers for Disease Control and Prevention (CDC) testing priorities were updated as well as California Department of Public Health (CDPH) testing priorities. These have been adapted locally to San Diego County to address local operational considerations and allow organizations to reference in the context of decreased testing-related supplies that some facilities are experiencing. This interim guidance is subject to change as the situation evolves.
- Local reporting guidance and resources are highlighted below in addition to updated guidance from Cal/OSHA on respirator supply shortages; an announcement from the Center for Medicare and Medicaid Services (CMS) that providers can be reimbursed for patient counseling; and CDC updated guidance on several topics, including ending home isolation and discontinuation of transmission-based precautions for hospitalized patients, retesting with or without symptom development in individuals within 3 months of initial symptom onset, eye protection for healthcare workers in communities of moderate to substantial spread, and a new peer to peer clinical management resource.

Situation

- As case counts increase locally and across the nation, molecular assay-based testing capacity is facing logistical and resource limitations with increased reagents, related testing materials, and personal protective equipment (PPE) demands.
- Centers for Disease Control and Prevention (CDC) testing priorities were updated, as well as California Department of Public Health (CDPH) testing priorities. These have been adapted locally to San Diego County to address local operational considerations and allow organizations to reference in the context of decreased testing-related supplies that some facilities are experiencing. These interim guidance documents are subject to change as the COVID-19 situation evolves. See below, with many notes, including that *each organization should be aware of federal, State, and County testing guidance and implement institutional testing strategies contingent on priority testing recommendations, including available testing, laboratory capacity, staffing, and PPE supply.*
- Reporting guidance for testing outcomes should be reported as mandated by the Health Officer Order.
- Providers should give patients who test positive a Health Officer Order, as well as Home Isolation Instructions, and tell patients to alert close contacts about Quarantine Instructions, if not an essential worker (See prior CAHAN #11 as well). The Center for Medicare and Medicaid Services (CMS) recently announced that providers can be reimbursed for patient counseling at time of COVID-19 testing using existing evaluation and management (E/M) payment codes (see counseling checklist here).
- Medical providers and/or their delegates can refer clinically stable, independent COVID19 patients for temporary lodging by calling 858-715-2350 from 7 am to 9 pm.

- Providers should refer to CDC's updated symptom-based strategy for ending home isolation and for discontinuation of transmission-based precautions for hospitalized patients. Two negative tests are no longer recommended.
- The CDC now recommends no re-testing within 3 months for persons previously diagnosed with symptomatic COVID-19 *who remain asymptomatic* after recovery. For those previously diagnosed positive who develop new symptoms within 3 months, the CDC recommends possible retesting and isolation in consultation with an infection control expert, if no alternative etiologies are identified.
- Clinicians who want peer-to-peer support on clinical management can now also call the CDC Information line (800-CDC-INFO or 800-232-4636) and be connected to volunteer clinicians from the Infectious Disease Society of America (learn more here).
- CDC advises that providers in areas of moderate to substantial community spread also wear eye protection in addition to face masks or respirators and do not recommend respirators with exhalation valves for source control.
- Organizations should be aware of updated guidance from Cal/OSHA on respirator supply shortages.

Actions Requested
- Consider below Priority Tiers for RT-PCR COVID-19 or antigen testing when updating testing algorithms in your organization based on available testing, laboratory capacity and materials, staffing, and PPE supply. Of note, antigen testing is a relatively newer form of diagnostic testing for COVID-19 for which currently two tests have received Emergency Use Authorization by the Food and Drug Administration (FDA). Please understand their limitations if you choose to utilize these in your testing strategy, especially with interpretation of negative results, and refer to their FDA EUA and materials for healthcare providers here under **"Individual EUAs for Antigen Diagnostic Tests for SARS-CoV-2"**.
- Providers should give patients who test positive a Health Officer Order as well as Home Isolation Instructions and tell patients to alert close contacts about Quarantine Instructions, if not an essential worker. The Health Officer Orders and Home Isolation and Quarantine Instructions are available in English and other languages, click here (See prior CAHAN #11 as well).
  - o Of note, those who need to be quarantined and continue to be exposed due to ongoing, unavoidable household contact with a case should continue quarantine until 14 days after the infectious period of the lab-confirmed case.
  - o Those who cannot be isolated or quarantined at home may be eligible for temporary lodging, if medically stable and functionally independent. Medical providers and/or their delegates should call 858-715-2350 from 7 am to 9 pm.
- After diagnosis, repeat testing is rarely needed. Providers should use CDC's symptom-based strategy for ending home isolation and for discontinuation of transmission-based precautions for hospitalized patients. Confirmed cases requesting negative testing to return to general work settings should not be tested as per CDPH.
- Providers and labs should report the results of their testing to PHS as per detailed reporting guidance and as mandated by the Health Officer Order.
- The below Priority Testing Categories are locally adapted from updated CDC and CDPH guidance and organizations can expand beyond these as the supply chain, PPE, and staffing becomes sufficient.

Priority Testing Tiers
Below are updated County of San Diego (County) testing priorities. The last County priorities were updated on April 22, 2020. This summary is adapted locally from federal and state guidance, influenced by current testing capacity/availability, and is subject to changes in the future as new information is known and conditions change.

Diagnostic and screening tests, like all clinical tests, should be ordered if they influence management and resource allocation. These tests are a point in time assessment and clinical judgment is warranted when a Polymerase Chain Reaction (PCR) diagnostic or antigen test is negative, but clinical suspicion or pre-test probability is high. Each healthcare organization must evaluate their supplies, staffing, and personal protective equipment (PPE) when determining how to prioritize diagnostic COVID-19 testing. Where applicable, organizations should fully provide testing through a tiered approach before proceeding to the subsequent, lower priority tier. Children who fall into these tiers should be tested where possible, as well. Any individuals not in the first four priority Tiers below may also be tested, if these initial four Tiers are first served and remaining resources permit testing with adequate processing times. Organizations should give guidance to those awaiting test results, particularly of importance when experiencing increased turnaround times. As an example, see here for the handout provided at County testing sites.

There is very limited national and state guidance addressing frequency of testing for asymptomatic individuals. Organizations should be aware that CDPH recommends that, outside of a known outbreak, asymptomatic staff in Skilled Nursing Facilities should be tested monthly. Understanding that this recommendation is for a "high-risk setting" will help guide an organization's assessment regarding frequency of testing asymptomatic individuals in lower Tiers, who are generally at lower risk and/or in low-risk settings.

Due to updated evidence, testing is no longer recommended by the CDC to release individuals from home isolation or discontinuation of transmission-based precautions in healthcare settings. Changes are reflected in the updated Health Officer Order for Isolation and the Home Isolation Instructions, both found here.

TIER 1 – High-Risk Symptomatic Individuals and Public Health Investigations
• SYMPTOMATIC* individuals not diagnosed with COVID-19 in past 3 months[1] who are: **hospitalized**; in **congregate facilities**;[2] **older adults** and those with **underlying** medical conditions[7]; or in a vulnerable population.[3]
• Persons identified for testing by **public health investigations** and disease control activities including those in potential outbreak settings.
TIER 2 – Other Symptomatic Individuals and Hospital and Procedure Testing
• SYMPTOMATIC* persons who do not meet above symptomatic criteria, including **healthcare workers** and **first responders**, not diagnosed with COVID-19 in past 3 months.[1]
• Hospital admission testing for **patients** who do not exhibit COVID-19 symptoms.*
• Scheduled **surgical procedures**, especially those that are aerosol generating.
TIER 3 – Asymptomatic Individuals from High-Risk Settings & Close Contacts
• Screening of ASYMPTOMATIC individuals not diagnosed with COVID-19 in past 3 months[4] who are residents or employees of **congregate living facilities**,[2] such as skilled nursing facilities,[5] assisted living facilities, homeless shelters, substance use disorder residential facilities, and detention centers.
• ASYMPTOMATIC **close contacts**[6] not diagnosed with COVID-19 in past 3 months[4] at 5-7 days after last exposure to a known COVID-19 case.
TIER 4 – Asymptomatic High-Risk Individuals

- ASYMPTOMATIC **healthcare workers and first responders** not diagnosed with COVID-19 in past 3 months[4] in direct patient contact roles.
- ASYMPTOMATIC individuals in ***vulnerable populations***[3] not diagnosed with COVID-19 in past 3 months[4] who are not in other categories above.
- ASYMPTOMATIC persons not diagnosed with COVID-19 in past 3 months[4] in ***other essential occupations***. This includes occupations such as utility workers, grocery store workers, food supply workers, and other public-facing employees including childcare and school workers.
- ASYMPTOMATIC ***older adults*** (i.e., persons >65 years of age) OR any age with ***chronic or other underlying medical conditions***,[7] such as pregnancy, that may increase the risk of severe COVID 19 illness as per the CDC[8] who were not diagnosed with COVID-19 in past 3 months.[4]
- ASYMPTOMATIC ***Caretakers of older adults or those with underlying medical conditions*** defined above who were not diagnosed with COVID-19 in past 3 months.[4]
- *When facing limitations of testing capacity for Tier 4, consider prioritizing testing amongst those in zip codes with higher prevalence rate than the Countywide prevalence rate over testing those in zip codes with lower prevalence rate than the Countywide prevalence rate. Zip code and Countywide prevalence data can be found [here](#).*

TIER 5 – Public Health Surveillance

- Other ASYMPTOMATIC individuals being tested for purposes of public health surveillance for COVID-19.

Notes:
*COVID-19 symptoms may be updated by the CDC and can be found [here](#). They currently include fever or chills, cough, shortness of breath, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea. Note that elderly people might not develop fever.

References:
[1]As per [CDC](#): "For persons who develop new symptoms consistent with COVID-19 during the 3 months after the date of initial symptom onset, if an alternative etiology cannot be identified by a provider, then the person may warrant retesting; consultation with infectious disease or infection control experts is recommended. Isolation may be considered during this evaluation based on consultation with an infection control expert, especially in the event symptoms develop within 14 days after close contact with an infected person."

[2]Congregate facilities include facilities where individuals live together, such as skilled nursing facilities, assisted living facilities, detention facilities, homeless shelters, and substance use disorder residential treatment facilities.

[3]Vulnerable populations include those in ethnic and racial minority groups, people with HIV/AIDS, people experiencing homelessness, those in rural areas, migrant workers, and Native Americans. National and local data suggest that some groups are disproportionately affected by COVID-19 and thus are included here. See CDC Health Equity considerations [here](#) and [here](#) for local data.

[4]As per [CDC](#): "For persons previously diagnosed with symptomatic COVID-19 who remain asymptomatic after recovery, retesting is not recommended within 3 months after the date of symptom onset for the initial COVID-19 infection. In addition, quarantine is not recommended in the event of close contact with an infected person."

[5]Due to high morbidity and mortality, skilled nursing facilities (SNFs) have strong surveillance testing recommendations and should follow respective [state](#) and [national](#) guidance.

[6]Close contacts need to be quarantined for 14 days after last exposure regardless of their test result. Median time to symptom onset or the median incubation period is 4-5 days as per CDC so testing is locally being recommended around 5-7 days, unless the close contact becomes symptomatic earlier.
[7]Underlying medical conditions that CDC associates with increased risk or potentially increased risk of severe illness from COVID-19 can be found here.

Please see this updated table for a comparison between federal, state, and local guidance documents.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website.

Thank you for your participation.

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LIVE WELL SAN DIEGO

Priority Level for Testing Criteria: Federal, State, and County Recommendations			
Priority Level	**Federal Testing Criteria ^ (July 17, 2020)**	**State Testing Criteria (August 3, 2020)**	**County Testing Criteria (August 17, 2020)**
1	• Individuals with signs or symptoms consistent with COVID-19	• Hospitalized individuals with COVID-19 symptoms. • Investigation and management of outbreaks, under direction of state and local public health departments (includes contact tracing).	**High-Risk Symptomatic Individuals and Public Health Investigations** • Symptomatic* individuals not diagnosed with COVID-19 in past 3 months[1] who are *hospitalized*, in *congregate facilities*,[2] *older adults* and those with chronic or *underlying medical conditions*, or in a *vulnerable population*. • Persons identified for testing by *public health investigations* and disease control activities including those in potential outbreak settings.

2	• Asymptomatic individuals with recent known or suspected exposure to SARS-CoV-2 to control transmission	• All other individuals with **COVID-19 symptoms**.
		• **Close contacts** of confirmed cases.
		• Individuals who are **asymptomatic** (having no symptoms of COVID 19), who fall into one of the following categories
		  1. Live in higher risk congregate care facilities including skilled nursing facilities, residential care facilities for the elderly, correctional facilities, or homeless shelters.
		  2. Work in the health care sector who have frequent interactions with the public or with people who may have COVID-19 or have been exposed to SARS-CoV-2. The health care sector includes hospitals, skilled nursing facilities; long-term care facilities; ambulatory surgery centers; health care providers' offices; health care clinics; pharmacies; blood banks; dialysis centers; hospices; and, home health providers
		  3. Work in a congregate care facility, including shelters for people experience homelessness and residential care facilities for the elderly.
		  4. Provide care to an elderly person or a person with a disability in the home, including a person providing care through California's In-Home Supportive Services Program.
		  5. Work in the emergency services sector who have frequent interactions with the public or with people who may have COVID-19 or have been exposed to SARS-CoV-2. The emergency services sector includes police and other public safety departments (including, for example, child protective services and adult protective services departments), fire departments, and emergency service response operations.
		  6. Work in a correctional facility.
		  7. Patients requiring pre-operative/pre-hospital admission screening.
		  8. Patients being discharged from hospitals to lower levels of care.
			Other Symptomatic Individuals and Hospital and Procedure Testing
			• Symptomatic* persons who do not meet above symptomatic criteria, including *healthcare workers* and *first responders*, not diagnosed with COVID-19 in past 3 months.
			• Hospital admission testing for **patients** who do not exhibit COVID-19 symptoms.*
			• Scheduled *surgical procedures*, especially those that are aerosol generating.

Priority Level for Testing Criteria: **Federal, State, and County Recommendations**			
Priority Level	**Federal Testing Criteria ^** **(July 17, 2020)**	**State Testing Criteria** **(August 3, 2020)**	**County Testing Criteria** **(August 17, 2020)**

3	• Asymptomatic individuals without known or suspected exposure to SARS-CoV-2 for early identification in special settings	• The following individuals who are **asymptomatic** (having no symptoms of COVID 19), and fall into one of the following categories:
		  1. Individuals who work in the retail or manufacturing sectors who have frequent interactions with the public or who works in an environment where it is not practical to maintain at least six feet of space from other workers on a consistent basis.
		  2. Individuals who work in the food services sector who have frequent interactions with the public. The food services sector includes grocery stores, convenience stores, restaurants, and grocery or meal delivery services.
		  3. Individuals who work in the agricultural or food manufacturing sector who have frequent interactions with the public or who works in an environment where it is not practical to maintain at least six feet of space from other workers on a consistent basis. The agricultural or food manufacturing sector includes food production and processing facilities, slaughter facilities, harvesting sites or facilities, and food packing facilities.
		  4. Individuals who work in the public transportation sector who have frequent interactions with the public. The public transportation sector includes public transit, passenger rail service, passenger ferry service, public airports, and commercial airlines.
		  5. Individuals who work in the education sector who have frequent interactions with students or the public. The education sector includes public and private childcare establishments; public and private pre-kindergarten programs; primary and secondary schools; and public and private colleges and universities.
			Asymptomatic Individuals from High-Risk Settings & Close Contacts
			• Screening of asymptomatic individuals not diagnosed with COVID-19 in past 3 months[4] who are residents or employees of **congregate living facilities,**[2] such as skilled nursing facilities,[5] assisted living facilities, homeless shelters, substance use disorder residential facilities, correctional facilities, and detention centers.
			• Asymptomatic **close contacts**[6] not diagnosed with COVID-19 in past 3 months[4] at 5-7 days after last exposure to a known COVID-19 case.

4	• Individuals being tested to determine resolution of infection (i.e., test-based strategy for Discontinuation of Transmission-based Precautions, HCP Return to Work, and Discontinuation of Home Isolation)	• Tier Four would be implemented when the state's testing turnaround time, as monitored by the California Department of Public Health, is less than 48 hours. • Other individuals not specified above including those who are asymptomatic but believe they have a risk for being actively infected as well as routine testing by employers.	**Asymptomatic High-Risk Individuals** • Asymptomatic **healthcare workers** and **first responders** not diagnosed with COVID-19 in past 3 months[4] in direct patient contact roles. • Asymptomatic individuals in **vulnerable populations**[3] not diagnosed with COVID-19 in past 3 months[4] who are not in other categories above. • Asymptomatic persons not diagnosed with COVID-19 in past 3 months[4] in **other essential occupations**. This includes occupations such as utility workers, grocery store workers, food supply workers, and other public-facing employees including childcare and school workers.

LIVE WELL SAN DIEGO

Priority Level for Testing Criteria: Federal, State, and County Recommendations			
Priority Level	**Federal Testing Criteria ^ (July 17, 2020)**	**State Testing Criteria (August 3, 2020)**	**County Testing Criteria (August 17, 2020)**
			• Asymptomatic *older adults* (i.e., persons >65 years of age) OR any age with *chronic or other medical conditions*, such as pregnancy, that may increase the risk of severe COVID 19 illness as per the CDC[7] who were not diagnosed with COVID-19 in past 3 months.[4] • *Caretakers of older adults or those with underlying medical conditions* defined above who were not diagnosed with COVID-19 in past 3 months.[4] *When facing limitations of testing capacity for this Tier, consider prioritizing testing amongst those in zip codes with higher prevalence rate than the Countywide prevalence rate over testing those in zip codes with lower prevalence rate than the Countywide prevalence rate. Zip code and Countywide prevalence data can be found here.*
5	• Individuals being tested for purposes of public health surveillance for SARS-CoV-2	• Not Applicable	• Individuals being tested for purposes of public health surveillance for SARS-CoV-2.

Notes:

*COVID-19 symptoms may be updated by the CDC and can be found here. They currently include fever or chills, cough, shortness of breath, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, or diarrhea. Note that elderly people might not develop fever.
^ The CDC has five populations for which SARS-CoV-2 testing with viral tests is recommended (i.e., nucleic acid or antigen tests).

References:

[1] As per CDC: "For persons who develop new symptoms consistent with COVID-19 during the 3 months after the date of initial symptom onset, if an alternative etiology cannot be identified by a provider, then the person may warrant retesting; consultation with infectious disease or infection control experts "is recommended. Isolation may be considered during this evaluation based on consultation with an infection control expert, especially in the event symptoms develop within 14 days after close contact with an infected person."
[2] Congregate facilities include facilities where individuals live together, such as skilled nursing facilities, assisted living facilities, detention facilities, homeless shelters, and substance use disorder residential treatment facilities.
[3] Vulnerable populations include those in ethnic and racial minority groups, people with HIV/AIDS, people experiencing homelessness, those in rural areas, and Native Americans. National and local data suggest that some groups are disproportionately affected by COVID-19 and thus are included here. See CDC Health Equity considerations here and here for local race and ethnicity data.
[4] As per CDC: "For persons previously diagnosed with symptomatic COVID-19 who remain asymptomatic after recovery, retesting is not recommended within 3 months after the date of symptom onset for the initial COVID-19 infection. In addition, quarantine is not recommended in the event of close contact with an infected person."
[5] Due to high morbidity and mortality, skilled nursing facilities (SNFs) have strong surveillance testing recommendations and should follow respective state and national guidance.
[6] Close contacts need to be quarantined for 14 days after last exposure regardless of their test result. Median time to symptom onset or the median incubation period is 4-5 days as per CDC so testing is locally being recommended around 5-7 days, unless the close contact becomes symptomatic earlier.
[7] Underlying medical conditions that CDC associates with increased risk or potentially increased risk of severe illness from COVID-19 can be found here.

To: **CAHAN San Diego Participants**
Date: **October 7, 2020**
From: **Public Health Services**

Health Advisory Update #18: Coronavirus Disease 2019 (COVID-19) Guidance and Resources to Support Management of Children with COVID-19 Symptoms Who Attend Daycare or In-Person School

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Key Messages

- The attached decision trees have been established with local stakeholders to guide management of children with COVID-19 symptoms who attend in-person instruction at daycares and K-12 schools.
- Providers should prioritize PCR testing of children with COVID-19 symptoms who are in daycare or in-person school settings. PCR tests are strongly recommended for symptomatic testing. Antigen and antibody tests should not be used to make decisions regarding school attendance due to false negative potential and lack of indication for diagnostic use respectively. Symptomatic children who are not tested and all those diagnosed with COVID-19 will be excluded from these settings for a minimum of 10 days. Children with negative tests will be able to return to school or daycare three days after symptoms resolve.
- Resources to test children for SARS-CoV2 are available within the county and listed in this advisory.
- Children with confirmed COVID-19 do NOT need re-testing to return to school or daycare and need to complete Centers for Disease Control and Prevention (CDC) isolation criteria [See also CAHAN #17].
- Providers should strongly encourage influenza vaccination to everyone six months of age or older.
- Patients with respiratory symptoms should be evaluated for both SARS-CoV2 and influenza as coinfection can occur and was reported in San Diego County during the last influenza season.

Situation

- Current information for pediatric healthcare providers from the Centers for Disease Control and Prevention (CDC) states that children may have similar to higher detectable viral loads in their nasopharynx compared with adults. Children can spread the disease in households and congregate settings including daycare, camps, and schools. Children may have non-specific COVID-19 symptoms as well as poor appetite or poor feeding. CDC also recommends that school-aged children with COVID symptoms who are close contacts or live in communities with substantial transmission should be prioritized for viral testing.
- Daycares have CDC guidance – Guidance for Child Care Programs that Remain Open; California Department of Public Health (CDPH) COVID-19 Update Guidance: Child Care Programs and Providers; and multiple Provider Information Notices (PIN)s from the Child Care Licensing Program (CCLP), California Department of Social Services.

- California Department of Public Health (CDPH) COVID-19 released Industry Guidance for [Schools and School-Based Programs](#), a [Framework for Reopening K-12 Schools in California](#), and [Schools Guidance FAQs](#) to help school and community leaders prepare to resume in-person instruction.
- As daycares open and schools resume or prepare to resume in-person instruction, clear and consistent guidance is needed for COVID-19 exclusion criteria. These decisions have to be made quickly and consistently across schools and daycares in order to stop the spread of COVID-19 to prevent transmission in [childcare](#) and school settings, which can also impact parents, caregivers, teachers, school staff and the broader community.
- Providers play a critical role in preventing spread and outbreaks in these settings and thus lowering risk of long-term outcomes such as Multisystem Inflammatory Syndrome in Children (MIS-C). To date, there have been 11 cases of MIS-C among San Diego County residents.
- Resources for providers who are NOT able to test children within their organizations are noted below, including testing via the Rady Children's Collaborative or at County-coordinated testing sites.
- As per CDPH [guidance](#), children who test positive with COVID-19 do NOT need re-testing to return to school or daycare and only need to complete CDC isolation criteria [See [CAHAN #17](#) for additional details and information].

Actions Requested
- Pediatric providers should:
  - Become familiar with the decision trees for [K-12 schools](#) and [daycare](#) settings respectively, both intended to prevent spread of COVID-19 within these congregate settings,
  - Consider providing letters to document pre-existing chronic conditions, especially if these symptoms mimic COVID-19,
  - Isolate and workup children with COVID-19 related symptoms to the extent possible, including prioritization of PCR testing. Antigen and antibody tests should not be used to make decisions regarding school attendance due to false negative potential and lack of indication for diagnostic use respectively.
    - Children in these settings who have one or more symptoms of COVID-19 will be excluded from campus and isolated. If PCR testing is performed and is negative, children can return to school or daycare 3 days after symptoms resolve, as per CDPH [school guidance](#).
    - Symptomatic children with one or more symptoms of COVID-19 who are not tested or laboratory confirmed COVID-19 positive children will be excluded from daycare settings or in-person school settings for a minimum of 10 days.
    - In addition, a positive test can enhance public health efforts to quarantine close contacts and minimize further spread.
  - If testing can NOT be performed in the provider office, three options are available:
    - COVID Collaborative for Children partnership with Rady Children's Hospital (Rady): non-Rady affiliated providers should ask patients to visit the [Non-Rady Patient COVID Testing Registration](#) site to request a COVID test or email [covidcollaborative@rchsd.org](#) to be scheduled at Rady's outpatient lab or COVID test drive up location in Kearny Mesa. Rady is working to expand COVID testing for those whose providers are non-Rady-affiliated. Provider referrals are NOT needed.
    - County-coordinated testing sites can currently accommodate those in grade Kindergarten and older and by the middle of October will be able to test those 6 months and older. Most sites do not require appointments. A listing of all sites can be found at [211Sandiego.org](#). Provider referrals are NOT needed.

- Providers who perform COVID-19 tests and counseling should be aware that:
  - As noted previously, reporting testing outcomes should be followed by providers and healthcare facilities as mandated by the Health Officer Order.
  - Providers should give patients who test positive a Health Officer Order for Isolation, as well as Home Isolation Instructions, and tell parents to alert their daycare or schools. Parents should also be instructed to alert other non-daycare/school close contacts about the need to quarantine and share quarantine Instructions, if not an essential worker (See CAHAN #11).
  - As per CDPH guidance, children confirmed positive with COVID-19 do NOT need re-testing to return to school or daycare and only need to complete CDC isolation criteria [See CAHAN #17 for additional information].
  - The Center for Medicare and Medicaid Services (CMS) recently announced that providers can be reimbursed for patient counseling at time of COVID-19 testing using existing evaluation and management (E/M) payment codes (see counseling checklist here).
  - If needed, requests for Personal Protective Equipment (PPE) can be directed towards MOC.LOGS.HHSA@sdcounty.ca.gov.

- Providers should also follow CDC guidance and strongly encourage influenza vaccination to patients and their families to minimize risk of developing flu symptoms, many of which are consistent with COVID-19. Of note, an influenza diagnosis does not exclude a COVID-19 diagnosis.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website. Thank you for your participation.

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To: **CAHAN San Diego Participants**
Date: **October 16, 2020**
From: **Public Health Services**

Health Advisory Update #19: Updated Coronavirus Disease 2019 (COVID-19) Test Result Reporting Guidance

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Key Messages
- **All** laboratories testing California specimens for SARS-CoV-2 are required to report SARS-CoV-2 test results to the California Department of Public Health (CDPH) or the County of San Diego Public Health Services. This requirement applies to entities that conduct Clinical Laboratory Improvement Amendments (CLIA)-waived point-of-care (POC) tests for SARS-CoV-2, including those operating at drive-through sites, physician offices, and pharmacies.
- Labs must ensure **all** SARS-CoV-2 test results (positive, negative, indeterminate, and specimen unsatisfactory) from molecular, antigen, and antibody/serology tests are reported within 8 hours from the time the laboratory notifies the health provider or other person authorized to receive the report.

Situation
- On September 23, 2020, California Department of Public Health (CDPH) Laboratory Field Services (LFS) issued updated guidance regarding mandated laboratory reporting of SARS-CoV-2 test results.
- While LFS noted that the need to provide testing for SARS-CoV-2 during the Coronavirus Disease 2019 (COVID-19) emergency has imposed unique demands upon testing laboratories that have affected the ability of laboratories to report results within the required time frame, it is critical that laboratories report test results and patient information within the regulatory time frames.
- These data are a prerequisite to timely case investigation and contact tracing to slow the spread of SARS-CoV-2.
- On July 28, 2020, the reporting regulations in Title 17 of the California Code of Regulations (CCR) section 2500 and 2505 were amended to change laboratory reporting times and require additional patient information.
- Failure to comply with these disease reporting requirements may be a basis for the denial, suspension, or revocation of any clinical laboratory license or registration. In addition, CDPH may also impose on a clinical laboratory alternative sanctions in lieu of, or in addition to, a denial, suspension, or revocation.

Actions Requested
- Laboratories that test San Diego County residents, regardless of the location of where the laboratory is based, are required to report as per the Health Officer Order. This includes testing performed **at drive-through sites, physician office laboratories, and laboratories located outside California, as well as pharmacies performing waived POC testing**.

- Laboratories are required by state law (Title 17 CCR Sections 2500 and 2505) to report SARS-CoV-2 test results to the California Department of Public Health (CDPH) or the County of San Diego Public Health Services.
- Laboratories must report results electronically to the CalREDIE Electronic Lab Reporting (ELR) system or directly to the County of San Diego.
    - Laboratories shall establish electronic lab reporting interfaces with the CalREDIE ELR system or directly to the County of San Diego through the San Diego Health Connect Health Information Exchange (HIE).
    - Laboratories and pharmacies not yet registered or otherwise unable to report via ELR should contact CalREDIE to arrange for reporting through alternative methods, such as a .CSV file reporting mechanism.
    - For those labs who will be submitting .CSV files, the County of San Diego requests a copy of the .CSV file to be sent to the County, as well.
    - To inquire about reporting SARS-CoV-2 test results to the County of San Diego, send an email to Epi-CDReporting.HHSA@sdcounty.ca.gov.
    - CalREDIE has established a special team to assist labs with questions about reporting SARS-CoV-2 results to CDPH, which may be contacted at CalREDIEHelp@cdph.ca.gov.
- Laboratories must report all **positive** and **non-positive (i.e., negative, indeterminate, and specimen unsatisfactory)** test results from molecular and antigen diagnostic tests and antibody/serology tests for SARS-CoV-2.
- Laboratories must report **within 8 hours** from the time the laboratory notifies the health care provider or other person authorized to receive the report.
    - Please note that laboratories no longer need to report SARS-CoV-2 results by telephone within one hour.
    - The lab results must include key reporting data elements which are outlined in the California Code of Regulations, Title 17, Section 2505, plus race/ethnicity. Lab requisition forms should be revised to include this information, and healthcare providers should ensure that demographic information is collected during patient intake and is available to the laboratory to include when reporting results.

Please visit the County Reporting Guidelines for COVID-19 webpage for further laboratory reporting information.

General public inquiries about COVID-19 should be directed to 2-1-1 San Diego or to the County COVID-19 website. Thank you for your participation.

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COVID-19 Symptom Decision Tree

(Version: 10/19/2020)

At school, student or staff member develops any one of the following signs or symptoms:

☐ Fever with or without chills/rigors (fever *defined as T >100.0 that does not resolve within 30 min. without medication*)

☐ Cough* ☐ Shortness of breath ☐ Nasal congestion/rhinorrhea (runny nose)* ☐ Sore throat

☐ Nausea, vomiting, or diarrhea* ☐ Fatigue* ☐ New loss of taste/smell ☐ Headache*

☐ Muscle or body aches* ☐ Poor feeding or poor appetite*

* Disregard this symptom if school personnel already aware of a chronic, pre-existing condition that causes the symptom. The nature of the presenting symptom (e.g., duration, intensity) must be consistent with the underlying chronic condition.

ACTION: Apply appropriate PPE; isolate student/staff member until sent home; recommend they reach health care provider for instructions. Note: Other infections can cause same symptoms (e.g., flu, strep, etc.) *but these do not rule out COVID-19 as co-occurring*

STUDENT / STAFF TO STAY HOME UNTIL...

With PCR COVID-19 viral test (Not antibody test; not antigen test)

Without PCR Covid-19 viral test

Note from healthcare provider re: chronic illness

Negative

Positive

Proof of negative test required.

May return 72 hours after symptoms resolved OR 10 days if symptoms are improving.

Consider notification to school community

Identify all close contacts (as defined by CDC). Identify all cohorts (class, bus, clubs, etc.). Quarantine and exclude close contacts (and work with public health on decision to exclude entire cohort) for 14 days after last date case present.

Notification to school community of a known case.

Retested or Not Retested *Proof of negative test not required

If note from MD/DO/NP/PA, or public health defines case as presumed COVID-19 virus (based on symptoms and circumstances), then: (a) consider notifying staff and parents of class (or bus, etc.) of a potential exposure; and (b) in conjunction with public health, exclude "close contacts" (using CDC definition) for 14 days from last day of exposure.

A signed note from a licensed MD/DO/NP/PA (who manages that condition) must: confirm the chronic diagnosis (i.e., cites labs, date-of-record when diagnosed); include provider's contact information; explain how symptoms are unrelated to COVID-19; and be accompanied by signed consent for school to interact with MD/DO/NP/PA.

Isolate the case. May return when: (a) 24 hours without fever (no meds) and (b) symptoms are improving AND (c) at least 10 days from symptom onset or test date.

May return to school immediately Consider individualized student health plan to prevent any future unnecessary dismissals.

If school becomes aware of one case in one cohort (shared bus, classroom, lab, team, etc.), then have district's/school's liaison contact the Public Health Department at 888-950-9905 to report the case and for further direction on quarantine. For questions on exposure, symptoms, or other related questions, please call the Epidemiology School Line at 619-692-8636 and leave a message.

To: **CAHAN San Diego Participants**
Date: **January 6, 2021**
From: **COVID-19 Medical Operations Center**

Health Advisory Update #21: Coronavirus Disease 2019 (COVID-19) California Crisis Care Continuum Guidelines for General Acute Care Hospitals and State Public Health Officer Order

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Key Messages

- The California Department of Public Health (CDPH) has issued All Facilities Letter (AFL) 20-91 on December 28th to General Acute Care Hospitals (GACH) which details updated California Crisis Care Continuum Guidelines and a Pre-Implementation Checklist.
- GACHs should review these guidelines and continue to work with partners, including reaching out to the Medical Health Operational Area Coordinator (MHOAC) program via MOC.LOGS.HHSA@sdcounty.ca.gov, for supplies and staffing requests to maintain contingent level of care as long as possible.
- As per AFL 20-91, GACHs should post their facility's California Crisis Care Continuum Guidelines; develop and share their communication plan with the County through the MHOAC process; and notify the MHOAC when implementing crisis care standards by email and phone (619-285-6434).
- When implementing crisis care, GACHs are the lead in communicating to the public. The County will share information about hospital status on its webpage to further assist with open and transparent communication.
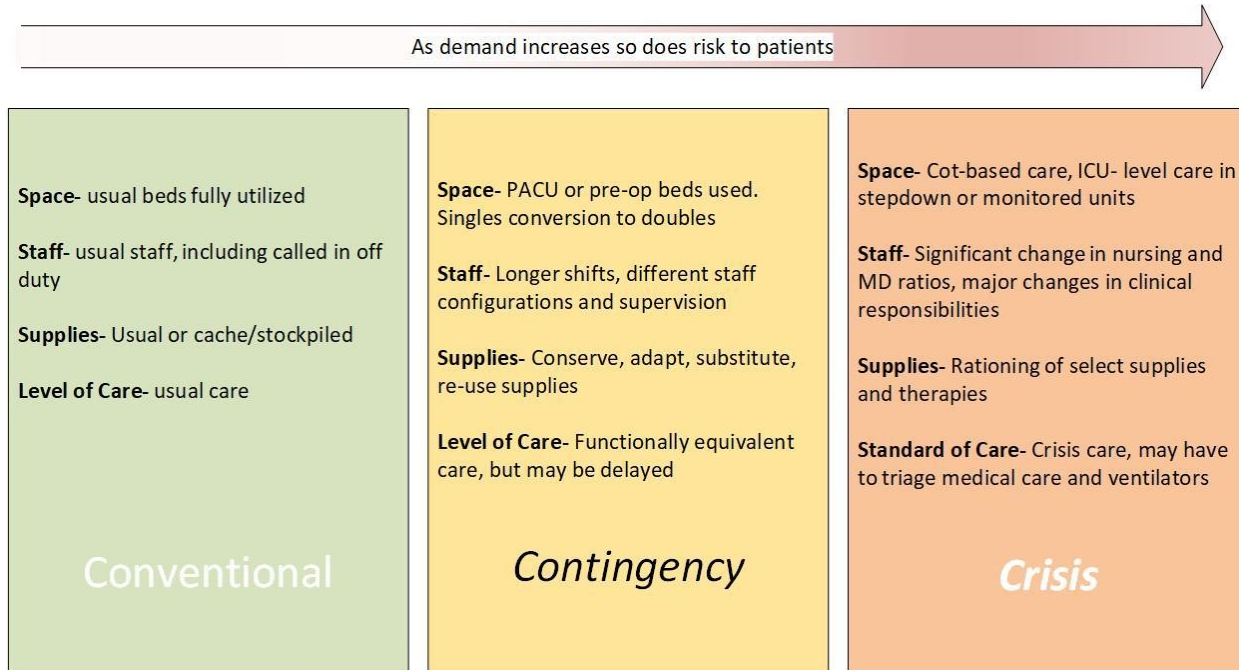- A State Public Health Officer Order was issued on January 5th requiring GACHs to accept patient transfers from facilities that have implemented contingency or crisis care guidelines as long as those transfers can be done capably and safely. Both non-children's GACHs and ambulatory surgery centers must also follow detailed guidance with respect to procedures.

Situation

- As COVID-related cases, hospitalizations, and ICU admissions continue to surge, California General Acute Care Hospitals (GACH) are generally moving from Conventional to Contingency Capacity strategies impacting space, staff, supplies, and level of care (See image below).
- California Department of Public Health (CDPH) has issued All Facilities Letter (AFL) 20-91 on December 28th to GACHs which details updated California Crisis Care Continuum Guidelines and a Pre-Implementation Checklist.
- This checklist and updated guidance aids GACHs in planning for staffing, supplies, and space with the local Medical Health Operational Area Coordinator (MHOAC) and others to maintain contingency capacity as long as possible while being prepared for crisis care implementation and transparent communication if or when entering crisis care.
- The MHOAC coordinates across the hospital and prehospital setting to assist with disaster planning and response, including assisting with supplies and staffing requests. The Medical Operations Center in the County's COVID-19 Emergency Operations Center assists the MHOAC in this role.
- Communication is critical when planning for and implementing crisis care and therefore requirements have been added in AFL 20-91 requiring GACHs to post California or other guidelines and communicate with the MHOAC, local licensing, and the public when entering crisis care. When implementing Crisis

Care, GACHs are the lead in communicating to the public. This communication will be complemented by the County sharing information on its webpage to further assist with open and transparent communication.

- A State Public Health Officer Order on January 5th requiring hospitals statewide to accept patient transfers from facilities that have implemented contingency or crisis care guidelines as long as those transfers can be done capably and safely. The order applies when a designated region has a state-calculated ICU bed availability of 10% or less. San Diego GACHs as of January 5th are impacted and the Order will remain in effect for at least three weeks.

As demand increases so does risk to patients

Conventional	Contingency	Crisis
Space- usual beds fully utilized **Staff**- usual staff, including called in off duty **Supplies**- Usual or cache/stockpiled **Level of Care**- usual care	**Space**- PACU or pre-op beds used. Singles conversion to doubles **Staff**- Longer shifts, different staff configurations and supervision **Supplies**- Conserve, adapt, substitute, re-use supplies **Level of Care**- Functionally equivalent care, but may be delayed	**Space**- Cot-based care, ICU- level care in stepdown or monitored units **Staff**- Significant change in nursing and MD ratios, major changes in clinical responsibilities **Supplies**- Rationing of select supplies and therapies **Standard of Care**- Crisis care, may have to triage medical care and ventilators

Note: Image from AFL 20-91

Actions Requested

1) As per AFL 20-91, GACHs should:
   a. Continue to reach out to the Medical Health Operational Area Coordinator (MHOAC) program at MOC.LOGS.HHSA@sdcounty.ca.gov, for supplies and staffing requests to help keep GACHs in contingent level of care as long as possible.
   b. Post and share their facility's Crisis Care Continuum Guidelines by close of business January 6th.
   c. Develop and share their communication plan with the County through the MHOAC process by close of business January 6th.
   d. Notify the MHOAC when implementing crisis care by email and calling 619-285-6434.
2) GACHs and ambulatory surgery centers should follow guidance detailed in the State Public Health Officer Order on January 5th with respect to procedures (Note: children's hospitals are exempt) and patient transfers until the order is lifted for the Southern California region. This includes GACHs in contingency care accepting transfers from GACHs in crisis care as detailed in the Order.
3) Healthcare professionals with capacity to volunteer should consider enrolling in the Medical Reserve Corps to be notified about volunteer opportunities, such as staffing and vaccination assistance.

Thank you for your continued support and participation.

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Public Website: http://www.cahansandiego.com

To: **CAHAN San Diego Participants**
Date: **January 27, 2021**
From: **Public Health Services**

Health Advisory Update #24: Coronavirus Disease 2019 (COVID-19) Quarantine Update

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Key Messages

- While the Centers for Disease Control and Prevention (CDC) is still recommending a 14-day quarantine period, they recently released a scientific brief and are allowing local jurisdictions to choose to shorten quarantine periods.
- The quarantine period for close contacts to COVID-19 has been revised locally to align with California Department of Public Health (CDPH) quarantine guidelines.
- Asymptomatic close contacts may discontinue quarantine after Day 10 from the date of last exposure only IF they are can monitor daily for symptoms of COVID-19 and strictly adhere to routine COVID-19 prevention interventions, especially use of face coverings and social distancing from Day 11 through Day 14.
- For facilities experiencing staffing shortage, shorter 7-day quarantine with a required a negative polymerase chain reaction (PCR) test on or after Day 5 is permitted for asymptomatic healthcare workers, emergency response workers, and certain social service workers.
- Healthcare employers with critical staffing shortages may use the updated COVID-19 Quarantine Guidance released by CDPH where asymptomatic healthcare personnel are allowed to work after the 7-day quarantine and negative PCR test with a surgical mask or respirator, but still report temperature and absence of symptoms each day until 14 days after exposure.

Situation

The Centers for Disease Control and Prevention (CDC) generally recommends a 14-day quarantine period. However, they released a scientific brief with alternate options for shortening quarantine for local public health departments to consider, based on local circumstances and resources, because 14-day quarantine can impose burdens that affect physical and mental health, as well as cause economic hardship that may reduce compliance. In addition, the prospect of quarantine may also dissuade recently diagnosed persons from naming contacts and may dissuade contacts from responding to contact tracer outreach, if they perceive quarantine as onerous.

CDC reviewed modeling data to determine the residual post-quarantine transmission risk if quarantine was discontinued early and recommended two shorter alternate quarantine options. These options were presented with the recognition that any quarantine shorter than 14 days balances a reduced burden of quarantine and the potential for increased compliance against a small possibility of increasing the spread of the virus. In both options, additional criteria must be met (e.g., continued symptom monitoring, use of face coverings through Day 14).

CDC Modeling Estimates

Last day of quarantine and the estimated residual post quarantine transmission risk with and without negative polymerase chain reaction (PCR) collected within 48 hours prior to release are presented in the table below:

Last Day of Quarantine	Residual Transmission Risk Median (Range)
Day 7 with negative PCR	4.0% (2.3%-8.6%)
Day 10	1.4% (0.1%-10.6%)
Day 10 with negative PCR	0.3% (0-2.4%)
Day 14	0.1% (0-3%)

CDPH guidance released on December 14 supports the discontinuation of quarantine for all asymptomatic close contacts after Day 10 with or without testing. This updated guidance is adapted locally, as well.

In California and San Diego County, the shorter Day 7 quarantine plus a negative PCR test (when collected on or after Day 5) is to only be used for asymptomatic healthcare workers, emergency response workers, and social service workers (who work face-to-face with clients in the child welfare system or in assisted living facilities) during critical staffing shortages. Health care employers facing staffing shortages that could impact safe patient care may also use CDC Contingency Capacity Strategies.

Actions Requested
- Close contacts of confirmed COVID-19 cases are required to self-quarantine for 10 days after their last contact with the infectious person. If they remain asymptomatic, after Day 10 they can discontinue quarantine **on the condition that they follow these additional precautions**:

  From Day 11 through Day 14 they must BOTH
    o Strictly adhere to all routine COVID-19 prevention interventions including, wearing a face covering whenever around other people (or Personal Protective Equipment, as required), keeping a distance of at least 6 feet from others, and washing hands often, AND
    o Continue to monitor daily for COVID-19 symptoms. If symptoms develop, they must isolate immediately and contact their healthcare provider, clinician advice line, or telemedicine provider for a medical assessment and arrange a test for COVID-19.

- Those living or working in high-risk congregate settings (e.g., skilled nursing facilities, prisons, jails, shelters) or residing or working with immunosuppressed persons (e.g., bone marrow or solid organ transplants, chemotherapy) should still quarantine for 14 days in the absence of staffing shortages.

- If quarantined in a congregate setting, hotel or multi-unit setting, the person may not enter other units within that setting. Persons may leave their place of quarantine to receive necessary medical care.

- Asymptomatic healthcare workers, first responders, and social workers (who work face-to-face with clients in the child welfare system or in assisted living facilities) are allowed to return to work after Day 7 from last exposure if they have a negative PCR test result from a specimen collected on or after Day 5 and continue to remain asymptomatic if their employer is experiencing critical staffing shortages and notifies employees of this change. Respective individuals after Day 7 must wear surgical face masks through Day 14 when leaving the home.

- Healthcare employers with critical staffing shortages may use Crisis Care Strategies, as described by CDPH, where asymptomatic healthcare personnel (including skilled nursing facilities during an outbreak when all staff are potentially exposed) are allowed to work with a surgical mask or respirator, but still report temperature and absence of symptoms each day until 14 days after exposure.

- Carefully review and closely follow all other requirements of the Health Officer Order and medical provider. Home Quarantine Guidance for COVID-19 Close Contacts should be followed by those on home quarantine, because of exposure to a COVID-19 patient.

- If a person in quarantine develops symptoms, they should contact their medical provider. Signs and symptoms that are consistent with COVID-19 include cough, shortness of breath or trouble breathing, fatigue, fever or chills, muscle or body aches, headache, sore throat, new loss of taste or smell, congestion or runny nose, nausea or vomiting, or diarrhea. The medical provider should then provide instructions on the need to isolate and test for COVID-19.
  - The Public Health Officer's Isolation Order is found here
  - Isolation instructions for patients are found here

Thank you for your continued participation.

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To: CAHAN San Diego Participants
Date: April 12, 2021
From: Public Health Services

Health Advisory Update #29: Coronavirus Disease 2019 (COVID-19) Vaccine Update

This health advisory updates providers on additional quarantine and isolation recommendations and new groups eligible for vaccination.

Key Messages

- Fully vaccinated people with no COVID-like symptoms do not need quarantine or testing (with some exceptions) following an exposure to a suspected or confirmed COVID-19 case according to the Centers for Disease Control and Prevention's (CDC) Interim Public Health Recommendations for Fully Vaccinated People.
- CDC's test-based strategy should be considered for determining when to discontinue isolation in severely immunocompromised individuals according to CDC's guidance on Discontinuation of Transmission-Based Precautions and Disposition of Patients with SARS-CoV-2 Infection in Healthcare Settings.
- The California Department of Public Health (CDPH) has authorized as eligible for vaccination, which started April 1, 2021, all individuals age 50 to 64 years of age.
- The next group to become eligible for vaccination will be individuals age 16 to 49 years of age starting April 15, 2021.

Situation
- *Recommendations for Fully Vaccinated People*
  - The Centers for Disease Control and Prevention's (CDC) most recent update of Interim Public Health Recommendations for Fully Vaccinated People and an accompanying Science Brief includes important changes in recommendations on quarantine and testing for the fully vaccinated. Post Vaccine Considerations for Healthcare Personnel has also been updated.
    - People are considered fully vaccinated for COVID-19 ≥2 weeks after receiving the second dose in a 2-dose series (Pfizer or Moderna), or ≥2 weeks after receiving a single-dose vaccine (Janssen).
    - Following an exposure to someone with suspected or confirmed COVID-19, fully vaccinated people with no COVID-like symptoms **do not need to be quarantined or tested** following exposure to a suspected or confirmed COVID-19 case (with some exceptions listed below).
      - Fully vaccinated people who do not quarantine should still monitor for symptoms of COVID-19 for 14 days following an exposure.
      - Any fully vaccinated person who experiences symptoms consistent with COVID-19 should isolate themselves, be clinically evaluated for COVID-19 and/or other etiologies, and tested for SARS-CoV-2 if indicated. The symptomatic, fully vaccinated person should inform their healthcare provider of their vaccination status at the time of presentation to care.

- - Whole genome sequencing (WGS) should be included when viral testing is ordered on fully vaccinated persons. Other situations to consider and instructions to request WGS are available in [Update #27: Coronavirus Disease 2019 (COVID-19) Variants](#).
  - CDC has updated [recommendations for travel](#).
    - Fully vaccinated people do not need to get tested before or after domestic travel or self-quarantine unless their destination requires it.
  - Fully vaccinated people should continue to take precautions in public like wearing a well-fitted mask, physical distancing, avoiding high risk situations and adhering to other prevention measures.
  - The [Quarantine Order](#) for San Diego County has been updated to reflect the above changes.
  - Exceptions to the above guidance on quarantine and testing:
    - [Work restrictions for fully vaccinated healthcare providers](#) (HCP) who have underlying immunocompromising conditions (e.g., organ transplantation, cancer treatment) should still be considered.
    - Fully vaccinated individuals that are [inpatients or residents in healthcare settings](#) (e.g., long term care facilities) or residents of non-healthcare congregate settings (e.g., correctional and detention facilities, group homes) should continue to quarantine for 14 days and be tested for SARS-CoV-2 following an exposure to someone with suspected or confirmed COVID-19.
    - Fully vaccinated [employees of non-healthcare congregate settings and other high-density workplaces](#) (e.g., meat and poultry processing and manufacturing plants) with no COVID-like symptoms do not need to quarantine following an exposure; however, testing following an exposure and through routine workplace screening programs (if present) is still recommended.
- The Centers for Disease Control and Prevention (CDC) updated the [Discontinuation of Transmission-Based Precautions and Disposition of Patients with SARS-CoV-2 Infection in Healthcare Settings](#) guidance and the accompanying [Decision Memo](#).
  - [CDC's test-based strategy](#) should be considered to determine when to discontinue isolation and precautions for persons who are [severely immunocompromised](#) (e.g., persons receiving chemotherapy for cancer), regardless of the presence of COVID-19 symptoms.
  - CDC defines [severe immunocompromise](#) as certain conditions, such as being on chemotherapy for cancer, untreated HIV infection with CD4 T lymphocyte count <200, combined primary immunodeficiency disorder, and receipt of prednisone >20mg/day for more than 14 days, that may cause a higher degree of immunocompromise.
  - This strategy requires at least two consecutive respiratory specimens collected ≥24 hours apart to determine when to stop isolation.
  - The [CDC's test-based strategy](#) may extend isolation past 20 days.

- *Vaccine Allocation Updates*
  - The California Department of Public Health (CDPH) has authorized as eligible for vaccination all individuals age 50 to 64 years of age.
  - On April 15, individuals age 16 to 49 years of age will also become eligible for vaccination.
  - Only the Pfizer vaccine is currently authorized for persons 16-17 years.
  - Current details of those eligible for vaccinations in San Diego County can be found [here](#).

- *CDC Vaccine Administration Resources*
  - The [COVID-19 Vaccine Quick Reference Guide for Healthcare Professionals](#) is a quick reference for comparing general information, storage and handling information, and vaccine administration [information for all COVID-19 vaccines](#). These [Interim Clinical Considerations](#) and new reference materials are ready for use:
  - The [Interim Clinical Consideration Summary](#) provides an easy reference of clinical considerations.
  - The [Vaccine Administration Errors and Deviations](#) table is an easy reference for information on handling vaccine administration errors.

Actions Requested

1. Remain up to date on CDC's [Interim Public Health Recommendations for Fully Vaccinated People](#) and the guidance on [Discontinuation of Transmission-Based Precautions and Disposition of Patients with SARS-CoV-2 Infection in Healthcare Settings](#).
2. Providers are requested to submit specimens for WGS from fully vaccinated individuals suspected to have SARS-CoV-2 virus infection.
   - Providers can contact the County Epidemiology Unit for assistance in both evaluation and specimen submission during business hours Monday through Friday by calling 619-692-8499. San Diego providers should not directly contact CDPH to request WGS and requests should not be made after hours.
   - Providers should report any receipt of sequence data identifying a variant of concern to the County Epidemiology Unit within one working day using a [Confidential Morbidity Report](#) faxed to 858-715-6458 or sent by secure email to epi-cdreporting.hhsa@sdcounty.ca.gov.
3. Vaccinated individuals aged 50-64 for COVID 19 and all others [eligible](#) in San Diego County.
4. Beginning April 15, also vaccinated individuals aged 16-49 for COVID 19, using only Pfizer for persons 16-17 years.
5. Report vaccine-related adverse events and vaccine administration errors to the [Vaccine Adverse Event Reporting System (VAERS)](#), and to the County Epidemiology and Immunization Services Branch at IZINFO.HHSA@sdcounty.ca.gov or Fax: (619) 692-5677.
6. Strongly encourage vaccine recipients to enroll in [V-safe](#) for active monitoring.

Thank you for your participation.

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To: **CAHAN San Diego Participants**
Date: **October 4, 2021**
From: **Public Health Services**
Health Advisory: Influenza and Respiratory Syncytial Virus Activity and Guidance for Clinicians

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Key Messages

- The California Department of Public Health (CDPH) issued a health alert with guidance regarding expected continued increases in influenza and respiratory syncytial virus activity (RSV), in addition to SARS-CoV-2.
- Testing for influenza and RSV is recommended, and testing for other respiratory pathogens should be considered, especially in patients with respiratory illnesses who test negative for SARS-CoV-2.
- Vaccination of individuals six months and older against influenza is recommended by CPDH: Influenza and COVID-19 vaccines can be co-administered.
- Clinicians may consider off-season immunoprophylaxis with anti-RSV monoclonal antibody Palivizumab (Synagis®) in high-risk infants and young children.
- Patients should be reminded of the importance of not reporting to work/school while acutely ill, even if they test negative for SARS-CoV-2.

Situation

Routine respiratory virus incidence and seasonality have been disrupted during the COVID-19 pandemic, as shown by the interseason transmission of respiratory syncytial virus (RSV). Rhinoviruses, enteroviruses, parainfluenza viruses, adenoviruses, and non-SARS-CoV-2 coronaviruses have also been circulating in California during the summer of 2021. Transmission of influenza and other respiratory viruses are expected to increase this fall and winter. Routine testing for influenza is important for tracking influenza activity but is currently low.

RSV is the most common cause of bronchiolitis and pneumonia in infants and causes severe disease in adults older than age 65 years. In the week ending September 18, 2021, 8.8% of respiratory illness specimens in California tested positive for RSV, versus <1% in previous years. This level of positivity is usually not seen before early-December. Influenza activity remains low in California, with <1% of specimens testing positive during the week ending September 18, 2021, but it is difficult to predict the level of activity this fall and winter.

California Department of Public Health (CDPH) recommends annual influenza vaccination for everyone six months of age and older. Influenza vaccine can be co-administered with COVID-19 vaccine without regard to timing. Antiviral treatment is available for the treatment of influenza infections.

Treatment

Palivizumab prevents severe RSV illness in infants and young children who are at high risk. The American Academy of Pediatrics (AAP) issued interim guidance for using palivizumab (Synagis®) during the current increase in RSV infections to supplement its standard recommendations for prophylaxis. Persons with acute respiratory

symptoms should stay home while ill, especially those who work in health care or long-term care, and those who attend or work in childcare/schools. Additional information and recommendations are available in the attached CDPH Health Advisory.

Actions Requested
1. Consider testing for respiratory pathogens, such as RSV and influenza in individuals who present with acute respiratory illness or age-specific symptoms and test negative for SARS-CoV-2.
2. Vaccinate individuals six months and older against influenza: Influenza and COVID-19 vaccines can be co-administered.
3. Consider immunoprophylaxis with anti-RSV monoclonal antibody Palivizumab (Synagis®) in high-risk infants and young children likely to benefit based on gestational age and underlying conditions.
4. Instruct patients to not report to work or school while sick, even if they test negative for SARS-CoV-2.
5. Report RSV-associated deaths in children under five and influenza-associated deaths in individuals less than 18 years of age, to the County Epidemiology Unit within one working day using a Confidential Morbidity Report faxed to 858-715-6458 or sent by secure email to epi-cdreporting.hhsa@sdcounty.ca.gov.
6. Report vaccine-related adverse events and vaccine administration errors to the Vaccine Adverse Event Reporting System (VAERS), and to the County Epidemiology and Immunization Services Branch at IZINFO.HHSA@sdcounty.ca.gov or Fax: (619) 692-5677.

Resources

AAP: Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection
AAP: Interim Guidance for Use of Palivizumab Prophylaxis to Prevent Hospitalization from Severe Respiratory Syncytial Virus Infection During the Current Atypical Interseasonal RSV Spread
CDC: Influenza (Flu)
CDC: Who Needs a Flu Vaccine and When
CDC: People at Higher Risk of Flu Complications
CDC: What You Should Know About Flu Antiviral Drugs
CDC: RSV (Respiratory Syncytial Virus)
CDC: Changes in Influenza and Other Respiratory Virus Activity During the COVID-19 Pandemic | MMWR
CDPH Health Advisory: Off-Season Respiratory Syncytial Virus Infections and Use of Palivizumab

Thank you for your participation.

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State of California—Health and Human Services Agency
California Department of Public Health

TOMÁS J. ARAGÓN, M.D., Dr.P.H.
Director and State Public Health Officer

GAVIN NEWSOM
Governor

Health Advisory: Influenza and Respiratory Syncytial Virus Activity and Guidance for Clinicians
September 27, 2021

Key messages

- Respiratory syncytial virus (RSV) and other respiratory viruses besides SARS-CoV-2 are circulating in California and causing potentially serious illnesses in infants and older adults.
- Test for influenza and RSV, and consider testing for other respiratory pathogens, especially in patients with respiratory illnesses who test negative for SARS-CoV-2.
- Routine testing for influenza is important for tracking influenza activity, which is currently low.
- Vaccinate Californians 6 months and older against influenza. Influenza vaccine and COVID-19 can be coadministered.
- Encourage parents and caregivers to keep young children with acute respiratory illnesses out of childcare, even if they have tested negative for SARS-CoV-2.
- Discourage health care personnel, childcare providers, and staff of long-term care facilities from working while acutely ill, even if they have tested negative for SARS-CoV-2.

Summary

Routine respiratory virus incidence and seasonality have been disrupted during the COVID-19 pandemic. Transmission of influenza and other respiratory viruses could increase this fall and winter. Testing for influenza and RSV is recommended, and testing for other respiratory pathogens should be considered, especially in patients with respiratory illnesses who test negative for SARS-CoV-2.

Respiratory syncytial virus (RSV) is the most common cause of bronchiolitis and pneumonia in infants and causes severe disease in adults older than age 65 years. Although RSV typically circulates during the winter, RSV infections have increased in recent months throughout the United States. In the week ending September 18, 2021, 8.8% of respiratory illness specimens in California tested positive for RSV, versus <1% in previous years. This level of positivity is usually not seen before early-December (Figure).

CDC estimates that annually from 2010 to 2020, seasonal influenza resulted in up to 45 million illnesses, 810,000 hospitalizations and 61,000 deaths in the United States, especially in adults 65 years and older, children less than 5 years, pregnant people, and persons with certain chronic medical conditions. Influenza activity remains low in California, with <1% of specimens testing positive during the week ending September 18, 2021 (Figure), but it is difficult to predict the level of activity this fall and winter.

Additional respiratory viruses have been circulating in California during the summer of 2021, including rhinoviruses and enteroviruses, parainfluenza viruses, adenoviruses, and non-SARS-CoV-2 coronaviruses.

CDPH recommends annual influenza vaccination for everyone six months of age and older. Influenza vaccine can be coadministered with COVID-19 vaccine without regard to timing. Antiviral treatment is available for the treatment of influenza infections. Palivizumab prevents severe RSV illness in infants and young children who are at high risk. The American Academy of Pediatrics (AAP) has published interim guidance for using palivizumab during the current increase in RSV infections to supplement its standard recommendations for prophylaxis, and CDPH has released a Health Advisory highlighting these recommendations. Persons with acute respiratory symptoms should stay home while ill, especially those who work in health care or long-term care, and those who attend or work in childcare.

Figure: Percentage of Respiratory Pathogen Detections at Clinical Sentinel Laboratories, 2020–2021
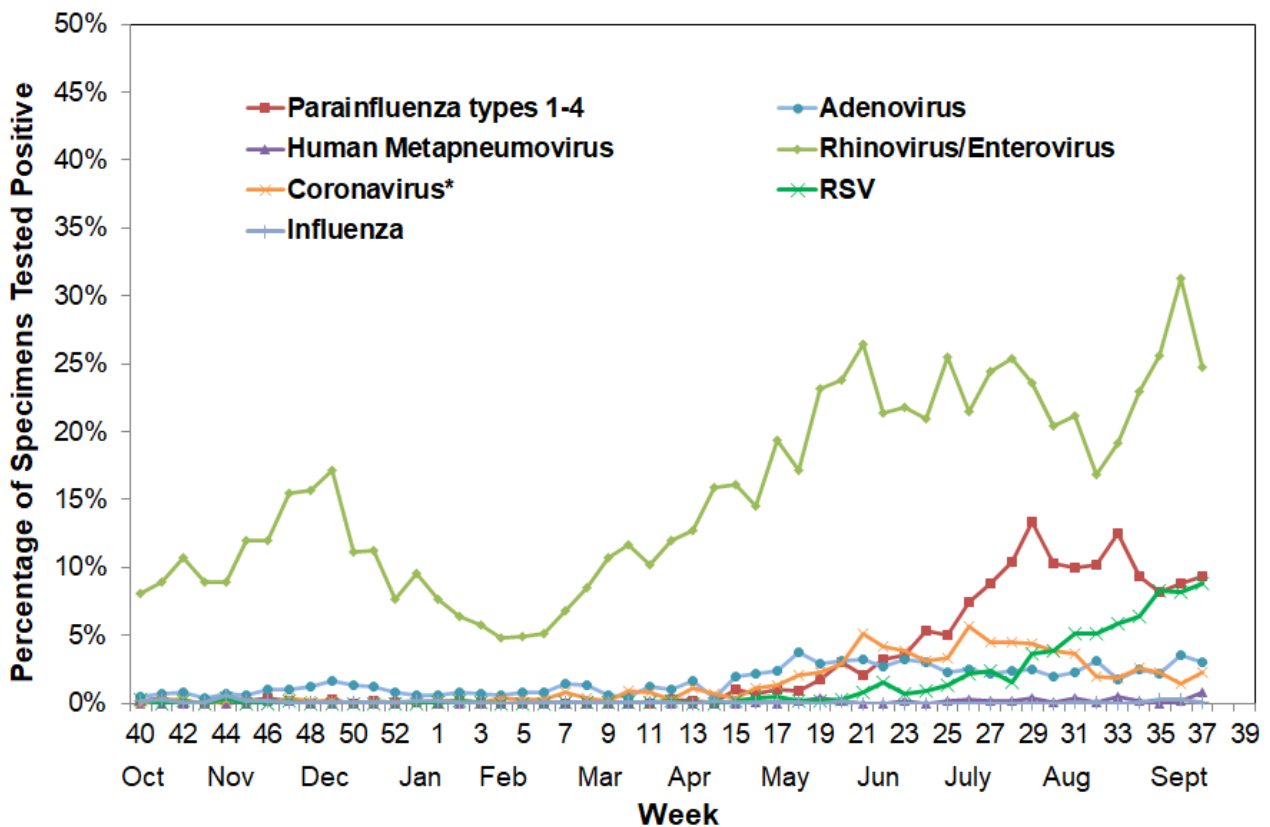
*Coronaviruses identified include common human coronaviruses 229E, NL63, OC43, and HKU1 and do NOT include SARS-CoV-2

For more information
- Influenza (Flu) | CDC
- Who Needs a Flu Vaccine and When | CDC
- People at Higher Risk of Flu Complications | CDC
- What You Should Know About Flu Antiviral Drugs | CDC
- RSV (Respiratory Syncytial Virus) | CDC

- [Interim Guidance for Use of Palivizumab Prophylaxis to Prevent Hospitalization from Severe Respiratory Syncytial Virus Infection During the Current Atypical Interseasonal RSV Spread (aap.org)](#)
- [CDPH Health Advisory: Off-Season Respiratory Syncytial Virus Infections and Use of Palivizumab](#)
- [Updated Guidance for Palivizumab Prophylaxis Among Infants and Young Children at Increased Risk of Hospitalization for Respiratory Syncytial Virus Infection | American Academy of Pediatrics (aappublications.org)](#)
- [Changes in Influenza and Other Respiratory Virus Activity During the COVID-19 Pandemic — United States, 2020–2021 | MMWR (cdc.gov)](#)

To: CAHAN San Diego Participants
Date: October 6, 2021
From: Public Health Services

Health Advisory Update #41: Coronavirus Disease 2019 (COVID-19) Vaccine Update: COVID-19 Vaccination for Pregnant People to Prevent Serious Illness, Deaths, and Adverse Pregnancy Outcomes from COVID-19

Key Messages

- In the US, the highest number of COVID-19-related deaths in pregnant people (n=22) in a single month of the pandemic was reported in August 2021.
- COVID-19 vaccination is strongly recommended either before or during pregnancy because the benefits of vaccination outweigh known and potential risks.
- The Centers for Disease Control and Prevention (CDC) issued a _Health Advisory_ recommending urgent action to increase Coronavirus Disease 2019 (COVID-19) vaccination among people who are pregnant, recently pregnant (including those who are lactating), who are trying to become pregnant now, or who might become pregnant in the future.

Situation

Although the absolute risk from COVID-19 is low, symptomatic pregnant individuals when compared with those who are not pregnant have more than a two-fold increased risk of requiring ICU admission, invasive ventilation or ECMO, and a 70% increased risk of death. Pregnant people with COVID-19 are also at increased risk for preterm birth, and neonates born to people with COVID-19 are at increased risk for NICU admission. Vertical transmission has also been observed among neonates born to individuals with COVID-19 during pregnancy, 1–4% of neonates tested were positive by rRT-PCR.

With the predominance of the COVID-19 Delta variant since June of this year, the risk of hospitalization and death has also increased for pregnant and recently pregnant people. The Centers for Disease Control and Prevention (CDC) reported that August 2021 had the highest number of COVID-19-related deaths in pregnant people (n=22) in a single month of the pandemic. As a result, CDC issued the attached _Health Advisory_ on September 29, 2021.

San Diego Findings

In San Diego County, there have been no deaths among pregnant County residents; however, there has been a marked difference in case counts and hospitalizations by vaccination status. Since June 1, 2021, through September 30, 2021, there have been 253 laboratory-confirmed cases among pregnant people, including 203 among those not fully vaccinated compared to 50 who were fully vaccinated. Of the 31 hospitalizations in the group of 253, 30 were not fully vaccinated. (*Not fully vaccinated is defined as being unvaccinated or having received a single dose of Moderna or Pfizer COVID-19 vaccines. Fully vaccinated is defined as being 14-days after the 2nd dose of Pfizer or Moderna COVID-19 vaccines or a single dose of Janssen/Johnson & Johnson vaccine.

CDC Health Advisory Recommendations

The Centers for Disease Control and Prevention (CDC) recommends urgent action to increase Coronavirus Disease 2019 (COVID-19) vaccination among people who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future. The recommendations align with those from the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine based on increasing evidence of both the safety and effectiveness of COVID-19 vaccination in pregnancy. The benefits of vaccination for both pregnant persons and their fetus or infant outweigh known and potential risks. Despite recommendations for vaccination, uptake of COVID-19 vaccination by pregnant people has been lower than that of non-pregnant people. The CDC *Health Advisory* provides recommendations for:

- *Urgent action to help protect pregnant people and their fetuses/infants,*
- *Recommendations for Public Health Jurisdictions, and*
- *Recommendations for Healthcare Providers.*

Actions Requested

1. If not already enrolled, providers should learn how to enroll in the California COVID-19 vaccination program and participate in COVID-19 vaccination efforts.
2. Review patients' COVID-19 vaccination status at each pre- and post-natal visit and discuss COVID-19 vaccination with those who are unvaccinated.
3. Reach out to patients with messages encouraging and reinforcing the critical need for vaccination.
4. Remind patients that vaccination is recommended even for those with prior COVID-19 infections. Studies have shown that vaccination provides increased protection in people who have recovered from COVID-19.
5. Support efforts to ensure people receiving the first dose of an mRNA COVID-19 vaccine (i.e., Pfizer-BioNTech, Moderna) return for their second dose to complete the series as close as possible to the recommended interval.
6. Consider a booster dose for eligible pregnant persons.
7. Communicate accurate information about COVID-19 vaccines and confront misinformation with evidence-based messaging from credible sources. For example, there is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.

Resources

CDC: COVID-19 Vaccines While Pregnant or Breastfeeding
CDC: COVID-19 Vaccines for People Who Would Like to Have a Baby
CDC: COVID-19 among Pregnant and Recently Pregnant People
CDC COVID Data Tracker:
     Vaccination Among Pregnant People
     Data on COVID-19 during Pregnancy: Severity of Maternal Illness
CDC: Toolkit for Pregnant People and New Parents
CDC: Building Confidence in COVID-19 Vaccines
CDC: Who Is Eligible for a COVID-19 Vaccine Booster Shot?
CDPH: COVID-19 Pregnancy, Breastfeeding & Infants (ca.gov)
CDPH: Vaccination During Pregnancy Guidance (ca.gov)
SDC: mRNA COVID-19 Vaccines: Myth vs. Fact

Thank you for your participation.

CAHAN San Diego

County of San Diego Health & Human Services Agency   Epidemiology and Immunization Services Branch
Phone: (619) 692-8499; Fax: (858) 715-6458   Urgent Phone for pm/weekends/holidays: (858) 565-5255
E-mail: cahan@sdcounty.ca.gov   Secure Website: http://cahan.ca.gov
Public Website: http://www.cahansandiego.com

<p style="text-align:center; color:orange;">**This is an official**</p>

CDC HEALTH ADVISORY

COVID-19 Vaccination for Pregnant People to Prevent Serious Illness, Deaths, and Adverse Pregnancy Outcomes from COVID-19

Summary

The Centers for Disease Control and Prevention (CDC) recommends urgent action to increase Coronavirus Disease 2019 (COVID-19) vaccination among people who are pregnant, recently pregnant (including those who are lactating), who are trying to become pregnant now, or who might become pregnant in the future. CDC strongly recommends COVID-19 vaccination either before or during pregnancy because the benefits of vaccination outweigh known or potential risks. As of September 27, 2021, more than 125,000 laboratory-confirmed COVID-19 cases have been reported in pregnant people, including more than 22,000 hospitalized cases and 161 deaths.[1] The highest number of COVID-19-related deaths in pregnant people (n=22) in a single month of the pandemic was reported in August 2021. Data from the COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) in 2021 indicate that approximately 97% of pregnant people hospitalized (either for illness or for labor and delivery) with confirmed SARS-CoV-2 infection were unvaccinated.[2] In addition to the risks of severe illness and death for pregnant and recently pregnant people, there is an increased risk for adverse pregnancy and neonatal outcomes, including preterm birth and admission of their neonate(s) to an intensive care unit (ICU). Other adverse pregnancy outcomes, such as stillbirth, have been reported. Despite the known risks of COVID-19, as of September 18, 2021, 31.0% of pregnant people were fully vaccinated before or during their pregnancy.[3] In addition, there are racial and ethnic disparities in vaccination coverage for pregnant people. Healthcare providers should communicate the risks of COVID-19, the benefits of vaccination, and information on the safety and effectiveness of COVID-19 vaccination in pregnancy. Healthcare providers should strongly recommend that people who are pregnant, recently pregnant (including those who are lactating), who are trying to become pregnant now, or who might become pregnant in the future receive one of the authorized or approved COVID-19 vaccines as soon as possible.

Background

COVID-19 vaccination is recommended for pregnant people. CDC recommends COVID-19 vaccination for all people aged 12 years and older, including people who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future.[4] CDC recommendations align with those from professional medical organizations serving people who are pregnant, including the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine. Accumulating data provide evidence of both the safety and effectiveness of COVID-19 vaccination in pregnancy. CDC strongly recommends COVID-19 vaccination either before or during pregnancy, because the benefits of vaccination for both pregnant persons and their fetus/infant outweigh known or potential risks. Getting a COVID-19 vaccine can prevent severe illness, death, and pregnancy complications related to COVID-19.

COVID-19 vaccination coverage for pregnant people remains low. Despite recommendations for vaccination, uptake of COVID-19 vaccination by pregnant people has been lower than that of non-pregnant people.[5] In addition, vaccination coverage for pregnant people differs by race and ethnicity, with vaccination coverage being lowest for non-Hispanic Black pregnant people (15.6%) as of September 18, 2021.[3] Although the proportion of fully vaccinated pregnant people has increased to 31.0% (as of

September 18, 2021), the majority of pregnant people remain unprotected against COVID-19, and significant disparities exist in vaccination coverage by race and ethnicity.

Pregnant and recently pregnant people with COVID-19 are at increased risk of severe illness, death, and pregnancy complications. Pregnant and recently pregnant people with COVID-19 are at increased risk for severe illness when compared with non-pregnant people. Severe illness includes illness that requires hospitalization, intensive care unit (ICU) admission, mechanical ventilation, or extracorporeal membrane oxygenation (ECMO), or illness that results in death. Although the absolute risk is low, compared with non-pregnant symptomatic people, symptomatic pregnant people have more than a two-fold increased risk of requiring ICU admission, invasive ventilation, and ECMO, and a 70% increased risk of death.[6] Pregnant people with COVID-19 are also at increased risk for preterm birth and some data suggest an increased risk for other adverse pregnancy complications and outcomes, such as preeclampsia, coagulopathy, and stillbirth, compared with pregnant people without COVID-19.[7-10] Neonates born to people with COVID-19 are also at increased risk for admission to the neonatal ICU.[9-11] In addition, although rare, pregnant people with COVID-19 can transmit infection to their neonates; among neonates born to women with COVID-19 during pregnancy, 1–4% of neonates tested were positive by rRT-PCR.[12,13]

Recommendations
CDC recommends urgent action to help protect pregnant people and their fetuses/infants. CDC recommends urgent action to accelerate primary vaccination for people who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future. Efforts should specifically address populations with lower vaccination coverage and use approaches to reduce racial and ethnic disparities. CDC recommends ensuring tailored, culturally responsive, and linguistically appropriate communication of vaccination benefits. In addition, pregnant people should continue to follow all recommended prevention measures and should seek care immediately for any symptoms of COVID-19. Healthcare providers should have a low threshold for increased monitoring during pregnancy due to the risk of severe illness.

Recommendations for Public Health Jurisdictions
- Continue and increase efforts to reach and partner with communities to encourage and offer vaccination to people who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future.
- Leverage resources to promote vaccine equity: COVID-19 Vaccine Equity for Racial and Ethnic Minority Groups.
  - Include focused efforts to increase vaccination coverage in pregnancy among people from racial and ethnic minority groups.
- Encourage healthcare providers to offer and recommend COVID-19 vaccination to their patients and community members who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future.
- Work with community partners and employers to make vaccination easily accessible for unvaccinated populations, including those who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future.
- Continue to implement additional prevention strategies where SARS-CoV-2 transmission is high and vaccination coverage is low, including in groups at increased risk, such as pregnant people.
- Continue to monitor community transmission and vaccination coverage levels and focus vaccine efforts on populations with low coverage.
- Disseminate and communicate information to key partners about vaccination coverage, risks posed by the highly transmissible Delta variant, and local transmission levels. Partner and share messaging with programs serving pregnant and recently pregnant people.

- Communicate accurate information about COVID-19 vaccines, respond to gaps in information, and confront misinformation with evidence-based messaging from credible sources. For example, there is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.

Recommendations for Healthcare Providers
- Ensure all clinical staff are aware of the recommendation for vaccination of people before and during pregnancy and the serious risks of COVID-19 to pregnant and recently pregnant people and their fetuses/infants.
- Increase outreach efforts to encourage, recommend, and offer vaccination to people who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future. A strong recommendation from a healthcare provider is a critical factor in COVID-19 vaccine acceptance and can make a meaningful difference to protect the health of pregnant and recently pregnant people and their fetuses/infants from COVID-19.
- For healthcare providers who see patients who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future:
  - Review patients' COVID-19 vaccination status at each pre- and post-natal visit and discuss COVID-19 vaccination with those who are unvaccinated.
  - Reach out to your patients with messages encouraging and recommending the critical need for vaccination.
  - Remind patients that vaccination is recommended even for those with prior COVID-19 infections. Studies have shown that vaccination provides increased protection in people who have recovered from COVID-19.
  - Support efforts to ensure people receiving the first dose of an mRNA COVID-19 vaccine (i.e., Pfizer-BioNTech, Moderna) return for their second dose to complete the series as close as possible to the recommended interval.
    - Consider a booster dose in eligible pregnant persons.[4]
  - Communicate accurate information about COVID-19 vaccines and confront misinformation with evidence-based messaging from credible sources. For example, there is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.
- Become a COVID-19 vaccine provider and vaccinate patients during their visit. More information can be found at How to Enroll as a COVID-19 Vaccination Provider.

For More Information
- Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States
- COVID-19 Vaccines While Pregnant or Breastfeeding
- COVID-19 Vaccines for People Who Would Like to Have a Baby
- COVID-19 among Pregnant and Recently Pregnant People
- COVID Data Tracker
  - Vaccination Among Pregnant People
  - Data on COVID-19 during Pregnancy: Severity of Maternal Illness
- Toolkit for Pregnant People and New Parents
- Building Confidence in COVID-19 Vaccines

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COVID-19 Decision Trees for Childcare

November 9, 2021

COUNTY OF SAN DIEGO HHSA · **LIVE WELL SAN DIEGO** · **First 5 San Diego**

If the person (staff or child)...

- Has **symptoms**, use the **Symptom and Isolation Tree**
- Has **tested positive** and **does not have symptoms**, use the **Asymptomatic Positive Tree**
- Is identified as a **close contact** and **does not have symptoms**, use the **Close Contact and Quarantine Guidance**

Symptom and Isolation Tree

A person has one or more symptoms associated with COVID-19
Possible symptoms include fever, chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, and/or diarrhea.

→ **Isolate the person pending a final determination as required below**

Was the person identified as a close contact within the last 14 days?

YES →

Result from a COVID test taken after onset of symptoms?

NEGATIVE or not done. If no test result, skip to vaccination question.

What type of test was used?

MOLECULAR / ANTIGEN

ANTIGEN → **Was a follow-up molecular test sample (collected within 48 hours) negative?**

MOLECULAR · YES → **Is the person fully vaccinated and has a negative test?**

YES ↓ **Stay home until symptoms have improved, typically 24 hours without fever and no use of fever-reducing medicine**

NO → **Stay at home for 14 days from last day of contact and until symptoms have improved and 24 hours have passed without fever or the use fever-reducing medicine**

NO. or result was positive.

POSITIVE → **Return on or after Day 11 from onset of symptoms if symptoms have improved + 24 hours without fever and no use of fever-reducing medications**

NO → **Is there a documented pre-existing chronic condition* that accounts for the symptoms?**

NO → **What was the result of a COVID test sample collected after on-set of symptoms?**

POSITIVE or not done. → **Return on or after Day 11 from onset of symptoms if symptoms have improved + 24 hours without fever and no use of fever-reducing medications**

NEGATIVE. If antigen negative, confirmation with PCR must also be negative. → **Stay home until symptoms have improved according to existing school policy, typically 24 hours without fever and no use of fever-reducing medicine**

YES → **Allow return to school or work**

Asymptomatic Positive Tree

A person has tested positive for COVID-19 and does not have symptoms

→ **Isolate the person pending a final determination as described below**

Was the positive result from an antigen or molecular test?

ANTIGEN → **Was a follow-up molecular test sample (collected within 48 hours) negative?**

MOLECULAR (PCR, LAMP, or NAAT) →

NO. The test was positive, not done, or not done within 48 hours. →

Isolate for 10 days from the date on which the first sample was collected.
- Additional tests should not be performed.
- If symptoms develop, continue isolation for 10 days past the onset of symptoms. Return on or after Day 11 if symptoms have improved + 24 hours without fever and no use of fever-reducing medications.

YES. The test was negative. → **Was the person identified as a close contact in the last 14 days?**

YES → **Use the Close Contact and Quarantine Guidance**

NO → **Return to child care or work**

Close Contact and Quarantine Guidance

*Chronic Conditions

Must have a signed note from a licensed MD/DO/NP/PA (who manages the condition) and the note must: confirm the chronic diagnosis, cite any associated labs, include the date when diagnosed, include provider's contact information and explain how symptoms typically present as part of the chronic condition. The note must be accompanied by signed consent for the childcare provider to interact with MD/DO/NP/PA .

Quarantine Guidance

- **Refrain from quarantine if you are** <u>**fully vaccinated**</u>**** and have no symptoms. CDC recommends a test 5-7 days after the day of last exposure.**

- **Refrain from quarantine and testing** <u>**if you are within 90 days of a lab-confirmed diagnosis of COVID-19.**</u>

- **If you are** <u>**not fully vaccinated or are not within 90 days of a lab-confirmed diagnosis of COVID-19**</u>**, you must quarantine for 14 days from the day of last exposure. Modified quarantine periods are currently not applicable to preschools or centers caring for children outside of a K-12 campus.**

- **In the workplace employers subject to the Cal/OSHA COVID-19 Prevention ETS must ensure that employees are following the current ETS face covering and testing requirements.**

**People are considered fully vaccinated:
2 weeks after their 2nd dose in a 2-dose series (Pfizer or Moderna) OR 2 weeks after a single-dose vaccine (J&J).
Even if you are eligible for a booster dose, a booster dose is not required to be considered fully vaccinated.

School-Aged Child Care Providers

Not located on site at a K-12 school campus (public or private)

Programs providing care for school-aged children **may** be permitted to follow 10-day for staff and students exposed to COVID-19 as long as providers ensure close contacts continue to follow all non-pharmaceutical interventions through Day 14, as outlined in the SD County Health Officer Order on Quarantine. These precautions include symptom monitoring, consistent use of face coverings, and maintaining a distance of at least 6 feet from others. If all these requirements cannot or will not be met, 14-day quarantine is required.

Located on site at a K-12 school campus (public or private)

Programs providing care for school-aged children, should refer to the K-12 COVID-19 Decision Tree quarantine requirements for before-school and after-school activities.

COVID Test Types

Appropriate Test Types:

Molecular Tests
- Lab-processed PCR or NAAT

Antigen Tests
- If symptomatic, a negative antigen test requires molecular test (PCR, NAAT) confirmation and individuals should isolate until the molecular test results are available.

- If asymptomatic, a positive test requires a confirmation with a molecular test (PCR, NAAT) and individuals should isolate until the molecular test results are available.

- In most cases, at-home tests cannot be used to satisfy the testing required for quarantine, or for state-mandated testing of employees who have not provided evidence of full vaccination. Tests must be administered by a clinic, lab, or properly trained school employees working under agreement with an ordering physician.

Onsite Rapid Tests

For people with one or more of the **symptoms** associated with COVID-19:

- A negative result from an antigen must be confirmed by a laboratory-processed test.

- A negative result from a Cue test administered on-site does not require confirmation with a lab-processed test.

Frequently Asked Questions

1. What is the difference between quarantine and isolation?

Quarantine: People who have been identified as having been in close contact with someone with COVID-19 are required to quarantine away from others because they may become infected with COVID-19 from 2 to 14 days following their last contact with a person who has COVID-19.

Isolation: People who have one or more of the symptoms associated with COVID-19 are required to isolate away from others while they may be contagious with COVID-19. A person:

- With symptoms is considered to be contagious from 2 days before their symptoms began, to 10 days after.
- Who has tested positive and does not have symptoms is considered contagious from 2 days before the date their first positive test sample was collected until 10 days after, if they remain asymptomatic.
- Who tested positive while they were asymptomatic, and develops symptoms later, is considered contagious from 2 days before the first positive test sample was collected until 10 days after their symptoms began.

2. What counts as a close contact?

- Being within 6 feet of someone who has COVID-19 for a total of 15 minutes or more over a 24-hour period
- Providing care at home to someone who is sick with COVID-19
- Having direct physical contact with the person (hugged or kissed them)
- Sharing eating or drinking utensils
- Being sneezed on, coughed on, or somehow getting respiratory droplets on you from someone with COVID-19
- Close contacts may be identified and excluded, in conjunction with local health department and healthcare provider guidance, based on symptoms and circumstance, such as in the absence of test results.

Frequently Asked Questions, cont.

3. Who is exempt from quarantine requirements?

Close contacts who do not have symptoms are not required to quarantine if they provide evidence that they:

- Are fully vaccinated
OR
- Have recovered from a lab confirmed case of COVID-19 and it has been 90 days or less since diagnosis.

If symptoms do occur, even people who are fully vaccinated, and those who have already had COVID-19 are required to self- isolate immediately and contact their health provider or San Diego County Public Health Services.

4. How long do I have to quarantine if a member of my household is COVID positive?

If I am not exempt from quarantine (as per Question 3 above) and there is ongoing exposure to a positive case, such as a household contact, and the case and contact continue to share a home, the close contact's quarantine will begin once the positive case's isolation period has ended. Typically, this is a period of 24 days (10-day isolation period + 14-day quarantine, with the 10th day being the contact's last day of exposure). If the COVID-19 positive person is not able to isolate in a separate residence, the county's home isolation instructions (translations) describe the specific requirements for isolation in a home occupied by others. If the person is able to comply with these instructions, quarantine of close contacts can begin when the COVID-19 positive person begins isolation.

5. Does the K-12 guidance apply to childcare settings?

CDPH has published guidance for each sector, K-12 in conjunction with Department of Education and Early Childhood Education in conjunction with Community Care Licensing. As K-12 and ECE serve different populations and have different methods of instruction, different precautions are needed in the ECE setting. The Childcare Decision Tree is based on the CDPH Child Care Providers and Programs guidance, Cal/OSHA Emergency Temporary Standards, and the local public health orders, pertinent executive orders, and answers received directly from the CDPH. CDPH has recently responded to feedback and now is allowing changes for childcare on K-12 campuses, as reflected above. It is anticipated more changes will follow over time.

6. Is contact tracing required for attendees and staff in outdoor childcare settings?

Yes. For most unvaccinated persons who have had close contact (within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period) with someone with suspected or confirmed COVID-19, CDPH recommends the exposed person get tested and self-quarantine at home. CDPH does not make a distinction between indoor and outdoor exposure in accounting for the 15 minutes of exposure.

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ADDITIONAL COUNTY AWARDS LIST

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Additional Awards and Recognitions

National Association of Counties (NACo)

Managing Remote Employees Virtual Course
A New Virtual Class called Mastering the Art of Remote Work
The Health Care Provider Status Team
Pharmacy Leadership Network
Roaming Outpatient Access Mobile (ROAM)
Live Well Mobile Office (LWMO) Pandemic Response
Whole Genome Sequencing

California State Association of Counties (CSAC)

MERIT AWARD – Operationalizing a Sector-specific Approach During a Pandemic - In the Issue Area of Health & Human Services

MERIT AWARD – Using Non-Traditional Data to Understand COVID-19 Locally - In the Issue Area of Health & Human Services

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TEST, TRACE, TREAT, AND VACCINATIONS DOCUMENTS

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Summary of T3 Strategies and Objectives

Background:

The Strategies below reflect what the T3 Team has agreed best capture Test, Trace, Treat, and Vaccine. The Key Initiatives / Objectives that follow were either provided by members of the T3 and Vaccine Policy Teams, and/or drawn from the various Timelines that members provided. This information will help in the documentation of the COVID-19 response. Any questions, contact Anita Walia or Jackie Werth.

TEST

GOAL: ACCESSIBLE COVID-19 TESTING

STRATEGIES:

1. Build excellence in the Public Health Laboratory and regional system through leadership, epidemiological innovation, information technology advancements, and creative solutions for expanding capacity
2. Develop expanded and equitable capacity for testing to reduce transmission
3. Conduct effective and culturally tailored communication and outreach to promote testing to increase access for all residents
4. Provide timely and quality data analysis to support data driven decision-making and transparency
5. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Test Strategy

TRACE

GOAL: TIMELY INVESTIGATIONS AND CULTURALLY COMPETENT CONTACT TRACING

STRATEGIES:

1. Establish and enhance reporting and surveillance capacity to identify cases of COVID-19
2. Build capacity and engage the community for timely and culturally competent investigations and contact tracing
3. Respond effectively to surges in cases and identified outbreaks
4. Provide timely and quality data analysis to support data driven decision-making and transparency
5. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Trace Strategy

TREAT

GOAL: CONTAINMENT OF THE SPREAD OF THE COVID-19 VIRUS IN THE SAN DIEGO REGION

STRATEGIES:

1. Establish, manage and sustain COVID-19 isolation, quarantine, and shelter locations to care for affected individuals, families and persons experiencing homelessness
2. Provide Wrap-Around services to individuals in our care including medical, behavioral health and basic needs
3. Assist with safe isolation and individualized services to help with completion of isolation and quarantine
4. Provide clinically appropriate care for vulnerable populations
5. Provide timely and quality data analysis to support data driven decision-making and transparency
6. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Treat Strategy

VACCINE

GOAL: PROTECT LIVES AND LIVELIHOOD

PLANNING FRAMEWORK: 5 C'S CONFIDENCE, COMPLACENCY, CONVENIENCE, COMMUNICATIONS, AND CULTURAL RESPONSIVENESS

STRATEGIES:

1. Strategies to achieve equity, social justice and cultural responsiveness.
2. Early active and sustained engagement of community partners in the development and implementation of a regionally unified COVID-19 vaccine program.
3. Utilize scientific evidence, regional data and guidance from clinical leaders from the county and community.
4. Proactive transparency and communication to support the flexibility of approaches during fluid pandemic environment.
5. Clear goals and measurable results
6. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Vaccine Strategy.

GOAL: ACCESSIBLE COVID-19 TESTING

KEY OUTCOME METRICS

- Total Number of Tests Reported; Average Testing Capacity Maintained During the COVID-19 response
- Total Number of Tests Reports in the Health Equity Quartiles (or Proportion of All Tests conducted in Health Equity Quartiles)
- Average Testing Results Turnaround Time (or Percentage of COVID-19 response days in which met turnaround goal of 1 day)

STRATEGIES:

1. **Build excellence in the Public Health Laboratory and regional system through leadership, epidemiological innovation, information technology advancements, and creative solutions for expanding capacity**

Key Initiative, Objective or Action
1. Led through creation of the County Laboratory Testing Task Force
2. Innovated with genome sequencing thru the Public Health Lab (PHL), Helix, and UCSD
3. Expanded capacity through partnerships (Helix Partnership) and new equipment (Perkin Elmer), increasing capacity from 2,000 to 7,000 per day
4. Implemented information technology advancements such as Electronic Lab Reporting (ELR)and Health Book Mass Scheduling System
5. Reduced processing time for County Fire though use of remote accession test kits using PHL Starlims system and Accula point-of-care 30-minute testing machines for symptomatic first responders

2. **Develop expanded and equitable capacity for testing to reduce transmission**

Key Initiative, Objective or Action

1. Implemented "Accessible COVID-19 Testing (ACT)" by Strategy:
    a. Act Right (11 Mobile Sites)
    b. Drive-Up Testing Sites
    c. Walk-in Testing Sites in Partnership with the State
    d. No Appointment Testing Sites
    e. Mobile Testing Sites

f. Tribal – County Fire and Sycuan
g. Rapid Response Testing Teams
h. Long Term Care
i. South Bay Saturation Strategy
2. Implemented Testing Efforts for Special Populations:
a. Conducted Testing Focused on Long Term Care Facilities, and developed a Long-Term Care Taskforce
b. Prioritized testing based on ethnic and impacted groups
• South Bay Saturation – 12 Sites
c. Conducted testing at the border
• San Ysidro Border – epidemiological variants
d. Directed County Fire Authority Testing in the Rural Areas and for First Responders
e. Conducted Latino Farmworkers/Outreach Testing
f. Allocated funding for School Testing for Children and Staff, with County Office of Education
g. Implemented Testing at Jails and Detention Centers
3. Supported testing capabilities of partners by the MOC distributing Antigen Tests, with guidance from Laboratory Testing Task Force, for use in point-of-care settings with symptomatic individuals, to obtain quick results

3. Conduct effective and culturally tailored communication and outreach to promote testing to increase access for all residents

Key Initiative, Objective or Action
1. Developed Communications Materials—as part of COVID-19 Website, Informational Materials, Promotional Fliers, Fact Sheets, etc—for all T3 including Testing
• Translated Communications Materials into multiple languages
2. Increased outreach through Brown Marketing Strategy Contract:
• For all T3 Strategies including and 4 phases—Testing, South Bay, Older Adults and Hispanics, Vaccines
3. Incorporated GIS mapping into the Website to make it easy for residents to locate Test sites
4. Partnered with 2-1-1 to support T3 (including Test) by helping residents to locate Test sites. Public urged to call 2-1-1 for information about locations and availability.
5. Coordinated with 2-1-1 for a Campaign regarding Testing Sites. 2-1-1 continued targeted outbound messaging to hard-to-reach segments of the community (September 2020).
6. Contracted with partners to utilize Community Health Workers and/or promotores to provide a trusted source of COVID-19 information to the community (all T3 including Testing)

4. Provide timely and quality data analysis to support data driven decision-making and transparency

Key Initiative, Objective or Action
1. Incorporated GIS mapping into the Website to make it easy for residents to locate Test sites
2. Reported COVID-19 Testing by race & ethnicity and zip code to identify issues of access and differences in positivity rates
3. Used Power BI Analytics to increase capacity to process, analyze and display data
4. Implemented ELR (Electronic Lab Reporting) to enhance speed of data collection and reporting among labs across the region
5. Conducted a Lab Turnaround Time Analysis to identify and remedy barriers to timely reporting   • Began receiving weekly Lab TAT on 8/3/2020. Began reporting at the press briefings on 8/19/2020. Last report for press briefing on 2/3/2021

5. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Test Strategy

Key Initiative, Objective or Action
1. Advertised to specific vendor lists to attract a qualified, diverse, and equitable temporary workforce
2. Expanded recruitment for non-traditional County roles in T3 to get Paramedics, EMTs, Contact Tracers, Case Investigators; also increased opportunities for individuals who qualified under revised state regulations, including microbiologists, EMTs and Paramedics
3. Used Temporary, Contracted Staff and Retirees to expand capacity quickly and to manage surges
4. Streamlined background and medical processes to meet hiring deadlines and instituted a structured, one-week background and medical onboarding process, and coordinated onboarding and orientation sessions, which included mandatory training
5. Made temporary assignments to higher class (TAHC) to fill critical vacant positions quickly
6. Adopted "When I Work" application to facilitate scheduling of large numbers of staff
7. Created a 2nd and 3rd shift (in June 2020) in the PHL so could operate 24 hours per day
8. Trained EMS first responders (for COVID-19 testing, early on, and the vaccinations later).
9. Developed and trained specialized T3 team of 2-1-1 agents to connect the public with accurate and timely information about pandemic response and services available them
10. Provided an opportunity for community members to learn basic skills for an opportunity to support COViD-19 response efforts
11. 211 prioritized bilingual agents specifically for Spanish-speaking callers, routing English-speaking callers to English-speaking agents only; making bilingual agents available 100% of time to answer only Spanish-speaking callers.

TRACE

GOAL: TIMELY INVESTIGATIONS AND CULTURALLY COMPETENT CONTACT TRACING

KEY OUTCOME METRICS
- Percentage of case investigations/contact investigations completed within 24 hours (or Percentage of days for the COVID-19 response in which met the goal of 90% investigations completed within 24 hours)
- Percentage of case investigations/contact investigations completed for those who reside in the Healthy Equity Quartiles within 24 hours
- Total number of case investigations performed overall and within Health Equity Quartiles

STRATEGIES:

1. Establish and enhance reporting and surveillance capacity to identify cases of COVID-19

Key Initiative, Objective or Action
1. Adopted a Contact Investigation and Tracing process and policy

2. Implemented Case Investigation and Contact Tracing targets and timeframes
    • 70% investigations initiated within 24 hours of notification
    • First contact attempt for 70% of close contacts within 24 hours

3. Developed MOAs with local cities and/or other entities to perform outreach services for contact tracing and case investigations
4. Launched smart phone technology with UCSD to notify users if they have a high risk of exposure

2. Build capacity and engage the community for timely and culturally competent investigations and contact tracing

Key Initiative, Objective or Action
1. Maintained a 24/7 Call Team to screen for testing and answer provider questions. Relayed questions to 2-1-1 for timely responses
2. Developed a unique collaboration with SDSU to design culturally responsive curriculum and training for contact tracing approach using Community Health Workers or promotoras
3. Engaged multiple partners though contracts to utilize Community Health Workers and/or promotoras to provide a trusted source of COVID-19 information to the community. Partners helped with communication and outreach and contact tracing.
4. Created an Outreach & Education Team

Key Initiative, Objective or Action
5. Executed contract for "Early Detection Wastewater Program" for early identification of outbreaks at schools

3. Respond effectively to surges in cases and identified outbreaks

Key Initiative, Objective or Action
1. Created Pre-Outbreak Team
2. Formed Rapid Response Strike Teams to address outbreaks in congregate facilities and for urgent or special events   a.   Also initiated Proactive Testing for congregate facilities
3. Created other specialized teams for Schools; Colleges/Universities; Military/VA; Homeless; Indian Reservations; Casinos; Border Health to help prevent and address outbreaks
4. Made process improvements in protocols for case investigations and contact tracing to ensure quicker response

4. Provide timely and quality data analysis to support data driven decision-making and transparency

Key Initiative, Objective or Action
1. Established agreements among the labs in the regions for electronic connections so that test results could be transmitted more quickly
2. Provided demographic data of County of San Diego Case Investigators and Contact Tracers by race & ethnicity
3. Published daily Case Investigation/Tracing Reports
4. Initiated the Triggers Dashboard, including timeliness of investigations, among other indicators of status of response   • Daily breakdown of Case Investigators, Outbreak Investigators, Contact Tracing, Administrative Team, as well as Hired and Pending Training, Trained but started.
5. Created "Summary of Case Investigators and Contact Tracers by Race/Ethnicity Biweekly Report" to closely track diversity of staff

5. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Trace Strategy

Key Initiative, Objective or Action
1. Advertised to specific vendor lists to attract a qualified, diverse, and equitable temporary workforce
2. Expanded recruitment for non-traditional County roles in T3 to get Paramedics, EMTs, Contact Tracers, Case Investigators; also increased opportunities for individuals who qualified under revised state regulations, including microbiologists, EMTs and Paramedics

3. Used Temporary, Contracted Staff and Retirees to expand capacity quickly and to manage surges
4. Streamlined background and medical processes to meet hiring deadlines and instituted a structured, one-week background and medical onboarding process, and coordinated onboarding and orientation sessions, which included mandatory training
5. Undertook several different recruitments to staff up contract tracers and investigators to meet need
6. Made a priority the hiring of diverse contact tracing staff to reflect diversity of clients served
7. Shifted contract tracers to disease investigations to address surge in cases
8. Scaled up the hiring of nurses, epidemiologists, and individuals to perform intake and process lab results and case reports

GOAL: CONTAINMENT OF THE SPREAD OF THE COVID-19 VIRUS IN THE SAN DIEGO REGION

KEY OUTCOME METRICS
- Total Number of Days in which Safe Lodging Provided (or Average Number of Individuals in Safe Lodging over the Duration of the COVID-19 Response)
- Cumulative Number of Individuals in Safe Lodging
- Number of Days in which Hospital/ICU Capacity was of Concern (Less than 20%)

STRATEGIES:

1. Establish, manage and sustain COVID-19 isolation, quarantine, and shelter locations to care for affected individuals, families and persons experiencing homelessness

Key Initiative, Objective or Action
1. Took early prevention steps: • Placed handwashing stations throughout City in areas where people experiencing homelessness • Dispatched Outreach Teams, sending PHNs to homeless shelters, and • Identifying hotel/motel rooms to house people who need to quarantine
2. Established key partnerships, such as the one with the Regional Task Force for the Homeless
3. Developed capacity through contracts for more than 1,000 Public Health Hotel rooms to be available for the Temporary Lodging Program, and included: • Daily wellness checks by nurses • Wrap-around services such as transportation, food, and healthcare
4. Established a large shelter for homeless at the Convention Center staffed by public health nurse and Homeless Outreach Teams • Including T3 services, eligibility, case management and other referrals
5. Provided infection control consultations to facilities, including COVID Care Centers within skilled nursing facilities

2. Provide Wrap-Around services to individuals in our care including medical, behavioral health and basic needs *see resources page

Key Initiative, Objective or Action
1. Set up a Nurse Triage Line to help 2-1-1 callers who have symptoms but do not have a medical provider. This Public Health Nurse Line was made available seven days a week from 8 am to 8 pm.
2. Actively promoted tips on how to present or address mental health challenges and recommended residents call the Access and Crisis line for assistance
3. Maintained the "Great Plates Program" so that older adults could continue to receive free and healthy meals during the pandemic, a collaboration with local restaurants, urging the public to call 2-1-1 for more information
4. Offered behavioral health services, including a Telehealth pilot, to all individuals housed in the shelter locations and in the Public Health Hotels. • Conducted a Telehealth pilot with Public Health Hotel placements and Homeless Outreach Workers.

3. Assist with safe isolation and individualized services to help with completion of isolation and quarantine

Key Initiative, Objective or Action
1. Developed and provided Nurse Isolation Support Help Line with nurse case managers notifying individuals of positive results and sharing isolation guidance. When this line is discontinued, triaged to 2-1-1 (November 2020).
2. Offered meal-delivery services to homebound individuals through 2-1-1/CIE, in partnership with SD Food Bank, Red Cross, and Door Dash. Services also made available during holidays.
2. Created the "Positive Recovery Stipend Program," authorized by BOS to provide financial assistance to employed individuals who stay home during the required isolation period
3. Launched the case management component to the Temporary Lodging program
4. Encouraged employers to adopt sick leave policies

4. Provide clinically appropriate care for vulnerable population

Key Initiative, Objective or Action
1. Created a Health Resources Page on the County COVID-19 website to help guide folks to resources
2. Arranged for early treatment for COVID-19 at two Monoclonal Antibody Regional Centers (MARC) at Palomar Health and San Ysidro for those at high-risk of progressing to severe disease
3. Provided triage or assessment services to ensure that the right people were placed in the right housing with appropriate treatment services

5. Provide timely and quality data analysis to support data driven decision-making and transparency

Key Initiative, Objective or Action
1. Summary of Public Health Room Guests by Race/Ethnicity Biweekly Report   • First posted to County COVID website on 8/24/2020, and updated biweekly.

6. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Treat Strategy

Key Initiative, Objective or Action
1. Partnership with County Fire (Operation Collaboration) to various capacities
2. Use of Emergency Medical Technicians in the prevention and spread of the virus

GOAL: PROTECT LIVES AND LIVELIHOOD

PLANNING FRAMEWORK: 5 C'S **C**ONFIDENCE, **C**OMPLACENCY, **C**ONVENIENCE, **C**OMMUNICATIONS, AND **C**ULTURAL RESPONSIVENESS

KEY OUTCOME METRICS
- Average Vaccination Capacity Maintained Countywide
- Average Vaccination Capacity Maintained within the Health Equity Quartiles
- Percentage of Goal Population Fully Vaccinated and by When
- Percentage of Population within Health Equity Quartiles that are Fully Vaccinated and by When

STRATEGIES:

1. Strategies to achieve equity, social justice and cultural responsiveness.

Key Initiative, Objective or Action
1. Adhered to State guidance regarding vaccine eligibility by Tier, ensuring that medical staff and most vulnerable received vaccines first.
2. Delivered vaccines to all Convention Center residents (homeless) and staff in partnership with City of San Diego
3. Published an Equity Plan in December 2020 that lays out five strategies to advance equity, including expanding the evidence-base for equity data; examining and expanding County programs and services related to COVID-19; supporting front line workers; expanding an inclusive workforce, and collaborating with community partners to ensure an inclusive engagement effort.
4. Implemented a vaccine strategy that emphasized accessibility, similar to the testing strategy. An "Ecosystem" of: a. County hosted sites   b. Vaccination Super Stations   c. Mobile Vaccination Teams to reach homebound individuals and long-term care facilities   d. Mobile Operation Collaboration Vaccination Teams to reach rural and agricultural communities   e. Partnerships with Health Systems (Hospitals)   f. City Partnerships   The Ecosystem includes efforts independent of County efforts such as with Federally Qualified Health Centers, Health System Member Vaccinations, Military and Veterans Administration, and the Federal Pharmacy Partnership Program.
5. Coordinated with the State Third Party Administrator (Blue Shield) to assist the State in managing its provider network while retaining flexibility the County needed to preserve its "ecosystem" of providers to meet needs

6. Hosted the Governor on a tour of the Vaccination Super Station at Petco Park to promote vaccination and encourage access by showcasing the Super Station and the partnership with the Padres.
7. Launched Project SAVE (Scheduling Assistance for Vaccine Equity) as a pilot in South Bay (Imperial Beach, National City, Chula Vista, San Ysidro), and later expanded to City Heights, to improve vaccination rates among impacted communities by utilizing community health workers for outreach and to make vaccine appointments for residents
8.Committed to equitable vaccine distribution in letter of Board members Fletcher and Vargas to City Councilmembers
9. Created Vaccine Support team in 2-1-1 to help address equity issues—clients set up for follow-up calls if faced barriers to scheduling or unable to access appointments.
10. Implemented the Homebound Seniors program, coordinating with AIS, to provide vaccinations to seniors who are unable to safely get to vaccination sites; later expanded to become Homebound San Diegans. AIS receives referrals from several sources that conduct eligibility screening, including 2-1-1, AIS care coordination programs, and CDPH - MyTurn, and then routes the referrals to one of seven vaccine providers (Operation Collaboration, Chula Vista Fire Department, Tri-City, Sharp, Alvarado, Palomar and Champions for Health).
11. Hosted agricultural worker vaccination events in order to ensure these essential workers in rural communities had access to vaccines
12. Conducted outreach to faith communities (e.g. Resource Tabling at Islamic Center)
13. Joined binational effort to vaccinate 10,000 maquiladora workers from Baja California
14. Conducted outreach to tribal communities and implemented plan to work with 5 clinics to administer vaccine (Operation Collaboration)
15. Transitioned to no appointment, drop-in Vaccination Sites to improve access; first site at Border View on Feb 23
16. Collaborated with numerous partners (up to 50) to create mobile walk-through vaccination sites to make it more convenient to reach residents

2. Early active and sustained engagement of community partners in the development and implementation of a regionally unified COVID-19 vaccine program.

Key Initiative, Objective or Action
1. Contracted and created MOAs with community partners to set up Super Stations and vaccine locations across the county
2. Continued strong partnership with Operation Collaboration and other fire agencies to vaccinate at senior complexes, homebound San Diegans, homeless shelters, rural communities, agriculture workers, and tribal communities
3. Partnered with 2-1-1 to support T3 and Vaccine communications with the public throughout, including helping residents (focus on older residents, and homebound seniors) to make vaccine appointments, bridging the digital divide
4. Launched creative approaches to engage residents to get the vaccine, including offering Padres Tickets and a Youth Video & Visual Art Vaccine Challenge to raise awareness about the importance of a vaccine
5. Connected people to Lyft rides via 2-1-1 when faced particular challenges getting to their vaccine appointment

6. Engaged partners in the signing of an amendment for Culturally Appropriate Testing Site Assistance (accompanying residents; providing translation services), which applies to both Test and Vaccine sites.

3. Innovative approaches rooted in scientific evidence, regional data and guidance from clinical leaders from the county and community.

Key Initiative, Objective or Action
1. Formed the COVID-19 Vaccine Clinical Advisory Group which includes clinical partners to provide guidance for vaccine distribution and recommendations using a health equity lens
2. Convened Clinic Town Halls through a partnership with the County Medical Society to keep physicians informed about the vaccine
3. Implemented an Academic Detailing by Zip Code Project to direct outreach and tailored guidance to providers in zip codes with the highest cases of COVID-19
4. Used the Healthy Places Index (HPI) Quartiles to identify where outreach, testing and vaccine efforts and resources should be focused, and reported data by quartile to show progress

4. Proactive transparency and communication to support the flexibility of approaches during fluid pandemic environment.

Key Initiative, Objective or Action
1. Designed and launched a Vaccine Webpage, as part of the County COVID-19 Website, which provided the latest update on Vaccine Eligibility, Vaccine Resources, information from the Clinical Advisory Group, and Information for Vaccine Providers. This Site was interactive, enabling individuals to locate a Vaccine Site and schedule an appointment.
2. Developed Communications Materials—as part of COVID-19 Website, Informational Materials, Promotional Fliers, Fact Sheets, etc—for all T3 including Testing   • Translated Communications Materials into multiple languages
3. Increased outreach through Brown Marketing Strategy Contract: For all T3 Strategies including and 4 phases—Testing, South Bay, Older Adults and Hispanics, Vaccines
3. Conducted a Community Vaccine Survey to identify reasons for "vaccine hesitancy" in which results informed media campaign and other outreach
4. Hosted by members of the BOS, Vaccine Town Halls (virtual) provided information and opportunity for public to ask questions
5. Partnered with the Multicultural Health Foundation to develop a multimedia campaign on COVID facts
6. Hosted by members of the BOS, Community Workshops were held for the public to give input to the County on the potential uses of anticipated funds on the American Rescue Plan. Five 90-minute community workshops were held virtually in which participants had the

opportunity to provide feedback on how they would like to see funds from the American Rescue Plan spent. Interpretation was provided in five languages – Arabic, Chinese, Tagalog, Spanish and Vietnamese.

5. Clear goals and measurable results.

Key Initiative, Objective or Action
1. Designed and posted a Vaccination Dashboard that enabled the public to readily see the number of doses received and administered, and progress toward Vaccination Goals for Individuals with at least one dose and fully vaccinated. Also displayed data by race/ethnicity and region.
2. Produced a number of reports (internal and external) created for Vaccine, including a Power BI Dashboard, Vaccine Allocation Database, Vaccine Projections Report, Vaccine Inventory Report, COVID-19 Vax and Test Sites, and T3 Internal Report and numerous public-facing reports.
3. Identified Health Equity Quartiles and produced data/reports to guide vaccination efforts to those census tracts most impacted (including Vaccinations by Health Equity Zip Code), posted on the website

6. Implement flexible culturally responsive hiring and staffing practices to meet the evolving demands of the Vaccine Strategy

Key Initiative, Objective or Action
1. Partnership with County Fire (Operation Collaboration) to lead or support in various capacities
2. Conducted several "Train the Trainer" sessions during vaccination events to expand number of County and partner staff who could vaccinate. This included an early event to vaccinate County Frontline Workers and a "Vaccinate the Vaccinators POD" which was also rolled out to the Sheriff's Department. Those trained included contract nurses, CalFire staff (EMTs), Champions for Health staff, and nurses in the Sheriff's Dept
3. Conducted an open recruitment for EMTs and also brought on Student Nurses
4. Supplemented 2-1-1 vaccine call staff by providing 75 County employees to respond to vaccine questions (Feb and March 2021)
5. Leveraging its CIE partnerships, 211 worked with City of Chula Vista Library System to use 20 librarians to handle the surge of COVID-19 calls. Librarians took more than 12,500 calls and logged more than 2,800 hours.
6. Provided an opportunity for community members to learn basic skills for an opportunity to support COViD-19 response efforts
7. Moved and shared staffing resources between T3 groups, leveraging the experience of Testing staff to support Vaccine

December 2021

COVID-19 Vaccination Strategies to Advance Health Equity in San Diego County
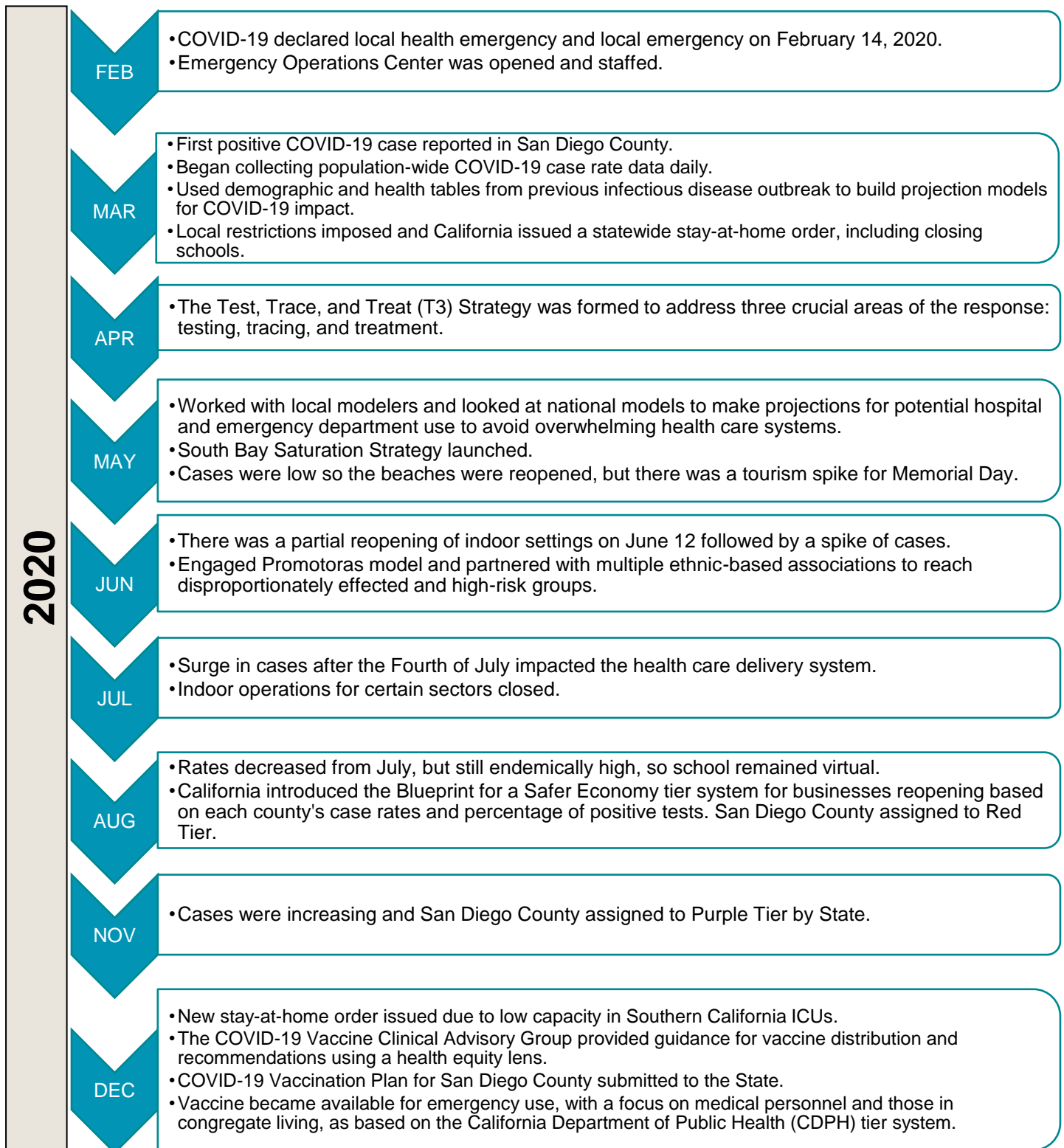
How COVID-19 case data was used to inform vaccination

County of San Diego | Health and Human Services | Public Health Services

COVID-19 Vaccination Strategies to Advance Health Equity in San Diego County

Contents

Timeline of Major COVID-19 Milestones in San Diego County

2020

FEB
- COVID-19 declared local health emergency and local emergency on February 14, 2020.
- Emergency Operations Center was opened and staffed.

MAR
- First positive COVID-19 case reported in San Diego County.
- Began collecting population-wide COVID-19 case rate data daily.
- Used demographic and health tables from previous infectious disease outbreak to build projection models for COVID-19 impact.
- Local restrictions imposed and California issued a statewide stay-at-home order, including closing schools.

APR
- The Test, Trace, and Treat (T3) Strategy was formed to address three crucial areas of the response: testing, tracing, and treatment.

MAY
- Worked with local modelers and looked at national models to make projections for potential hospital and emergency department use to avoid overwhelming health care systems.
- South Bay Saturation Strategy launched.
- Cases were low so the beaches were reopened, but there was a tourism spike for Memorial Day.

JUN
- There was a partial reopening of indoor settings on June 12 followed by a spike of cases.
- Engaged Promotoras model and partnered with multiple ethnic-based associations to reach disproportionately effected and high-risk groups.

JUL
- Surge in cases after the Fourth of July impacted the health care delivery system.
- Indoor operations for certain sectors closed.

AUG
- Rates decreased from July, but still endemically high, so school remained virtual.
- California introduced the Blueprint for a Safer Economy tier system for businesses reopening based on each county's case rates and percentage of positive tests. San Diego County assigned to Red Tier.

NOV
- Cases were increasing and San Diego County assigned to Purple Tier by State.

DEC
- New stay-at-home order issued due to low capacity in Southern California ICUs.
- The COVID-19 Vaccine Clinical Advisory Group provided guidance for vaccine distribution and recommendations using a health equity lens.
- COVID-19 Vaccination Plan for San Diego County submitted to the State.
- Vaccine became available for emergency use, with a focus on medical personnel and those in congregate living, as based on the California Department of Public Health (CDPH) tier system.

Timeline of Major COVID-19 Milestones in San Diego County (cont.)

2021

JAN
- Peak in cases in early January.
- Regional stay-at-home order was lifted.
- Adults 65+ eligible to receive vaccine.
- First vaccination super station opened outside of Petco Park.
- Expansion of vaccination sites across the county.

FEB
- Vaccination eligibility expanded to essential workers, teachers, emergency workers, agricultural and food services, etc.

MAR
- Vaccination eligibility expanded to those with additional high-risk medical conditions.
- Project SAVE Pilot Project started focusing on making sure vaccinations were available to communities experiencing high burden of COVID-19 in the southern part of San Diego County.

APR
- Vaccination eligibility opened to all adults.
- San Diego County in Orange Tier of the State's tiered system.

MAY
- Vaccine approved for 12 to 17 year olds.

JUN
- San Diego County assigned to the Yellow Tier of the State's system.
- California Blueprint for a Safer Economy is retired.
- 75% of eligible San Diegan County residents received at least one dose of the vaccine.

JUL
- Cases surge.

AUG
- Schools reopen for in-person learning.
- Cases peak and began decreasing.
- 75% of eligible San Diego County residents fully vaccinated.

SEP
- Pfizer vaccine booster available to fully vaccinated, eligible residents.

OCT
- Moderna and J&J/Janssen booster approved.
- Cases remain steady but higher than levels seen during June 2021.

NOV
- Vaccine approved for 5 to 11 year olds.

Background

The first local community positive case of the 2019 novel coronavirus (COVID-19) among a San Diego County resident was reported in early March 2020. The County of San Diego (CoSD) launched its T3 Strategy: Test, Trace, and Treat (**Figure 1**) in April 2020, a large-scale, equity-focused, population health-based strategy using immense collaborative efforts to achieve collective impact in protecting the public's health. Vaccination was included as part of the T3 Strategy with the anticipation of COVID-19 vaccine availability. Health equity has been an essential strategy and goal that has been threaded through all T3 programs and activities.
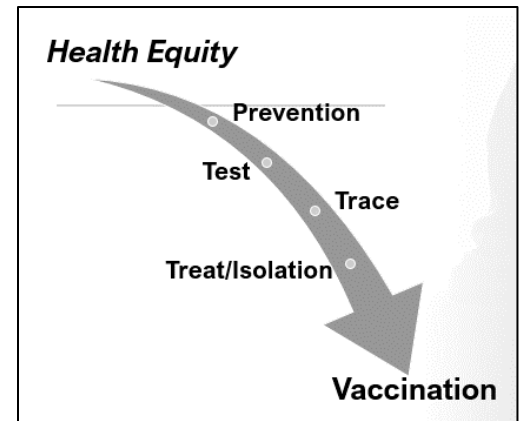
FIGURE 1. T3/VACCINE STRATEGY INFORMED BY HEALTH EQUITY LENSES.

The CoSD COVID-19 Vaccination Plan was submitted to the State on December 8, 2020. The COVID-19 Vaccination Plan focused on a "response that reaches all vulnerable populations" and a "transparency of the process for equitable distribution of vaccine." A Health Equity Strategy, also submitted to the State in late 2020, established the goal to "ensure equitable access to services, including testing and vaccination, for all San Diego County residents in response to the COVID-19 pandemic."

The County of San Diego's ambitious goal was to fully vaccinate 75% of its 2.8 million eligible adult population, prior to approval for children, and to ensure historically underserved groups were protected. To accomplish this, CoSD set as a goal that 75% of eligible adult residents would have at least one dose of the vaccine by July 1, 2021. Through a vaccine ecosystem which consisted of a variety of vaccine providers that reached all communities and populations in the county, San Diego County achieved the highest vaccination rates among Southern California counties and in California overall. Additionally, vaccination rates were highest in the South Region of San Diego County where residents, many of Hispanic ethnicity, were disproportionately impacted by COVID-19, reflecting a successful implementation of the CoSD vaccination strategies based on the data.

Decision-Making

The County of San Diego (CoSD) has a long history in advancing health equity. In 2016, the County Chief Administrative Officer declared disproportionality as a priority, which led Public Health Services (PHS) to systematically review the data of each PHS Branch to identify potential disproportionalities across programs and services provided. CoSD also added Branch-level Health Equity goals to the PHS Strategic Plan (2019). In addition, PHS is in the process of developing a new PHS Health Equity Plan, 2021-2024 and a new Health Equity departmental policy at the time of publishing this document.

Early in the pandemic, the Board of Supervisors formed a subcommittee with an emphasis on health equity. Regular presentations to the Board of Supervisors were established to provide COVID-19 response updates and request Board approval for new, essential actions. The presentations included

epidemiological and clinical updates from the Public Health Officer, with an emphasis on the disproportionate impacts of COVID-19 and the importance of health equity in the response. Presentations from other sectors in the response were also made, including Public Health Hotels, Behavioral Health Services, Vaccinations, and Economic Updates. In early December 2020, the COVID-19 Vaccine Clinical Advisory Group, comprised of CoSD's clinical partners, provided guidance for vaccine distribution and recommendations using a health equity lens.

The Public Health Officer prepared the "Health Equity Strategy," submitted to the State in late 2020, establishing the goal to ensure equitable access to services, including testing and vaccination, for all San Diego County residents in response to the COVID-19 pandemic. Early in the pandemic, the Chair and Vice-Chair of the Board of Supervisors emphasized the disproportionate impacts of COVID-19 and the importance of health equity to the response during regular press conferences. A Health Equity Taskforce was formed, comprised of community members, to advise and assist CoSD in its response. The Chair and Co-Chair of the Taskforce authored a letter to City Councilmembers in February of 2021 stressing that, "with an ever-evolving situation, we are making every attempt to provide access to our hardest-hit communities." The Chair worked closely with the Public Health Officer, the Director of the T3 Strategy, and the Chief Nursing Officer to communicate the importance of health equity and, while ensuring accessibility for all, focusing on communities that were most significantly impacted.

Surveillance & Reporting COVID-19 Case Data

The Epidemiology and Immunization Services Branch (EISB) of Public Health Services (PHS) works to identify, investigate, register, and evaluate communicable, reportable, and emerging diseases and conditions to protect the health of the community. COVID-19 surveillance utilizes many components of the public health surveillance system in disease response and population-wide COVID-19 case data has been collected daily by the EISB since the first local case was reported in March 2020. As required by law, EISB receives COVID-19 disease reports from providers, clinics, hospitals, and laboratories across San Diego County, and this information is entered into the disease registry utilized by EISB called WebCMR. ESIB exports data from WebCMR for analysis and surveillance, and a daily file of all confirmed and suspected COVID-19 cases is shared with the California Department of Public Health (CDPH). In October 2021, suspected cases of COVID-19 were also included in the reports and the list sent to CDPH.

San Diego County is home to a very diverse population of over 3.3 million residents, with no majority racial or ethnic population. With an international border, San Diego County is also home to large and diverse refugee and immigrant communities. This diversity required multiple analysis and outreach approaches to inform all residents of vital health information.

Data analysis and surveillance were completed by PHS staff using geographic, age, gender, and race/ethnicity variables to assess case rates and identify at-risk groups. These data were shared with the COVID-19 Incident Command System for internal monitoring and to inform high-level decision-making. Reports, dashboards, and other COVID-19 information produced by PHS and other CoSD

groups were available publicly on San Diego County's COVID-19 Website (www.coronavirus-sd.com) where detailed data were posted regarding case and vaccination rates. Here, data were broken out by zip code, jurisdiction, age, gender, and race/ethnicity to identify needs and trends. EISB also prepared a weekly [COVID-19 Watch](#) to report rates of outbreaks, positive cases, hospitalizations, and deaths. It organized data by demographics, zip code, and exposure settings.

For example, analysis of case rates by geography and by race/ethnicity revealed patterns that suggested a certain focus to the response. **Figure 2** below is a map that shows case rates by zip code from late January 2021. It illustrates that certain regions/communities were more impacted than others at the height of the pandemic.

Cumulative COVID-19 Rates by Zip Code of Residence, San Diego County
### (Countywide Rate = 6,778 per 100,000 Population)
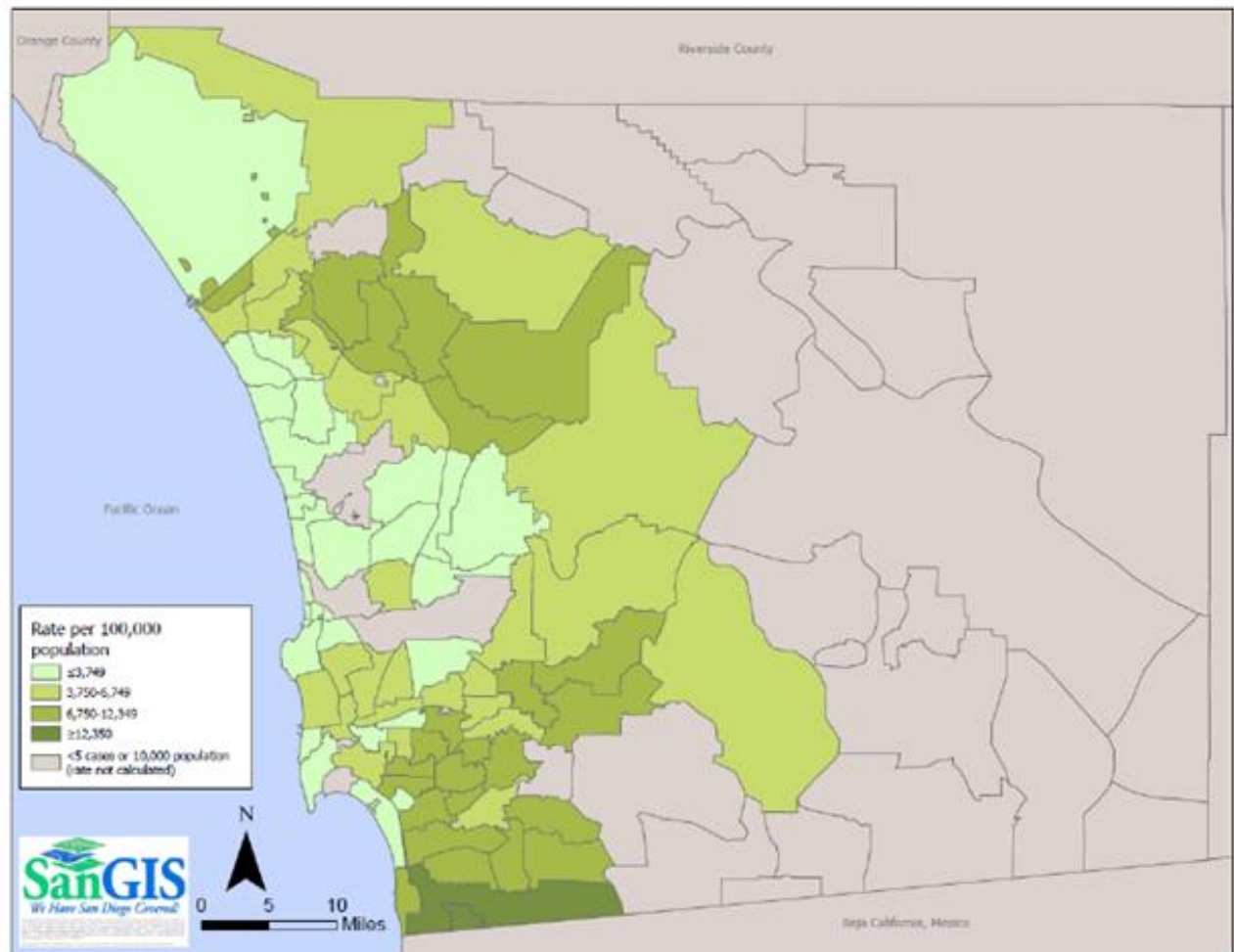
Rates calculated using 2019 population estimates from the San Diego Association of Governments. Rates not calculated for counts under 5 cases or populations less than 10,000. Zip code is zip code of residence, which may not be location of exposure.
Case [counts and rates](#) for each zip code are updated routinely on the County of San Diego COVID-19 website.

Figure 3, from COVID-19 Watch, shows relative case rates by different race and ethnic groups from late January 2021. Analysis of this data by County epidemiologists revealed higher rates of COVID-19 in certain populations throughout San Diego County, such as Hispanic or Latino, Native Hawaiian and Pacific Islander, and Black or African American communities.

Confirmed Cumulative COVID-19 Cases by Race/Ethnicity San Diego County Residents, N=185,642*
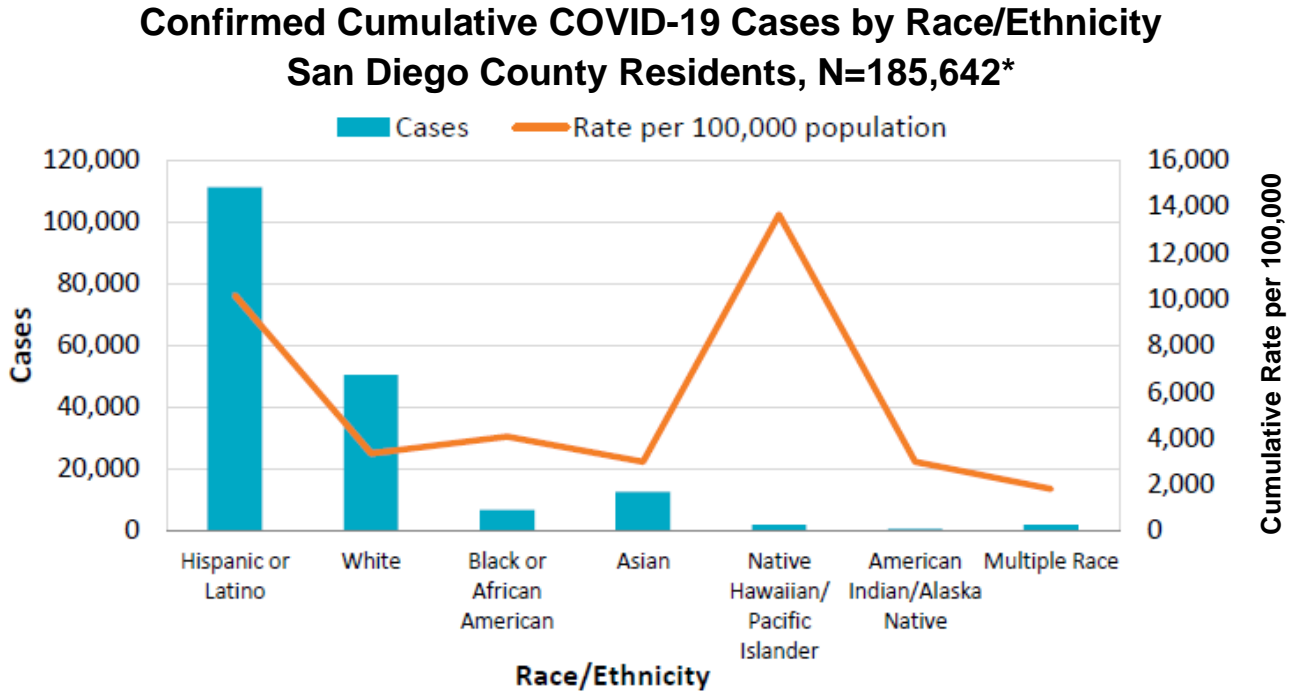
*Race/ethnicity is unknown for 41,553 cases.
Data through January 23, 2021.

FIGURE 3. CUMULATIVE CASE RATES OF COVID-19 BY RACE/ETHNICITY SHOWING RELATIVE CASE RATES AMONG DIFFERENT RACE/ETHNIC GROUPS, INCLUDING HISPANIC/LATINO POPULATIONS.

Disaggregating the population-wide COVID-19 data further allowed trends to be seen for each of the Health and Human Services Agency (HHSA) Regions and their respective communities. The Community Health Statistics Unit developed Health Equity Dashboards (**Figure 4**) early in the response and continues to update them weekly to identify COVID-19 disparities and inequities by age, gender, geography, race/ethnicity, and socioeconomic status for these geographies.

The Health Equity Dashboards provide easy-to-understand visualizations and made it evident that during the surge of cases, the highest cumulative rates of COVID-19 occurred in South Region, particularly in South Bay subregional area. Further analysis of South Region case data showed Native Hawaiian/Pacific Islander and Hispanic residents and those aged 20 to 60 years old generally had higher cumulative rates of COVID-19, as of January 23, 2021. This display of data was one of the many pieces to help inform prevention efforts and targeted responses.
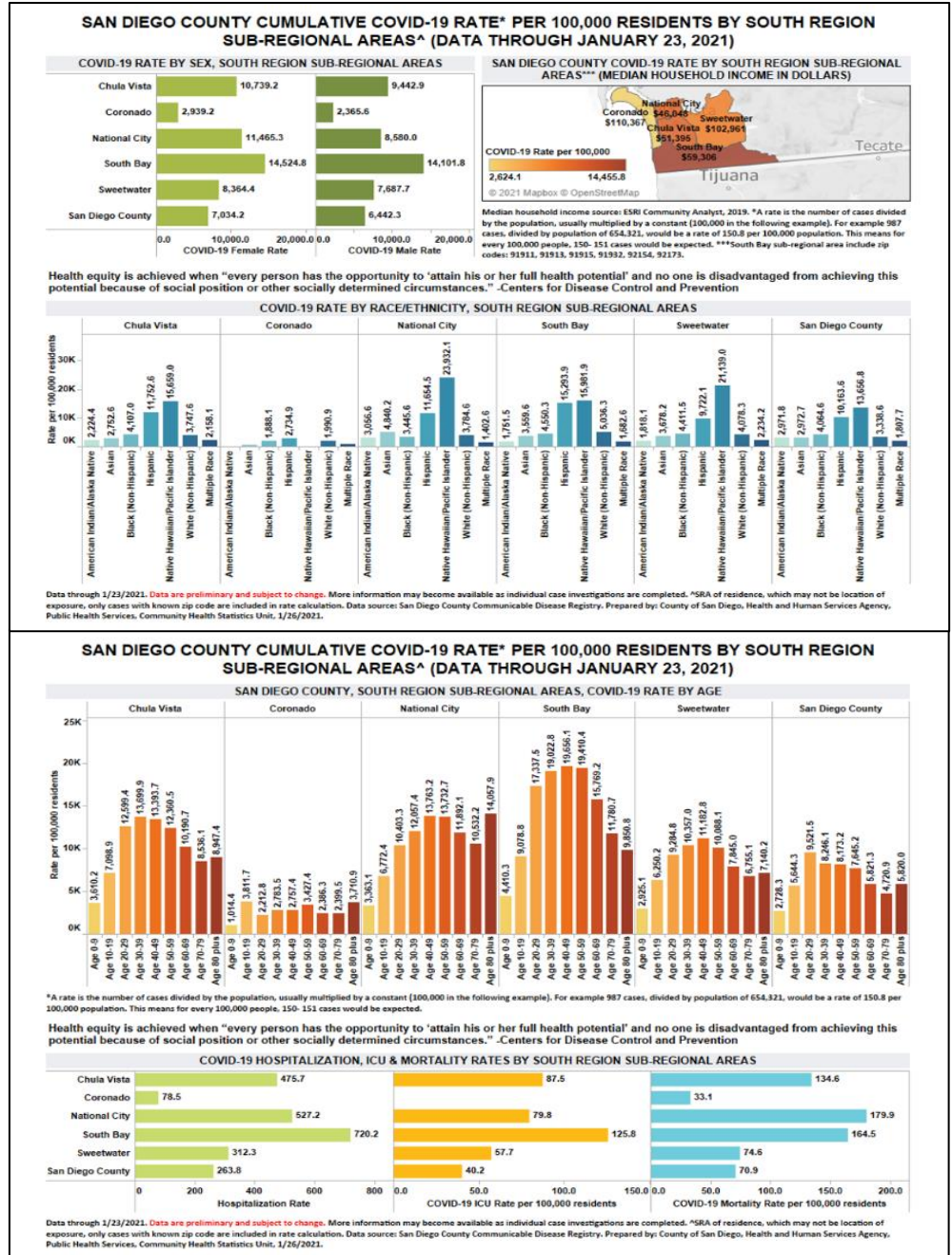
FIGURE 4. SOUTH REGION HEALTH EQUITY DASHBOARD.

Risk Assessment and Vaccine Planning

Non-traditional population surveillance by the Community Health Statistics Unit (CHSU) identified groups that were most at risk of illness to inform a targeted response for the vaccine rollout. Surveillance was conducted proactively, before the vaccine was available, and simultaneously, once the vaccine was available.

Prior to the approval of vaccines, the population estimates informed which groups were at highest risk of contracting COVID-19. The Centers for Disease Control and Prevention (CDC) identified higher risk groups and the County of San Diego staff used Census and Bureau of Labor Statistics survey data to estimate the number of individuals in various risk categories for planning purposes.

Older adults, individuals with multiple or severe health conditions or disabilities, racial and ethnic minority groups, and frontline workers had, and continue to have, a higher likelihood of more severe illness from COVID-19. **Figure 5** shows how surveillance considered risk to the population from various lenses of health equity, including age, comorbidities, race/ethnicity, and occupation by using existing population estimates, where available, to determine high-risk groups. These identified groups were deemed priority populations for testing and vaccination strategies. Geographic case data determined rates were higher in more densely populated parts of the county. Using demographic, occupation, and health data enabled the identification of the distribution of risk among subpopulations. For example, the Hispanic population in South Region communities had much higher case rates initially, requiring additional culturally appropriate messaging about prevention and vaccination to reduce their inequitable risk compared to other racial and ethnic groups. Looking at the rates of COVID-19 among the subpopulations enabled the analysis of the equity of these risks across various population groups.

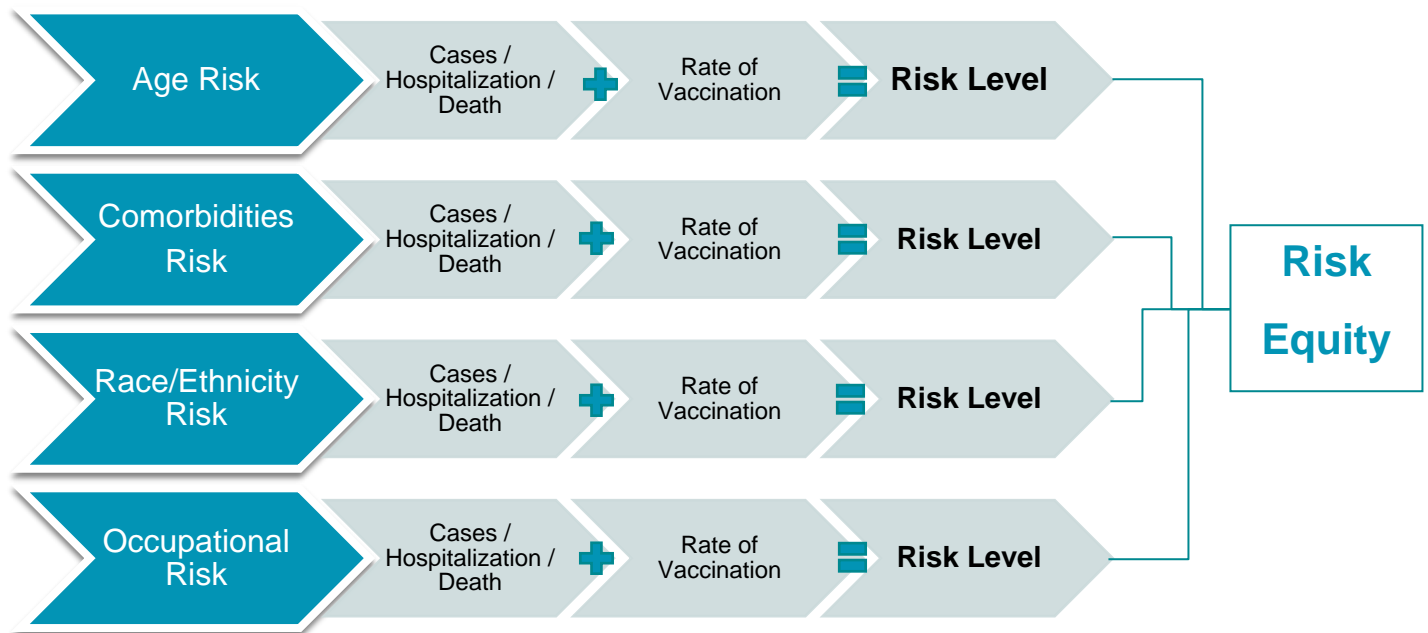## Surveillance of High-Risk Groups to Determine Risk Equity

In the weeks prior to the roll out of vaccine, the State implemented a tier system for vaccination priority. Healthcare personnel and those living in congregate living facilities were eligible to receive the vaccination first, followed by essential workers and then those 65 years and older, due to higher risk of severe illness and death from the virus. This age group was also the most likely to have more comorbidities, putting them at higher risk for more severe disease. The occupational risk estimates provided information to help partner with local industries to provide vaccination for essential workers. Risk data was also used to inform the creation of community partnerships, such as using the Promotoras model, to conduct targeted outreach to higher-risk racial and ethnic groups. Additionally, when examining this data, there were intersections where individuals met multiple high-risk criteria, such as a senior resident with a comorbidity such as diabetes, which made vaccine need estimates more difficult to calculate. These intersections created an overestimate of need but provided multiple opportunities to engage individuals using various targeted outreach strategies for vaccination.

Applying daily surveillance data and the different reproductive rates of the COVID-19 virus by age, select comorbidities, race/ethnicity, and occupation allowed PHS staff to create predictive models. Weekly estimates were made beginning in April 2020 projecting the number of cases, hospitalizations, and deaths in future months. CHSU collaborated with the California Department of Public Health (CDPH) modeling team to develop state, regional, and county models. This modeling later led to projecting cases among those who were vaccinated, compared to those unvaccinated.

Vaccination Site Planning

The preparations for vaccinations began in the Fall of 2020. The San Diego County "COVID-19 Vaccination Plan" was submitted to the state on December 8, 2020. Vaccines were pre-positioned at hospitals on December 11, 2020, so it could be quickly deployed. The first County of San Diego (CoSD) vaccination site was located at the Health Services Complex in late December to vaccinate the vaccinators. Numerous train-the-trainer vaccination events were held in December and January.

In January 2021, through community partnerships, the San Diego County Vaccination Ecosystem was fortified to meet the anticipated demand as additional tiers were made eligible for the vaccinations. The Ecosystem, in addition to the traditional immunization providers, included County-hosted and County-sponsored vaccination sites. An innovative component of the County's vaccine site strategy included locations that could accommodate large numbers of people (such as Petco Park) while also accessible to communities with the highest burden of disease.

The "Ecosystem" of sites included:
- County-hosted sites
- Vaccination super stations
- Mobile vaccination teams for homebound residents and long-term care facilities
- Mobile Operation Collaboration Vaccination Teams to reach rural and agricultural communities
- Partnerships with health systems (hospitals)

- Pharmacies
- City partnerships

As vaccine eligibility expanded to include a larger portion of the population, communities with the highest burden continued to be the focus, with sites in numerous locations in the southwest area of the county, where COVID-19 disease burden was highest.

As vaccination rates increased in the areas of highest need, additional vaccination sites were selected to serve other areas of the county. The percent of population vaccinated at the zip code and census tract levels were evaluated to identify areas with the lowest vaccination rates. Additionally, population size of the areas with lowest vaccination rates was reviewed to identify locations with both low vaccination rates and larger populations. All this information was evaluated on an ongoing basis to determine which areas needed vaccination sites as programs expanded.

Through our ongoing outreach work with the older adult and disability sector, we gathered feedback on the needs of vulnerable older adults who had barriers accessing vaccination sites. Some residents needed transportation assistance, and some were essentially homebound. We worked with 211 San Diego to develop a screening tool to identify these callers and offer resources. A data inquiry with HHSA's In-Home Supportive Services program found that approximately 1500 recipients may be homebound (e.g., recipient data included descriptors such as "life support needed" and "mental/cognitive disability"), so these recipients were sent a flyer (in their language) giving information about the free program. The CDPH MyTurn online system added questions about transportation and homebound status, and routed the resident's information to 211 San Diego for transportation assistance and to HHSA for homebound vaccination. As of 1/5/22, 1,872 homebound residents have received at least one dose of the COVID-19 vaccine and 1,716 are fully vaccinated.

The CoSD vaccination locations were scaled back as demand decreased and as pharmacies and medical practices assumed a greater role in providing vaccinations. On July 23, 2021, the CoSD was operating the "Great Eight," a collection of geographically distributed no-cost vaccination sites to continue progress on vaccination rates and these sites remained in place as of October 2021. As demand for vaccinations at the stationary sites declined, partners informed the CoSD that there was still demand, but that vaccinations needed to be brought to community locations such as churches, local business, and grocery stores. The CoSD coordinated with partner organizations to provide vaccinations for requested community sites. More than 150 mobile vaccination events have been conducted since the program started in June 2021.

Development of the Health Equity Zip Codes

To increase access to the vaccine with a focus on health equity, the California Department of Public Health (CDPH) developed the Vaccine Equity Metric (VEM). For the VEM, CDPH identified priority zip codes based on a set of criteria which included CDPH-derived scores and the California Healthy Places Index (HPI), which was developed by the Public Health Alliance of Southern California

(healthyplacesindex.org). Using the newly created scores at the zip code level, each zip code was assigned by the State into a quartile relative to all zip codes in California. The HPI and the VEM considered social determinants of health at the community level to better understand the health and well-being of Californians, as well as create a quantifiable score that allowed geographies to be compared across the state. The State defined zip codes with the least healthy community conditions as being in the first quartile (representing approximately 25% of the state population). CDPH identified 12 zip codes in San Diego County that fell within the first quartile, representing about 8% of the total population in the county.

CoSD utilized HPI scores at the census tract level to re-evaluate and apply this indicator of health outcomes locally, relative to geographies within the county instead of the entire state. The census tracts with the least healthy community conditions were defined by the CoSD as being in the HPI fourth quartile, representing approximately 25% of the county population. The CoSD referred to the HPI fourth quartile as the Health Equity Quartile (HEQ) and adopted CDPH's approach with some modifications to better inform local decisions. For each zip code in San Diego County, CoSD identified how much of the area was composed of census tracts that were in the HEQ. There were 79 zip codes that had HEQ census tract areas within the zip code boundaries. Of these 79 zip codes, 34 had at least 25% of its area within a HEQ census tract. All 12 of the zip codes identified by the State were also included in the 34 zip codes selected with this method. Additionally, of the original 79 zip codes, five met the criteria for having a high burden of COVID-19 (defined as a cumulative case rate at that time of at least 10,000 COVID-19 cases per 100,000 population). This resulted in a total of 39 Health Equity Zip Codes for San Diego County. See **Appendix** for a summary of the Health Equity Zip Codes.

Figure 6 below is a map of the San Diego County Health Equity Zip Codes, and the census tracts within these Zip Codes that fall within the fourth ("least healthy") quartile relative to all census tracts in the county.

San Diego County Healthy Places Index Health Equity Quartile Census Tracts and Health Equity Zip Codes
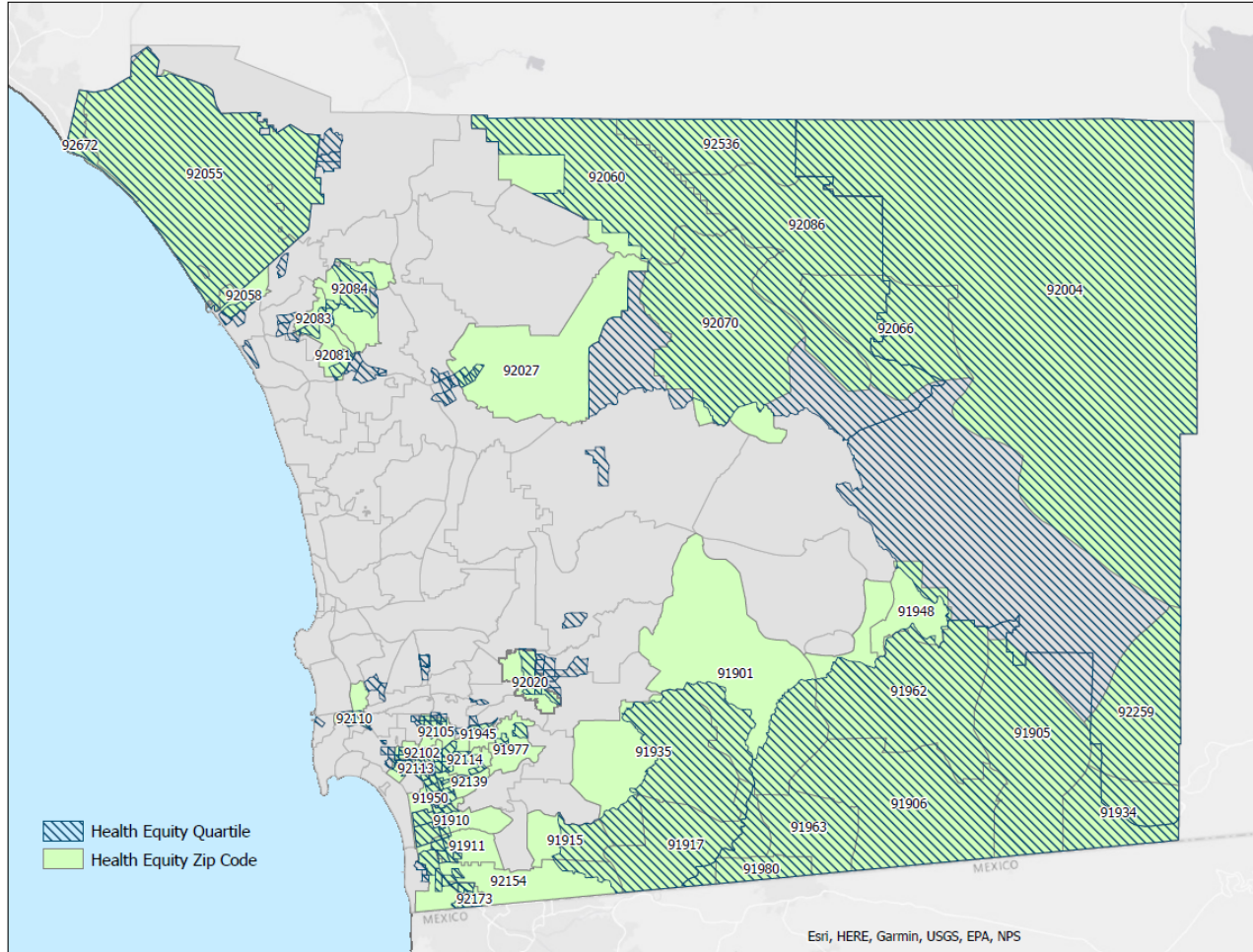
FIGURE 6. SAN DIEGO COUNTY HEALTHY PLACES INDEX HEALTH EQUITY QUARTILE CENSUS TRACTS AND HEALTH EQUITY ZIP CODES.

The Health Equity Zip Codes were utilized throughout the response. In April 2021, vaccine providers were directed by CDPH to allocate at least 40% of their doses to individuals residing in Health Equity communities. The CoSD gave the list of 39 zip codes to providers to help them prioritize vaccination appointments while vaccine supply was an issue. These zip codes were also used to determine priority for fulfilling mobile vaccination event requests and identifying new vaccination site locations.

Figure 7 shows the placement of vaccination stations near communities where community case rates were highest.

COVID-19 Vaccination Locations

Cumulative Rate per 100,000 by Zip Code

- Not Calculated**
- ≤3,549
- 3,550 - 6,074
- 6,075-11,524
- ≥ 11,525
- Health Equity Quartile
- ▲ Current County and Partner PODs
- ▲ Future County and Partner PODs
- ★ Current Superstation
- ★ Future Superstation*

Data reported through 1/24/2021; map prepared on 1/25/2021
Esri, HERE, Garmin, USGS, EPA, NPS

*Locations for the North and East Superstations to be determined.
**Rates not calculated for counts under 5 cases or populations less than 10,000.
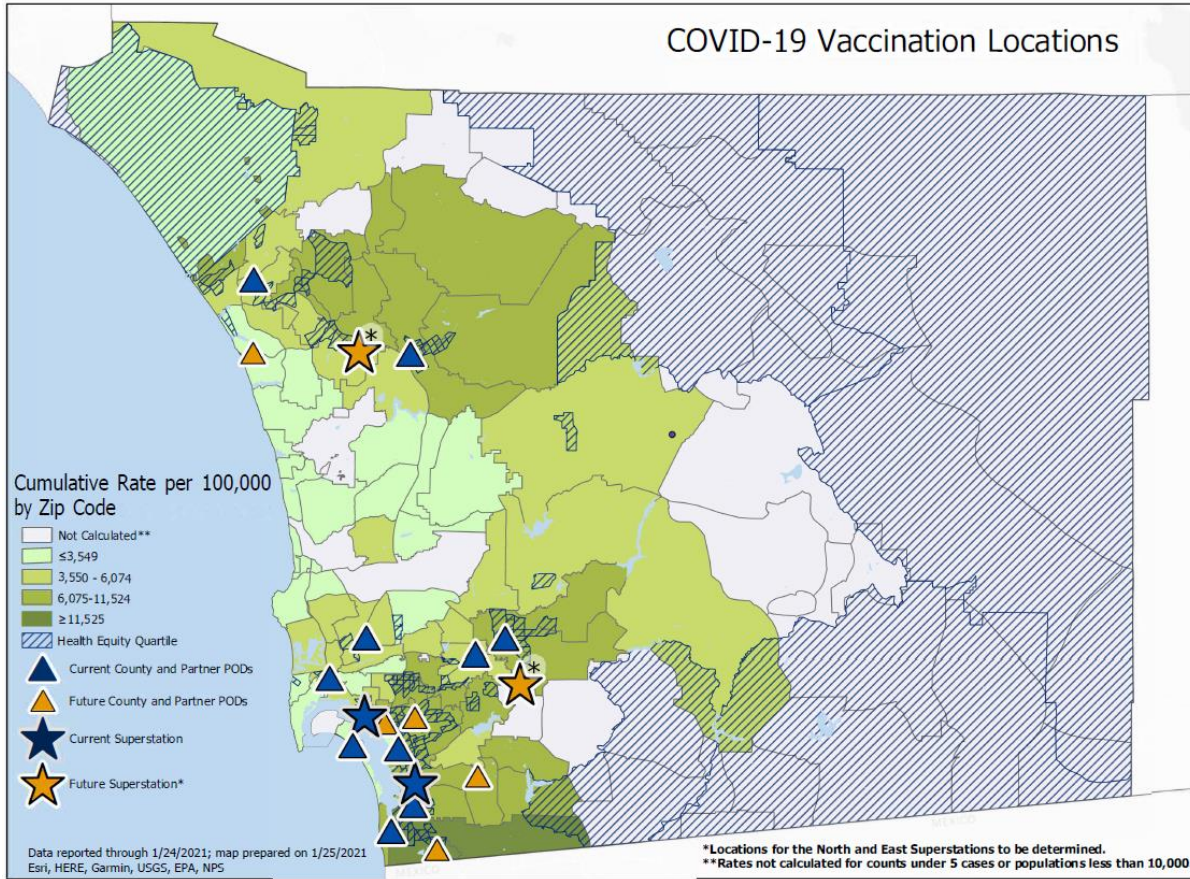
FIGURE 7. COVID-19 VACCINATION SITES RELATIVE TO CUMULATIVE COMMUNITY CASE RATES.

Strategies to Reduce Inequities

Data was made publicly available in the interest of transparency. It was used for prioritizing outreach strategies and engagement with community advocacy groups. These community groups began with a focus on testing and providing messages on non-pharmaceutical interventions, which eventually shifted to a focus on vaccination. These efforts led to programs which increased vaccination equity among all San Diego County residents. Reports and dashboards on the County of San Diego's COVID website were used to identify COVID-19 disparities and inequities beyond the Health Equity Zip Codes. Testing data was visualized with an emphasis on race/ethnicity or HPI.

Throughout the pandemic several key strategies were launched to address disparities in case and vaccination rates among the communities most impacted. These strategies grew out of what the data showed. Below are two examples of programs developed to address inequities identified in the ongoing analyses of COVID-19 case and vaccination data.

14

South Bay Saturation Strategy

The South Bay Saturation Strategy, an extension of the County of San Diego's Test, Trace, and Treat (T3) Strategy, launched in May 2020 to serve the unique and diverse residents across San Diego's South Bay community, home to one of the region's densest populations. The goal was to address the rising numbers of positive COVID-19 cases in the community by providing free, accessible testing and vaccination resources (once available), and ensure timely services. To maximize impact for the South Bay community, data, coordination, and partnership were utilized to guide implementation and planning efforts for COVID-19 testing and vaccination sites. Vaccination sites were strategically added to support residents who were and continued to be disproportionately affected by COVID-19.

Project SAVE

Project SAVE (Scheduling Assistance for Vaccine Equity) was the County of San Diego's most significant and innovative effort to serve hard-to-reach communities by utilizing COVID case rate data to target higher-risk areas. Project SAVE was organized to increase vaccine equity by assisting those who face technology, language, or other health care barriers.

Working in partnership with local government entities and trusted partners, Project SAVE Community Health Workers (CHWs), also referred to as Promotoras, conducted outreach to educate communities on how to get a vaccine and the benefits of getting vaccinated. CHWs/Promotoras also had the ability to provide access to dedicated vaccine appointments along with referrals to no-appointment events. By bringing shared backgrounds, experiences, language, and culture to the communities they serve, CHWs/Promotoras served as an integral component for reaching those outside traditional channels of communication. They were a trusted source for COVID-19 vaccine information and other resources and were also part of the South Bay Saturation Strategy.

Project SAVE was announced in February 2021 and launched as a pilot in the South Bay. Vaccination rates at the zip code and census tract level were routinely shared with the CHW organizations to assist with their targeted outreach so they were reaching the areas with lowest vaccination rates. Specifically, the 39 Health Equity Zip Codes were provided to the project as a way to focus their efforts into specific areas of San Diego County, expanding to City Heights and North County in early April 2021.

Results

There is evidence to suggest the South Bay Saturation Strategy and Project SAVE have helped bridge the gap to vaccination in South Bay, where many of the Health Equity Zip Codes fall. Relatively high vaccination rates have been achieved. With 93.0% of the eligible population vaccinated, vaccination rates were the highest in the South Region of San Diego County, an area that had the highest COVID-19 case rates and was the focus of health equity strategies. **Figure 8** below shows the relatively high

vaccination rates achieved in Health Equity Zip Codes, including South Region, where there was a focused vaccination effort.
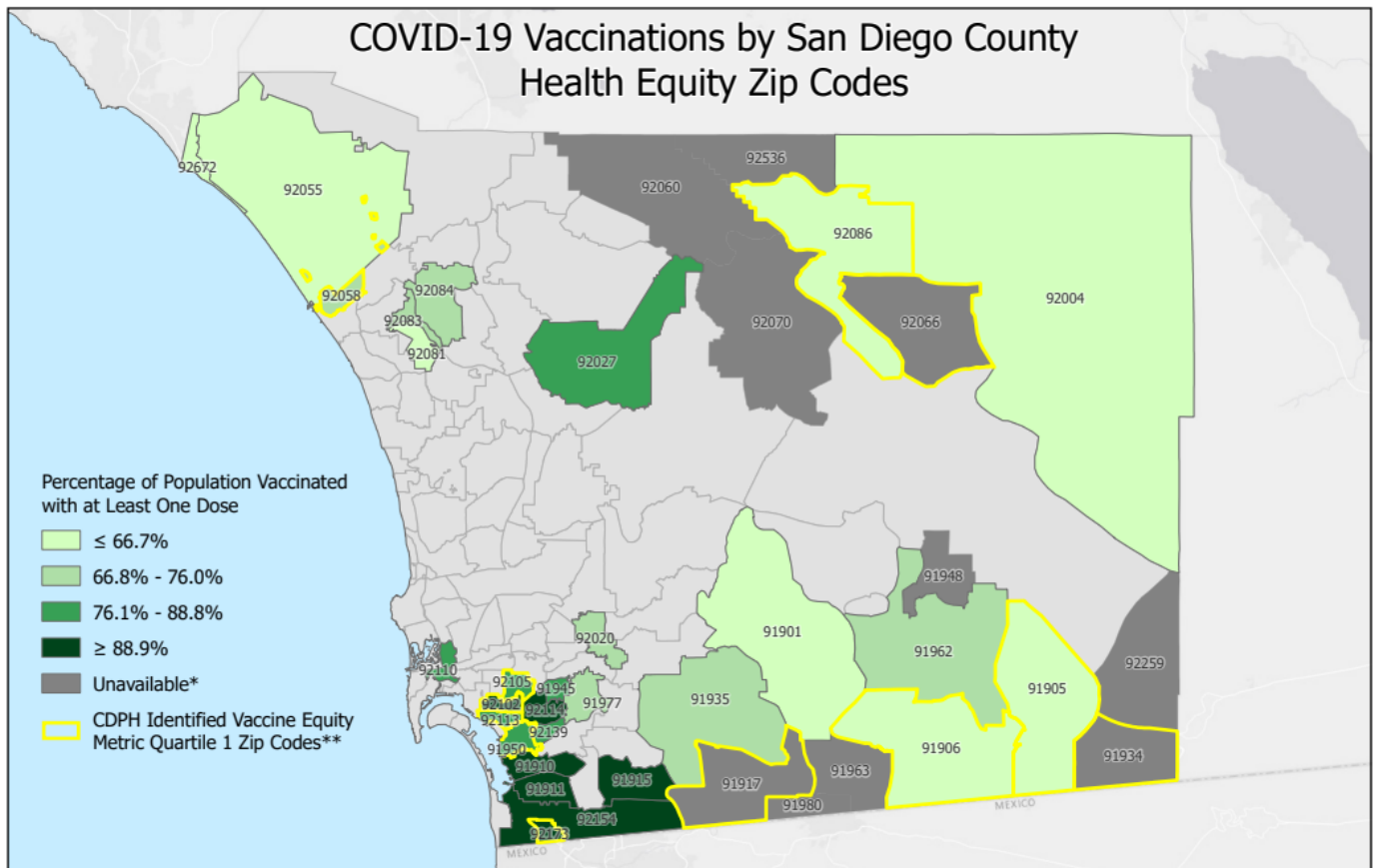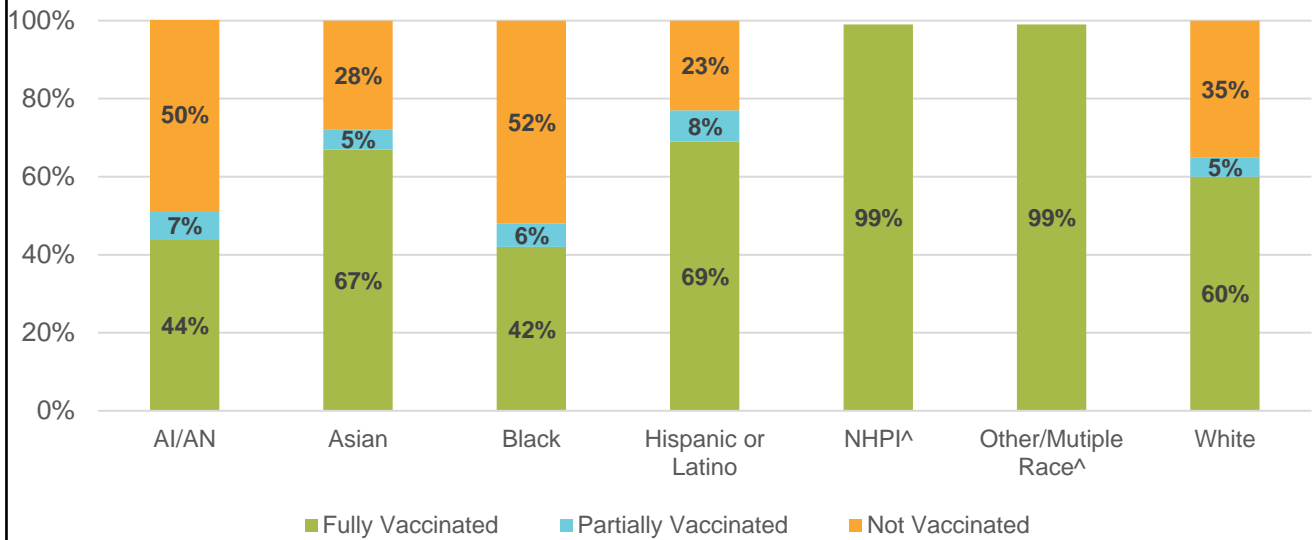

*Censored due to less than 6 individuals vaccinated or population smaller than 1,000.
**California Department of Public Health (CDPH) developed the Vaccine Equity Metric which combines the Health Places Index (HPI) with CDPH-derived scores. Zip codes with less healthy community conditions are in Quartile 1. For more information on CDPH Vaccine Equity Metric visit https://covid19.ca.gov/vaccination-progress-data/
Doses registered through 10/4/2021. Updated 10/5/2021. San Diego Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020). Ages 12 years and older included in vaccination and population data.
39 zip codes were identified as Health Equity Zip Codes for San Diego County. Zip codes with at least 25% of the area within a HPI Quartile 4 census tract or zip codes experiencing a high burden of COVID-19 were selected. These 39 zip codes include the 12 zip codes identified in the CDPH Vaccine Equity Metrics Quartile 1. For more information on San Diego County Health Equity Zip Codes refer to the document COVID-19 Health Equity Zip Codes Summary and Vaccination Report on the County of San Diego's COVID-19 website.
Esri, HERE, Garmin, USGS, EPA, NPS

FIGURE 8. COVID-19 PERCENTAGE OF POPULATION VACCINATED BY HEALTH EQUITY ZIP CODE.

Figure 9 shows the relatively high vaccination rates achieved across different race and ethnic groups, which are particularly high among Hispanics or Latinos. This reflects positive results of the County of San Diego's approach.

**Vaccination Status by Race/Ethnicity,
San Diego County Residents Age 12 Years and Older**

Race/Ethnicity	Fully Vaccinated	Partially Vaccinated	Not Vaccinated
AI/AN	44%	7%	50%
Asian	67%	5%	28%
Black	42%	6%	52%
Hispanic or Latino	69%	8%	23%
NHPI^	99%		
Other/Mutiple Race^	99%		
White	60%	5%	35%

■Fully Vaccinated ■Partially Vaccinated ■Not Vaccinated

^The percentage and the rate of the population vaccinated with at least one dose of COVID-19 vaccine may approach, or exceed, 99% or 999 per 1,000 San Diego residents aged 12 years and older. The most recent race/ethnicity populations are 2019 estimates, which may underestimate the current population. When these demographics are analyzed, the population estimates may not reflect social and environmental changes of a community, possibly leading to an under- or overestimate of a population.

Individuals vaccinated by Veterans Affairs or Department of Defense are not included.
COVID-19 vaccine is not approved for those under age 12 at this time.
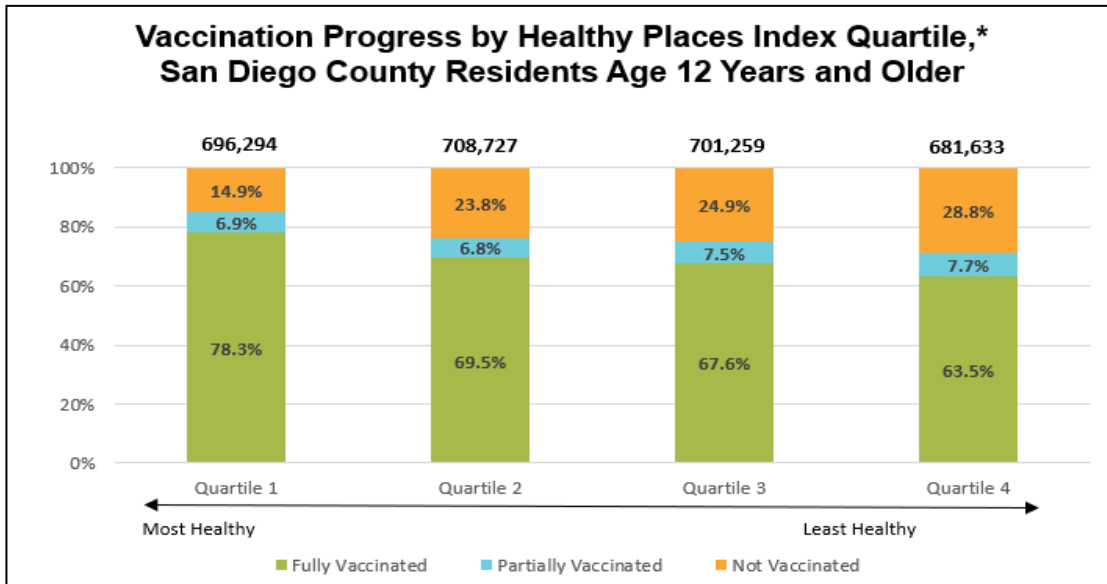Data source: San Diego Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020). Total Population 12 years of age and older=2,833,418.
Data through 10/9/2021.

FIGURE 9. CUMULATIVE PERCENTAGE OF POPULATION VACCINATED FOR COVID-19 BY RACE/ETHNICITY.

This is not to say that there are still challenges in reaching higher vaccination rates among Health Equity Zip Codes. Vaccination rates remain lower than the San Diego County average for those communities that are least healthy, as shown in **Figure 10**. Consequently, the County of San Diego continues to focus its vaccination and outreach efforts in the Health Equity Zip Codes. This reflects

continuing challenges in getting all populations vaccinated and variation in success by Health Equity Quartile.

Vaccination Progress by Healthy Places Index Quartile,* San Diego County Residents Age 12 Years and Older

*The California Healthy Places Index.

Individuals vaccinated by Veterans Affairs or Department of Defense are not included.
COVID-19 vaccine is not approved for those under age 12 at this time.
Data source: San Diego Immunization Registry, SANDAG 2019 Population Estimates (Prepared June 2020). Total Population 12 years of age and older=2,833,418.
Data through 10/9/2021.

FIGURE 10. SAN DIEGO COUNTY RESIDENTS AND CUMULATIVE PERCENTAGE BY VACCINATION STATUS BY HEALTH EQUITY QUARTILE.

However, while the fourth quartile (the health equity quartile) has the lowest cumulative vaccination percentage, from July to September 2021 more individuals from the fourth quartile were vaccinated each week compared to all other quartiles. **Figure 11** shows the percent of San Diego County residents fully vaccinated per week by HPI quartile from the beginning of 2021 through mid-September of 2021.
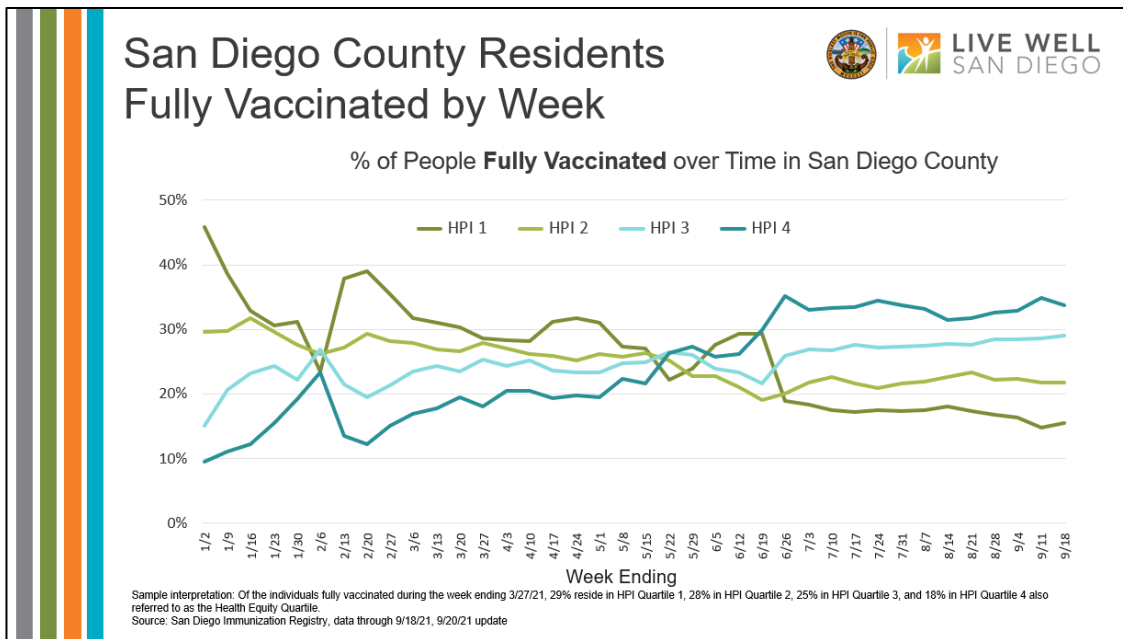
FIGURE 11. PERCENT OF SAN DIEGO COUNTY RESIDENTS FULLY VACCINATED PER WEEK BY HEALTHY PLACES INDEX (HPI) QUARTILE.

The success of vaccine strategies implemented thus far throughout the course of the COVID-19 pandemic, the flexiblity and innovation of approaches, and County of San Diego's robust data collection suggest the benefit of continuing to build upon these programs and efforts. Further, if San Diego County had the same rate of death as the nation, we would have expected approximately 7,587 deaths due to COVID-19 as of mid-November. Based on the early and aggressive response from the County of San Diego, an estimated 3,300 lives have been saved.

Appendix

COVID-19

San Diego County Health Equity Zip Codes Summary

Determining Health Equity Zip Codes for San Diego County:

- For each zip code, identified how much of the area is also a Healthy Places Index
  Health Equity Quartile (HEQ) census tract
    - o 79 zip codes had HEQ census tract area within the zip code boundary
- Of these zip codes, selected those with at least 25% of the area within a HEQ census tract
    - o 34 zip codes had at least 25% of the area in a HEQ census tract
- Of the original 79, identified additional zip codes with high burden of COVID-19
  (defined as a cumulative case rate of at least 10,000 COVID-19 cases per 100,000 population)
    - o 5 zip codes met the criteria

San Diego County Health Equity Zip Codes (39 Zip Codes)							
91901	91915	91948	91980	92058*	92083	92110	92173*
91905*	91917*	91950*	92004	92060	92084	92113*	92259
91906*	91934*	91962	92020	92066*	92086*	92114	92536
91910	91935	91963	92027	92070	92102*	92139	92672
91911	91945	91977	92055	92081	92105*	92154	

*California Department of Public Health (CDPH) assigned Vaccine Equity Metric Quartile 1 zip codes

The population of the 39 Health Equity zip codes is 1,081,964, or 32.3% of the San Diego County population.**

Percent of the Population Age 16 Years and Older by Race & Ethnicity, Percent of Individuals Vaccinated with at Least One Dose of COVID-19 Vaccine by Race & Ethnicity and Percent of Each Race & Ethnicity Population Vaccinated					
Race & Ethnicity	Population Ages 16 Years and Older***		Individuals Vaccinated with at Least One Dose		Population Vaccinated^
	Number	Percent	Number	Percent	Percent
Hispanic	393,629	47.1%	218,023	45.6%	55.4%
White	252,928	30.2%	110,829	23.2%	43.8%
Black or African American	62,367	7.5%	18,957	4.0%	30.4%
American Indian or Alaskan	5,469	0.7%	1,676	0.4%	30.6%
Asian	97,571	11.7%	52,222	10.9%	53.5%
Native Hawaiian or Other Pacific Islander	3,698	0.4%	3,422	0.7%	92.5%
Other/Multiple Race	20,714	2.5%	38,132	8.0%	99.0%^^
Unknown			35,298	7.4%	
Total	836,376	100.0%	478,559	100.0%	57.2%

** 2019 SANDAG population estimate, all ages.
*** 2019 SANDAG population estimate, age 16 years and older.
^ Percent of population age 16 years and older vaccinated with at least one dose of COVID-19 vaccine for each race/ethnicity population.
^^Percentage of population vaccinated capped at 99.0%. The percentage of the population vaccinated with at least one dose of COVID-19 vaccine
 may approach, or exceed, 99%. The most recent race/ethnicity population are 2019 estimates, which may underestimate the current population.
When these demographics are analyzed, the population estimates may not reflect social and environmental changes of a community, possibly
leading to an under- or overestimate of a population. For example, household dynamics may have changed as a result of COVID-19, where family members previously living
apart may now be living together, therefore shifting the population of an area or demographic which may not be reflected in the 2019 population estimates.
Source: San Diego Immunization Registry data through 5/8/2021, 5/9/2021 update. Individuals vaccinated by Veterans Affairs or Department of Defense are not included.

LIVE WELL SAN DIEGO

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EDUCATION AND OUTREACH BRANCH ONE PAGERS

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COVID-19 Business Sector Year in Review

Background

March 2020- March 2021

GOAL: The COVID-19 Business Sector was formed to support the needs of the business community in the San Diego County region during the COVID-19 pandemic in efforts to educate, engage, and provide resources essential to business partners in order to mitigate the spread of COVID-19. The Business Sector aims to accomplish that goal by:

➢ Providing timely COVID-19 information and reopening guidance through biweekly telebriefings, weekly e-newsletters, and one-on-one technical support through email inquiries.

➢ Tailored outreach to Business Chambers and Business Improvement Districts & other associations to promote relevant resources and provide sector specific guidance.

➢ Identify and address the needs of the business community by engaging and partnering with one another.
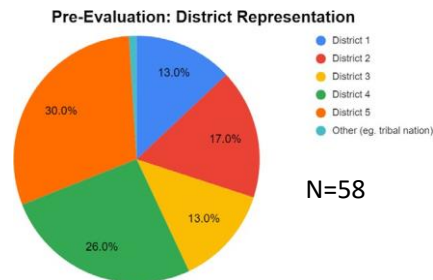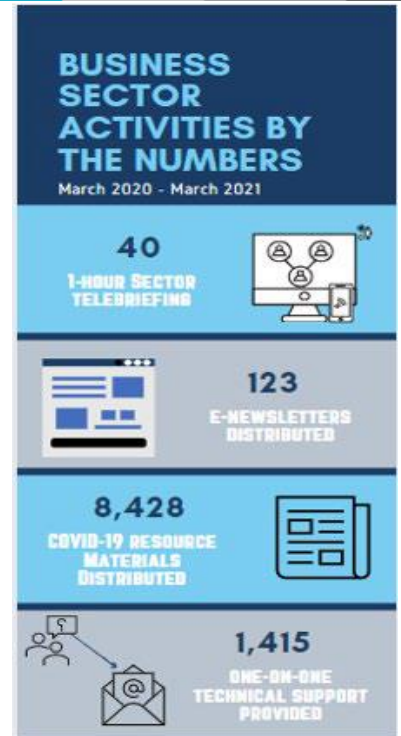
Initial Assessment of Business Sector

In mid-August 2020, the Business Sector conducted an initial feedback assessment to assess the effectiveness of the sector activities and identify any gaps/needs (N=58). The overall results showed the sector activities were well-received and effective in getting the support and information that the businesses needed at the time. The initial assessment revealed a need for more outreach efforts to businesses in county districts 1 (13%), 2 (17%), and 3 (13%). The assessment showed significantly less business representation in those districts than in 4 (26%) and 5 (30%).
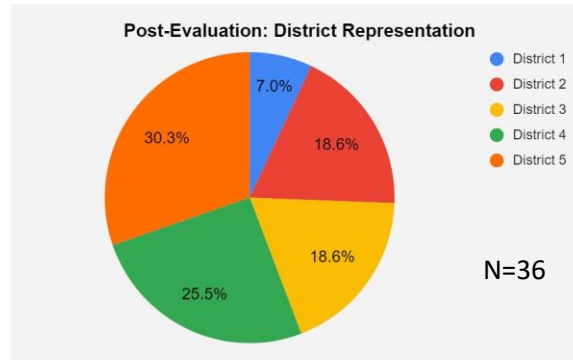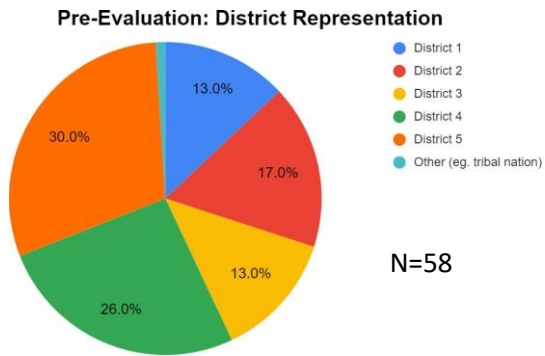
Expanding Outreach Efforts

After identifying the gap in representation from businesses in Districts 1,2, and 3, the Business Sector team explored ways to increase outreach efforts to businesses in the overall San Diego County region. At the time, the sector had only conducted an initial phase of phone outreach to the various business chambers in the region (N= 27). As an extension to the phone outreach conducted in July 2020, the sector appointed each of the team members as the point of contact (POC) for a list of business chambers and business improvement districts/associations in the region and conducted 2 separate outreach efforts via tailored email sharing business-related resources and up-to-date information on new guidance from local and state.

In November 2020, a tailored email outreach specific to business chambers (N= 29) and business districts/associations was completed (N=23) sharing COVID-19 Business Sector resources and relevant resource materials such as the Stay Connected Flyer and Business Sector Referral Guide one-pager. In an effort to continue to maintain that communication line with businesses, a second email outreach to both chambers (N=29) and business districts/association (N=23) was completed in January of 2021 sharing funding resources and information on COVID-19 Vaccine.

BUSINESS SECTOR ACTIVITIES BY THE NUMBERS
March 2020 - March 2021

- 40 1-HOUR SECTOR TELEBRIEFING
- 123 E-NEWSLETTERS DISTRIBUTED
- 8,428 COVID-19 RESOURCE MATERIALS DISTRIBUTED
- 1,415 ONE-ON-ONE TECHNICAL SUPPORT PROVIDED

Pre-Evaluation: District Representation

- District 1 — 13.0%
- District 2 — 17.0%
- District 3 — 13.0%
- District 4 — 26.0%
- District 5 — 30.0%
- Other (eg. tribal nation)

N=58

Outreach Efforts	Phase 1 – July 2020	Phase 2 – November 2020	Phase 3 – January 2021
Business Chambers	Phone outreach – 27 completed	Email Outreach – 29 completed	Email Outreach - 29 completed
	Phase 1 – November – December 2020	**Phase 2 – January 2021**	
Business Improvement Districts/Associations	Email Outreach – 23 completed	Email Outreach – 23 completed	

Post-Evaluation Feedback Results

Pre-Evaluation: District Representation

- District 1
- District 2
- District 3
- District 4
- District 5
- Other (eg. tribal nation)

13.0%
17.0%
13.0%
26.0%
30.0%

N=58

Post-Evaluation: District Representation

- District 1
- District 2
- District 3
- District 4
- District 5

7.0%
18.6%
18.6%
25.5%
30.3%

N=36

In the initial assessment, the Business Sector found that there were less business representation from county districts 1, 2, and 3. The Business Sector team took action and conducted 2 phases of email outreach to business chambers and business improvement districts/associations in the San Diego County region. The Sector also collaborated with business partners to provide one-on-one assistance with COVID-19 reopening and vaccine guidance inquiries. In February 2021, the post-feedback assessment was conducted and shared with over 1,600 business contacts. The post-feedback assessment (N=36) revealed there was a significant increase in business representation from county district 3, a small increase in district 2, and less representation from district 1 this time around. The post-feedback assessment did not show significant changes in the overall district representation of businesses.

Partner Collaborations

Despite the low response rate in the post-feedback assessment (N=36), the Business Sector collaborated with two partners as an outcome of the outreach efforts made with the districts that lacked representation as highlighted in the initial feedback assessment (D1, D2, D3). A partnership was created between the Business Sector and the Otay Mesa Chamber of Commerce (District 1). In November 2020, at the request of Otay Mesa Chamber of Commerce, the Business Sector helped connect the chamber with the T3 team to address questions and concerns relating to the COVID-19 vaccinations. In addition, the Business Sector assisted in building a relationship between the Otay Chamber and Chicano Federation to make vaccines available on-site via mobile vaccination events with UCSD for eligible food manufacturing workers in Otay.

The Business Sector also collaborated with the East County Economic Development Council (District 2) to reach out to Manufacturers about safe operations during COVID-19. The Business Sector provided a comprehensive list of Business Sector resources that would benefit manufacturers and that was used in ECEDC's e-newsletter which was distributed to 700 manufacturers in their database.

Limitations/Challenges

The Business Sector post-feedback has some limitations to the findings that may need to be examined carefully. The response rate for the post-feedback was lower with 36 respondents vs. the initial feedback assessment with 58 respondents. Due to the low response rate on the post-feedback, the results may not be generalizable with the overall impact of the Sector's outreach efforts. Though the post-feedback assessment was shared widely via e-newsletters, tailored emails, and during telebriefings, getting businesses to complete the feedback form was a challenging factor. A possible reason for that could be feedback fatigue from the businesses during this time when all the sectors were sending out various assessment forms, and it is possible some businesses/organizations are on multiple sector distribution lists.

Next Steps

The Business Sector strives to continue to provide timely dissemination of current and relevant information, guidance, and resources to support the business community. In addition to targeted email outreach, the Sector will conduct phone outreach to the business chambers and districts in efforts to support them as more reopening guidance comes out and the County moves towards the path to recovery.

Further next steps will include reducing the number of weekly sector e-newsletter distribution to once a week, so to not overwhelm businesses with emails. The Business Sector will also be promoting personalized support assistance offering businesses technical support with where and how to find resources specific to their industry, navigating COVID-19 vaccination resources/materials, and providing free COVID-19 Safe Business Practices certification course in partnership with County of San Diego Public Health Nursing and MiraCosta College.

In addition to those steps, the sector will also enhance the partnership with University of California San Diego's (UCSD) Small Business Outreach Team to expand further outreach to small businesses in the San Diego County utilizing their COVID-19 resource toolkit and County resources.

COVID-19 Community & Faith Based Organizations Sector – Year in Review

LIVE WELL SAN DIEGO

Background

In response to the COVID-19 pandemic, the Community-Based Organizations (CBO) Sector and the Faith-Based Organizations (FBO) Sector, collectively referred to as the Community and Faith-Based Organizations (CFBO) Sector, were formed to support the needs of communities and organizations in San Diego County. Since its beginnings, the CFBO Sector has provided resources, timely information and updates, and individualized support for CBOs and FBOs throughout the region. The CFBO team also developed a Rural Communities Outreach Committee and sub-sector, while conducting a series of evaluations throughout their sector work.

Evaluation Goals *March 2020- March 2021*

The goals of the CFBO Sector evaluations were to understand the needs of the sector, assess satisfaction with the sector response, determine if outreach and education goals were met, and determine ways to improve. To meet these evaluation goals, the sector conducted a series of interviews, Zoom polls, and feedback forms from March 2020 through April 2021. While each evaluation provided valuable information to inform the CFBO Sector's efforts, this report will focus on the methods and results from two larger evaluations, CBO Cold Calls conducted in January through March 2021 and FBO Feedback Forms conducted in February 2021.

CFBO SECTOR BY THE NUMBERS

Hosted over **50** 1-hour telebriefings

Distributed **121** e-newsletters to over **2,000** people

Provided small group reopening workshops to over **25 organizations**

Distributed non-medical PPE supplies to over **250** organizations

Produced over **20** How-To Videos for Live Well You Tube Channel

Distributed **2,025** educational materials

Initial Assessment of CBO & FBO Sectors

Evaluations were conducted from January-March 2021 in response to the rollout of the COVID-19 vaccines and one year of COVID-19 sector work to determine which projects were successful and which could be improved.

CBO Sector: The evaluation approach was to cold call members from CBOs who were selected from each of the region's Live Well Leadership Distribution Lists. These individuals were identified as relevant stakeholders who could provide the sector with beneficial information. An email template and a brief phone interview script were created to facilitate outreach efforts and the phone calls. A member of the CBO team contacted participants via phone, and contacts who did not answer were sent an email inviting them to schedule a time to conduct an interview. During the phone call, the script was read aloud, and responses were recorded in a spreadsheet.

FBO Sector: Since respondents were more involved in the FBO sector and the subsequent telebriefings, an evaluation was created in the Smartsheets program, including qualitative and quantitative questions, for the participants to respond directly to. The feedback form was shared during two FBO telebriefings and in one stand-alone email, as well as in multiple eblasts/newsletters for the sector.

Data Collection and Results

After the CBO cold calls and FBO feedback were conducted, the results from each evaluation were analyzed.

CBO Sector: A total of 31 responses were collected. The evaluation revealed that most respondents (53%) preferred the existing CBO telebriefing schedule, however, the CBO team continued to work on increasing attendance. Most respondents (93%) had attended a telebriefing in the last month, and 60% felt it addressed their needs. Those who had not attended telebriefings reported that they had many competing priorities, heavy workloads, or others in their organization attended on their behalf. Respondents also provided positive feedback as well as recommendations for how to improve the sector, which were addressed by the team in order to make the sector response valuable to participants.

FBO Sector: A total of 39 participants completed the feedback form. The results indicated that during sector telebriefings, participants prioritize information about reopening (78%), the COVID-19 vaccine (59%), and Q&A with subject-matter experts (54%). Telebriefings are also the most-valued method of communication, with 69% of respondents saying that is their favorite way to receive information. In response to the COVID-19 vaccine, respondents said that information about vaccination locations (67%), phases of eligibility (64%), and addressing vaccine misinformation (56%) would be the most helpful. Qualitatively, most respondents were thankful for the FBO sector efforts, although some mentioned concerns about vaccine eligibility and prioritization.

Evaluation Results

"I really liked hearing the guest speakers."

69% of FBO respondents said telebriefings are their favorite way to receive information.

"I like the resources offered by the telebriefings... In general, I just want to know what's going on [in the community]."

"It is great that if we miss a briefing, we can request it."

53% of CBO respondents prefer the current telebriefing schedule.

"I appreciate your group's hard work in keeping everyone up to date on info and answering the many varied questions you are asked."

"Thank you for doing this. Great job of organization & control with well planned FBO meetings!"

78% of FBO respondents prioritize reopening updates during sector telebriefings.

Partner Collaborations

Based on the feedback from both evaluations, the sector started to collaborate with FBOs and CBOs and conduct small reopening workgroups in order to assist these entities with reopening, provide recommendations where necessary, and give feedback on reopening documents and plans. The purpose of these workshops was to review the safe reopening plan and local guidance and answer specific and nuanced questions. The sector team developed a specific process for hosting workshops, which included a reservation system on Eventbrite, sending the presentation in advance so organizations could come prepared with questions, and sending follow-up emails to recap what was covered in the workshop and answer additional questions. In addition to this, the feedback highlighted that speakers were needed for specific organizations in the community. In response, the sector team organized presentations from subject matter experts for the CBO and FBO partners, and assisted the subject matter experts with those presentations, providing support, answers to questions, and up-to-date information and recommendations.

Limitations/Challenges

Both the CBO & FBO evaluations have some limitations that must be examined carefully. Limitations of the CBO and FBO evaluations include response bias, as the results only reflect feedback from those who were motivated to respond. In addition, the CBO evaluation only contacted those who were identified from the Live Well Leadership Distribution Lists, which is not representative of all CBO members across the entire county. Additionally, the CBO feedback did not reflect responses from the North Inland region as there were no identified contacts from the region.

Next Steps

Telebriefings: The FBO sector tailored their telebriefing content to focus on reopening updates and medical updates while preserving enough time for Q&A. Also, because of the positive feedback about the content and guest speakers during CBO telebriefings, the sector increased the number of guest speakers and coordinated efforts in order to highlight important topics of interest such as grants, meals, assistance with housing or rent, COVID-19 vaccine/testing guidance, and other CBO-related items.

Sector Websites: The sector noted that there is room to improve e-newsletters and the sector webpage. As a result, they are transitioning to MailChimp for e-newsletters, which will hopefully improve the accessibility and visual appeal of the email announcements. The sector websites were also revamped and redesigned to be more user friendly, using buttons and highlighting recent telebriefing materials, in order to facilitate ease of use.

Increasing Relevance of Sector Content: Given requests for more information about the COVID-19 vaccine, the FBO sector tailored the telebriefing and e-newsletter content to the needs of the sector. Similarly, the CBO sector included more content oriented to diversity and equity in addition to the guest speaker content.

Future Evaluations: The CFBO sector is also in the process of developing a post evaluation, which will help reflect on the entirety of their COVID-19 response and inform the future of their work. This will also include questions about the schedule for future telebriefings, which was suggested through the CBO cold calls.

CITIES, GOVERNMENT, & TRIBAL NATIONS
COVID-19 RESPONSE SECTOR

BACKGROUND

In March 2020, in response to the COVID-19 Pandemic, the County of San Diego created COVID-19 response sectors to ensure San Diego was being provided accurate information and the support needed to prepare and prevent the spread of the COVID-19 virus in our region.

GOAL

The Cities, Government and Tribal Nations sectors work with city, government, and tribal leaders to solicit feedback and disseminate timely information about COVID-19 prevention, mitigation, and response efforts; all to support the community's physical, emotional, and economic wellness. In addition, the Sector Lead, who also served as the Communities of Color and Binational Media Lead provided various presentations to communities, held TV and radio interviews with local and international stations and participated in multiple press conferences with city and community partners on COVID-19 collaborative efforts.

Telebriefings

Public Health Officer provides latest updates with City, Government and Tribal Nation leaders.

Connections

Collaborate with City, Government officials and Tribal Nation Leaders to ensure cross-threading of information.

Rapid Information

Sector staff provided ongoing COVID-19 updates, a newsletter and managed questions from leaders and staff

For Additional Information, Email: Barbara Jiménez, Cities, Government and Tribal Nations COVID-19 Sectors Lead at COVID-Cities-Government@sdcounty.ca.gov. In addition, you can visit the sector website: Cities, Government, and Tribal Nations Website.

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THE STORY OF OUR SECTOR
TIMELY | TRANSPARENT | TRUSTED

The Cities, Government and Tribal Nations sectors moved quickly to engage leaders representing cities, government, and tribal nations to disseminate pertinent updates through multiple venues including telebriefings and newsletters. We strengthened and built relationships during sector telebriefings, which serve as a hub for leaders to turn to for accurate and timely information. Telebriefings are also an opportunity for jurisdictions and tribal nations to address feasibility of various local Public Health guidelines before implementation. Through these strengthened partnerships our sector went on to assist the creation of COVID-19 Compliance team, comprised of City and County staff. In an initial survey in 2020, most survey participants found Sector Telebriefings to be helpful and informative. In a recent survey in 2021, that number increased to 100% of responses, indicating that city managers and leaders found the Cities, Government, and Tribal Nations telebriefings informative and a good use of their time. In addition, 100% of responses indicated telebriefings to be the most valuable and helpful form of communication.

Data guides decisions about the pandemic response across the county. At one telebriefing early in the response, a few cities posed questions about granular city-level data. The sector then quickly connected with epidemiologists and data analysts for a special briefing and tutorial on utilizing SANDAG data downloads and other dashboards available. Through this session, the sector identified the needs of the cities for data abstraction specific to their communities and in response, additional data resources were created on the COVID-19 website. In addition, our sector hosted special Parks and Recreation telebriefings to share and solicit input on latest Public Health Officer Order changes. We also co-hosted two (2) virtual COVID-19 town halls with the City of El Cajon geared towards Middle Eastern communities. These town halls were held to update participants on statistics, prevention measures and discussion of the latest Public Health Officer Order changes.

The enhanced partnership with tribal nations in our region during the pandemic led to the development of Memorandums of Agreements (MOA) with four tribal nations. The MOAs addressed the need to establish a relationship for timely information exchange relating to public health, pandemics, epidemics, outbreaks, environmental health, and other communicable diseases. Information exchange with sovereign nations in the County is key in combating regional public health emergencies as they arise. In an initial survey in 2020, most survey participants found Sector Telebriefings to be helpful and informative. In a follow up survey, 100% of responses indicated they found Tribal Nations telebriefings informative and a good use of their time. In addition, 100% of responses indicated telebriefings and Q&A to be the most valuable and helpful form of communication.

NEXT STEPS:
- Continue being an available resource to the Cities, Government, and Tribal nations sector by:
  - Actively monitoring our COVID-19 communications received;
  - Periodically sharing information and resources relevant and helpful to the Sectors;
  - Being available to set up ad hoc calls for any future developments, key issues that may arise, or upon their or the County's request to disseminate timely information and coordinate efforts;
  - Maintaining close contact with our Tribal Nations Epidemiologist Lead/Liaison.
- Continue cultivating partnership with the Cities, Government, and Tribal Nation leaders.
  - When the new Department of Homeless Solutions & Equitable Communities is fully formed, we will connect with the Sector contacts to build on existing relationships.

Rev. June 2021

COVID-19 Education Sector Evaluation Report

Background

March 2020- March 2021

In March 2020, the Education Sector of the County of San Diego Emergency Operations Center (EOC) COVID-19 Response Education & Outreach Branch (the Sector) was formed to support the needs of the early care, K-12 schools, and Institutes of Higher Education community in the San Diego County region to provide support and resources to help prevent the spread of COVID-19. Since then, the Education Sector implemented various activities and projects tailored to the sector to provide timely information and guidance through weekly & bi-weekly telebriefings, weekly e-newsletters, one-on-one technical support through email inquiries, support with state waiver requirements and more. Throughout the year the Education Sector responded to community needs and public health guidance, as is detailed on page 2. **GOAL**: For this specific evaluation project, the sector aims to collect baseline data on the preferences and utilization of services and preliminary data on COVID-19 vaccine information needed by our constituents.

Initial Assessment of the Education Sector

In mid-January 2021, the Education Sector created and implemented a feedback assessment smartsheet survey to assess constituent preferences of future telebriefing topics, which sector services have been most useful, which vaccine resources would be most beneficial, and an open-ended question about how the education sector has impacted their work and life. While results varied between Early Care (N=49), K-12 schools (N=135), and IHEs (n=14), the majority valued the telebriefings the most out of all sector services, with specific emphasis on the question & answer and COVID-19 Updates portion. All three subgroups clarified that the information received from our sector was used in planning and response and communicating with students, staff and families. For promoting the COVID-19 vaccine, Early Care and K-12 reported that email messages and parent handouts would be the most affective delivery methods and should provide Q&A with medical experts and vaccine safety & efficacy. IHEs had a more distributed response to COVID-19 vaccine promotional efforts, but there was a greater interest in safety & efficacy, benefits, and addressing misinformation. The following summary reports include direct quotes from constituents, quantitative data charts, and opportunities for growth; Early Care and Education, K-12 Schools , and Institutes of Higher Education.

Education Sector By the Numbers
March 2021 - March 2021

4,576 ListServ Contacts

250 E-Blasts

Education Sector Telebriefings

38 Early Care & Education Telebriefings
Average Attendees: 210

60 K-12 Schools Telebriefings
Average Attendees: 330

58 IHE Telebriefings
Average Attendees: 81

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO
LIVEWELLSD.ORG

Strengths & Limitations

Overall, the Education Sector feedback form received a good amount of Reponses (198) and allowed us to get baseline data and preference on our performance, which had previously not been evaluated. Including the vaccination promotion question allowed us to get a sense of what our constituents would benefit most from before the COVID-19 vaccine became widely available. The open-ended question allowed us to get direct quotes and testimonials from our constituents. The results were shared with our education sector team, subject mater experts and the team that oversees COVID-19 vaccines. The results also helped us adapt our services to better suit the needs of our community. For example, we have started to guarantee at least 15 minutes and aim for even more time for question and answer on our telebriefing. We have tailored our communication about the COVID-19 vaccine via our telebriefings and eblasts, based on the data we received.

As this was our first feedback form evaluation, there are several areas which could have been strengthened. First, only basic questions were asked about our services, without a set project or improvement we were hoping to accomplish. This initial evaluation took place almost 11 months after we originally started our sector work, and therefore we do not have any previous baseline data to compare it to in order to see change or benefits over time. Compared to the number of regular attendees on our telebriefings, only a small percentage of schools responded (23% of early care, 40% of K-12 schools, 17% of IHEs). We may have received more responses had we extended the timeline for submission or if we had made the questions part of a zoom poll that participants would have completed during the telebriefings.

Next Steps

The Education Sector continues to provide timely updates regarding COVID-19 guidance, resources, and opportunities to collaborate to support our education community. Looking forward, we anticipate our education community will need our support navigating the Beyond the Blueprint (June 15) guidance and preparations for the 2021-2022 schools year. COVID-19 vaccines are vital to the recovery of our community and the return to normal activities. Our education sector has become vital in these efforts to vaccinate students and staff. Our team has worked closely with other county departments, schools, and youth to promote vaccination events on-site and tailored materials such as PowerPoint presentations for parents and videos for youth.

We hope to conduct another evaluation like this initial one in order to compare to baseline data, help us understand what services and ideas for collaboration will be most beneficial moving forward, and helping us understand how we can support the building back better of our community. We intend to better utilize the polling function on zoom to get higher response rates and more frequent feedback.

Other Sector Highlights: March 2020 – March 2021

1,000 Attendees
How Best to Prepare for COVID-19 as a College Student webinar in partnership with San Diego State University and Association of Schools and Programs of Public Health
March 26, 2020

600 Attendees
Coffee with a Doctor: All Your Coronavirus Questions Answered in partnership with SDSU, ASPPH, and the National Society of High School Scholars
April 27, 2020

Coronavirus and Summer Break Online Webinar for Youth
150 students across the county attended on May 28, 2020

COVID-19 Guidance for Day Camps
Webinar for local schools and day camp providers
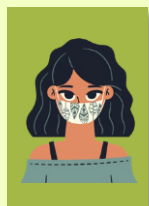June 16 & 23, 2020

Processed 110 Waiver Requests
Our team review local school reopening plans for compliance with CDPH and local guidance in order to return to in-person learning
August 2020

4,000 Posters and Print Materials
Distributed to local early care, K-12 schools, and colleges
Began October 2020

Tailored Messaging & Materials for Holidays and Travel
Our team created tailored materials and e-blasts for the education sector to help prepare students and families to have a safe Halloween, Thanksgiving, and winter holidays. Our Holiday Giveaway and Food Distribution flyer was also shared widely by local schools.
October - December 2021

Antigen Testing Pilot Program
County Epidemiology piloted antigen testing surveillance testing at two schools in Coronado and Ramona. With support from the education sector, the program has since expanded to 20 educational entities including 9 public school districts. Schools receive free testing kits, onsite training and tracking software.
Began February 2021

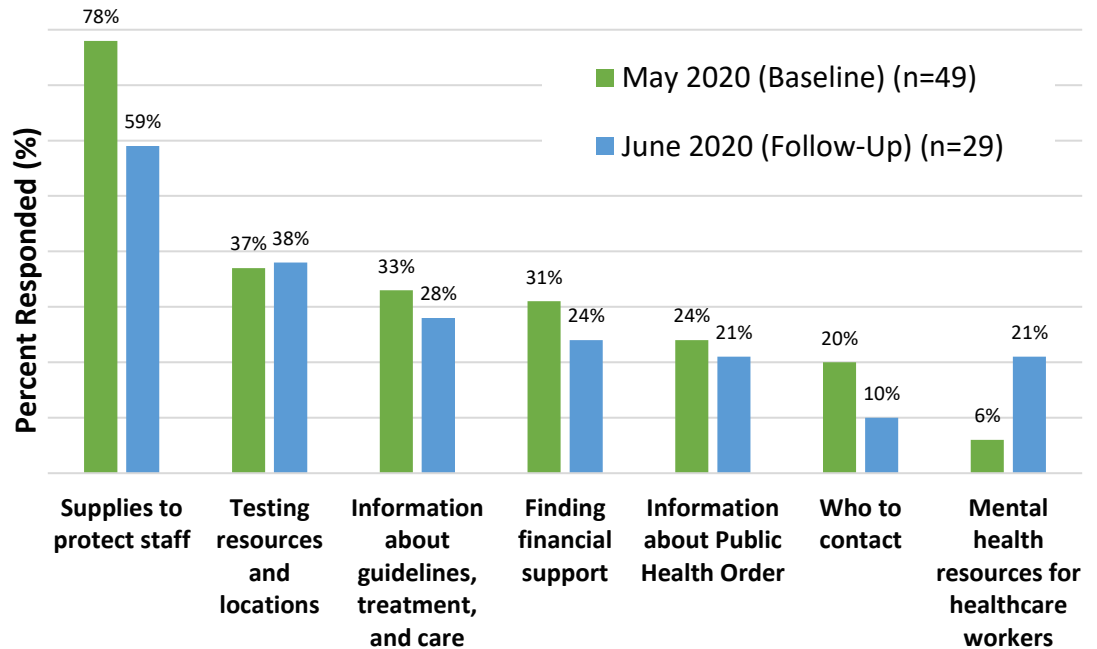## LISTEN → ENGAGE → SUPPORT
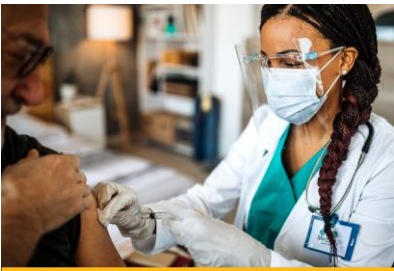
COVID-19 HEALTHCARE SECTOR EVALUATION

The goal of the Healthcare Sector is to improve the health of the community by providing **timely and accurate information to healthcare providers** (including healthcare, dental and behavioral health, federally qualified health centers, hospitals, pharmacies, and tribal clinics) during the COVID-19 pandemic. By **listening, engaging, and supporting** partners, the Healthcare Sector aims to:

✓ Improve partners' knowledge and understanding of local, state, and national COVID-19 guidelines for testing, treatment, and control of infectious disease

✓ Change behavior(s) of healthcare providers, practices and the community by sharing resources and best practices

NEEDS

The Healthcare Sector distributed a **Feedback Form in May and June 2020** to understand the needs of providers and partners by region, service type, and population served. Overall satisfaction with Health- care Sector activities, as well as specific barriers, challenges and needs were assessed.

MOST REPORTED BARRIERS AND CHALLENGES:

Percent Responded (%)

Legend:
- May 2020 (Baseline) (n=49)
- June 2020 (Follow-Up) (n=29)

Barrier	May 2020	June 2020
Supplies to protect staff	78%	59%
Testing resources and locations	37%	38%
Information about guidelines, treatment, and care	33%	28%
Finding financial support	31%	24%
Information about Public Health Order	24%	21%
Who to contact	20%	10%
Mental health resources for healthcare workers	6%	21%

ACTION

In response to the barriers and challenges shared by healthcare providers and partners in the Feedback Form, the Healthcare Sector:

✓ Continuously surveyed healthcare providers on their needs, and shaped each project to bridge gaps and meet the needs of providers and partners

✓ Shared resources to obtain personal protective equipment, testing, vaccinations, treatment and clinical guidelines via telebriefings, newsletters, and the Health Professionals website

✓ Collected existing and designed new informatics (e.g., Caring for Your Mental Health During COVID-19 for Healthcare Personnel, Dental Requirements)

As a result of continuous quality improvement activities, the Healthcare Sector:

✓ Tailored telebriefings, newsletters, website, and emails according to providers and partners' needs.

✓ Planned and implemented the Academic Detailing by Zip Code project that individualized outreach and education targeted to healthcare practices located in the lowest Healthy Equity Metric, in order to improve health outcomes in zip codes with the highest rates of COVID-19
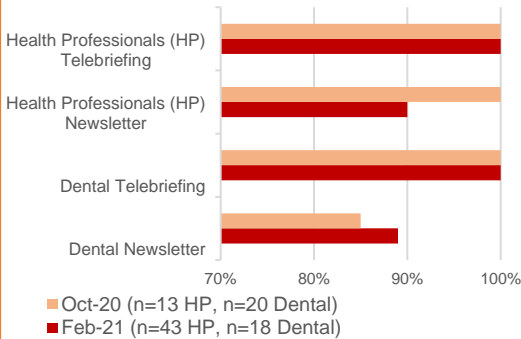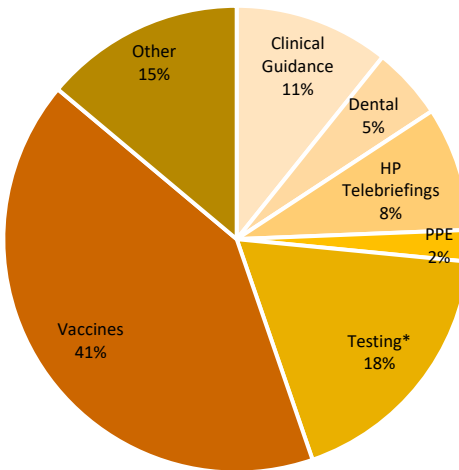
IMPACT (as of 05/09/2021)

LISTEN

14 Listening Sessions with Professional Health Organizations

Reported Satisfied to Highly Satisfied in Healthcare Sector Polls

Chart (horizontal bar):
- Health Professionals (HP) Telebriefing
- Health Professionals (HP) Newsletter
- Dental Telebriefing
- Dental Newsletter

Axis: 70%, 80%, 90%, 100%

- Oct-20 (n=13 HP, n=20 Dental)
- Feb-21 (n=43 HP, n=18 Dental)

ENGAGE

Questions (2,548 questions received)

Pie chart:
- Other 15%
- Clinical Guidance 11%
- Dental 5%
- HP Telebriefings 8%
- PPE 2%
- Testing* 18%
- Vaccines 41%

Telebriefings and Meetings

Health Professionals

57 Telebriefings since 03/13/20

47 Average Attendance

19 Telebriefings since 05/07/20

61 Average Attendance

Dental Providers

17 Healthy San Diego COVID-19 Task Force Meetings since 05/07/20

SUPPORT

www.sandiegocounty.gov/COVIDHealthProfessionals

35 Resource Sections

378 Posts to Website

+84,510 Unique Website Visitors

Newsletters

42 Health Professionals

30 Dental Providers

+ 8 Healthy San Diego and **12** Maternal, Child, Adolescent Providers

Academic Detailing by Zip Code (ADZC)

86% (369 out of 431) Practices Successfully Engaged in 92154, 92173, 91911, 92113, 92114, 92083, 91950 & 92020

- ✓ Over **1,846 minutes** have been spent talking to practices
- ✓ Provided resources for clinical guidance, vaccinations, PPE, testing, patient resources, and treatment
- ✓ Expanding to **92058, 92102 & 92105** zip codes, chosen based on the California Department of Public Health's Vaccine Equity Metric Quartiles
- ✓ In April 2021, the ADZC was awarded a **2021 Innovative Practice Gold Award** by the National Association of County and City Health Officials

NEXT STEPS

- ✓ Iterative process: continue polls and listening sessions, address needs, engage partners to ensure successful engagement, as well as continue to develop personal relationships with ADZC healthcare providers and assess and address their needs
- ✓ Address health inequities by expanding ADZC to more zip codes, identify new barriers, and analyze the data and feedback
- ✓ Partner with local healthcare providers and the media to educate on the benefit of monoclonal antibodies for the early treatment of COVID-19
- ✓ Collaborate with federal, state, and local healthcare partners to implement and sustain Monoclonal Antibody Regional Centers (MARCs)

"Thank you for inviting the [Behavioral Health] providers to today's telebriefing. It was very informative...." – P.B-D 2020

"I wanted to specifically thank you again for the work you are doing and taking on my concerns at the beginning of this. I am continuing to build resources and help support other dentists in my community..." – C.P. 2020

"I'm grateful for County support, especially the commitment to health equity... I also see behind the scenes how much the county staff is working to serve those most in need." – J.A. 2021

Revised 05/17/2021

COVID-19 Homeless Sector
Year in Review

Background

March 2020- March 2021

GOAL: The County of San Diego COVID-19 Homeless sector brought together a diverse group of community leaders, stakeholders, and residents. In collaboration with one another, these groups represent a community engaged in efforts to: help educate and mobilize communities, develop and address their priority needs, identify resources, and plan actions to improve the health of the community and persons experiencing homelessness.

In March 2020, the sector and its partners were able to mobilize quickly to develop comprehensive plans to prevent the spread of COVID-19 among people experiencing homelessness. The development and implementation of these plans occurred before the first cases of coronavirus arrived in San Diego County. The sector was tasked with dispersing COVID-19 information to organizations serving the homeless and people experiencing homelessness. Through various platforms such as telebriefings, e-newsletters, printed materials, a website and email distribution list dedicated to the needs of homeless, County news channel, social media, and press conferences, critical information was shared.

Homeless Sector Efforts

Some of the sector interventions included COVID-19 screenings in local emergency shelters, installing hand-washing stations at encampments, deploying County public health nurses with local homeless outreach teams, securing hotel rooms for quarantine and isolation, and distributing hygiene kits. These interventions resulted in low numbers of infections among people experiencing homelessness across the County during the pandemic. As the sector's efforts evolved, interventions included COVID-19 testing for the homeless, personal protective equipment distribution to sector partners, and delivery of vaccines by mobile teams to people experiencing homelessness.

Since March 2020, the sector collaborated with nearly 70 outreach partners, service providers, non-profits, and faith-based organizations to distribute over 30,000 COVID-19 prevention hygiene kits. The kits include face coverings, hand hygiene products and a COVID-19 informational flyer in both English and Spanish. Additional needs were identified by sector stakeholders resulting in modifications to the hygiene kit contents. New items included information on behavioral health services, COVID-19 testing and flu clinics, and critical information on the COVID-19 testing and vaccines. The National Association of City and County Health Officials recognized this effort with the 2021 Bronze Award for Innovative Practice.

In mid-June 2020, an assessment was conducted with partners to gather feedback on the effectiveness of sector activities and identify any gaps/needs. The overall result showed that sector activities were well-received and effective in getting the support and information that the partners needed, especially hygiene kits. The initial assessment revealed that 94% of participants wanted the hygiene kit distribution to continue.

Other efforts included: a cost analysis of the hygiene kits to support planning for inclusion of cost in budget to continue assembly and distribution and updating encampment map to ensure proper sanitation for unsheltered.

HOMELESS SECTOR ACTIVITIES BY THE NUMBERS

March 2020- March 2021

38 1-HOUR SECTOR TELEBRIEFINGS WITH 3,500 PARTICIPANTS

110 E-NEWSLETTER DISTRIBUTED TO 52,000 RECIPIENTS

28,200 HYGIENE KITS ASSEMBLED AND DISTRIBUTED TO UNSHELTERED HOMELESS VIA 68 OUTREACH PARTNERS
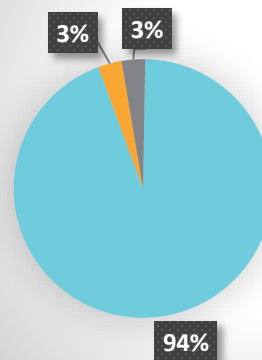
28,500 COVID-19 UNIVERSAL SCREENINGS COMPLETED AT CONVENTION CENTER

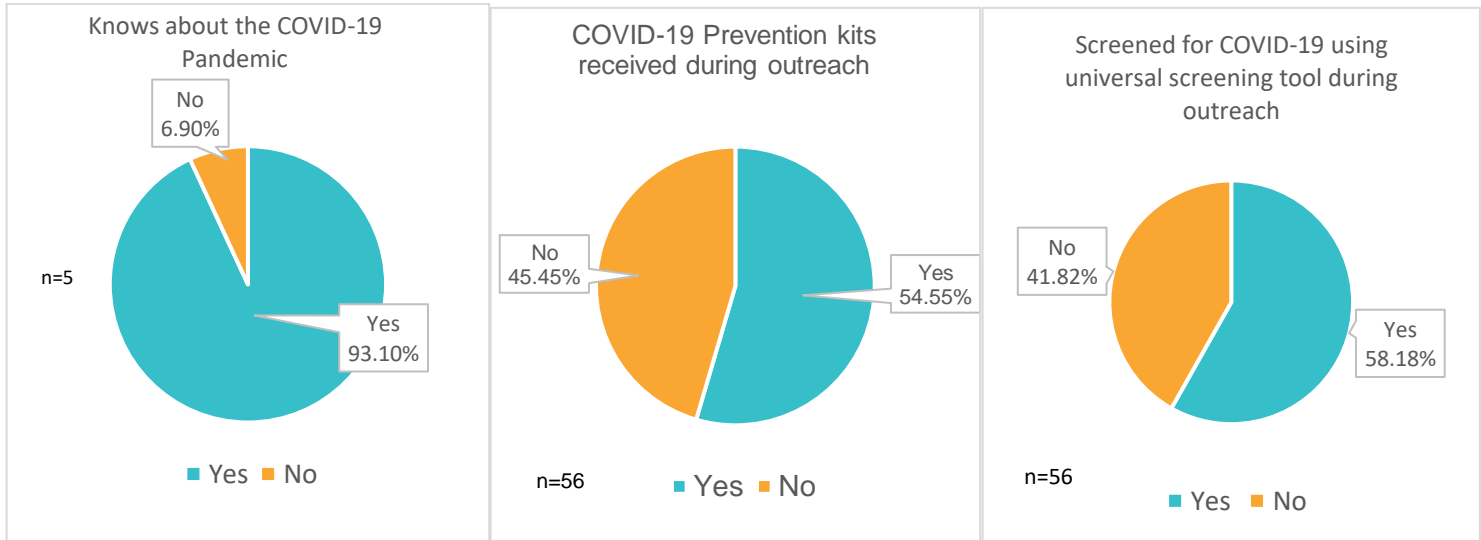**1,481** SCREENINGS ENTERED INTO HOMELESS MANAGEMENT INFORMATION SYSTEM

Should County Continue Hygiene Kit Distribution Post-Pandemic?

3% 3% 94%

- Yes, distribution of hygiene kits would be useful moving forward.
- No, distribution of hygiene kits would NOT be useful moving forward.
- I do not have a preference.

Project ENGAGE (Educate, Network, Gain Trust, Action Plan, Guard Relationships,Execute Programs)

In August 2020, the sector was joined by interns from San Diego State University and expanded in Spring 2021 to California State University San Marcos with the goals to gather feedback from people experiencing homelessness on services that they received during the COVID-19 pandemic and evaluate all sector cross threading and impacts. Interns conducted one-on-one brief interactions with people experiencing homelessness. Collecting data provided useful information, fostered relationships with the unsheltered communities and expanded the network of partner organizations and activities. The data collected revealed that resources provided by the sector such as the hygiene kits, universal screening tool, and other county efforts, were well-received by over half of the community. In addition, valuable information was collected about barriers experienced by people experiencing homelessness. Additional data on attitudes of people experiencing homelessness was analyzed and summarized to inform messaging to this vulnerable population.

Knows about the COVID-19 Pandemic
n=5
- No 6.90%
- Yes 93.10%
- ■ Yes ■ No

COVID-19 Prevention kits received during outreach
n=56
- No 45.45%
- Yes 54.55%
- ■ Yes ■ No

Screened for COVID-19 using universal screening tool during outreach
n=56
- No 41.82%
- Yes 58.18%
- ■ Yes ■ No

Partner Collaborations

When it comes to homeless services, collaboration has always been the key to successful outcomes. The County has long-standing partnerships with various jurisdictions, law enforcement agencies, internal County departments, community organizations, and health agencies that serve people experiencing homelessness. These partnerships, which existed long before COVID-19, were strengthened during the pandemic. The County partnered with community organizations to help distribute the COVID-19 prevention hygiene kits in all regions of the county. Based on sector feedback, the hygiene kit distribution process was streamlined by collaborating with a food distribution partner. Public health nurses deployed with outreach teams conducted over 9,062 COVID-19 screenings. They also made referrals to temporary lodging and delivered vaccines in the field to over 700 individuals in 27 community locations. The County also partnered with local universities to provide internship opportunities to students who served essential roles in supporting COVID-19 efforts directed toward people experiencing homelessness.

Limitations/Challenges

Initial feedback from sector partners identified business closures due to COVID-19 regulations as a significant barrier to providing services. Libraries, shelters, and other locations that typically provided homeless services found themselves closed at the onset of the pandemic, limiting access to computers and phone charging stations. The hygiene kits distribution was expanded to include the distribution of portable power banks for utilization until businesses and other services reopened, allowing case workers to contact their clients with crucial information. Other barriers identified included permanent and temporary housing availability, difficulty accessing stimulus checks, and service model changes.

Next Steps

The new department of Homeless Solutions and Equitable Communities has been formed to serve as a central point of collaboration for outside partners and ensure equity among the vulnerable population of San Diego and to reduce homelessness in the region. Some of the sector activities will continue in the new Department to ensure smooth transition and continuity of good public health practices.

![Live Well San Diego logo] **LIVE WELL @ HOME**

Goal: Provide San Diego County residents with resources and activities for staying healthy, active and engaged during COVID-19 stay-at-home orders.

Program Highlights:
- **Resource and Activity Website**
- **April & May Activity Challenge**
- **Virtual Event Activity Calendar**
- **How-To Technology Videos**
- **Work Well @ Home Resources**

Introduction

By March 27, 2020, the *Live Well San Diego* Support Team had curated and published the Live Well @ Home resource website. Resources were collected from *Live Well San Diego* Recognized Partners, including the County of San Diego, and directly from the public through an online submission form. Resources were organized into age specific sections, including Toddlers & Children, Elementary School, Middle & High School, Parents & Caregivers, Adult, and Seniors & Older Adults, each into themes of physical fitness, mindfulness, education, and social connectedness. How-To Technology Videos were launched in May, a Virtual Event Calendar added in June, and Work Well@ Home resources added in late summer.

Promotion

- County of San Diego COVID-19 Press Conferences (Late March-Early April)
- County of San Diego COVID-19 Home Page (Coronavirus-SD.com Late March-April)
- Email marketing to over 25,000 (Late March-April):
  - Education and Outreach Branch of the Emergency Operations Center distribution lists and telebriefings
  - *Live Well San Diego* distribution lists
- County of San Diego Organic Social and *Live Well San Diego* Paid and Organic Social (March-April)

Website Traffic

At the initial creation and promotion of Live Well @ Home, the Unique Visitor rate was high with 22,401 Unique Visitors in the first week alone (March 27-April 2) and 43,274 Unique Visitors in the first four weeks (March 27-April 23). Unique visitors only increased an additional 3,270 in the next 4 weeks (April 24-May 28). For comparison, 76% of visitors to the overall LiveWellSD.org website came specifically to view the Live Well @ Home pages within the first week, a 727% increase in Unique Visitors from 2019. This was most likely the result of heavy promotional efforts during the first month of the page being live.

Week	Dates	Unique Visitors to LW@Home	% of total Unique Visitors to LiveWellSD.org	Unique Visitors to LiveWellSD.org 2020	Unique Visitors to LiveWellSD.org 2019	% increase from 2019
First 1 Week	March 27-April 2	22,401	76%	29,536	3,570	727%
First 4 Weeks	March 27-April 23	43,274	56%	76,724	16,914	354%
First 8 Weeks	March 27-May 28	46,544	47%	98,268	36,359	170%

Paid promotion of Live Well @ Home on social media resulted in an even higher increase in traffic to the page, with Unique Visitors increasing from 3,601 the week of April 3-9 to 10,186 the week of April 10-16 when the ads were run. Starting the week of May 8, website traffic dropped significantly and remained at levels around 200 Unique Visitors per week through May and June. This drop corresponded to changes in the public health order, one at the end of April allowing beach use, another at the beginning of May allowing use of parks and recreation areas and another the week of May 9th allowing certain businesses to safely reopen.

Activity Challenges

To support and promote Live Well @ Home, the *Live Well San Diego* Support Team created and implemented Live Well @ Home daily challenges promoted organically on social media during the months of April and May. The challenges supported the objectives of promoting resources for the general public's use and encouraging members of the community to remain positive and healthy by providing activities and ideas to do throughout the Shelter in Place order. In April, a weekly fitness challenge encouraged easy to do, at-home workouts, while daily challenges focused on social connection, mental health, and nutrition. May focused mainly on fitness activities, promoting free classes from Partners like the YMCA of San Diego, OG Yoga, and American Heart Association, as well as Olivewood Gardens and Learning Center for weekly healthy recipes. A Facebook/Instagram ad was run on May 1st to promote the May Challenge and reached 11,476 people and engaged 1,485 people.

Social Media

All *Live Well San Diego* social media channels saw increased reach, engagement and followers during April when the resources were heavily promoted, compared to June where no challenges or events were promoted.

	Facebook			Twitter			Instagram		
Month	Reach	Engagements	Followers	Reach	Engagements	Followers	Reach	Engagements	Followers
April	62,763	4,806	574	102,778	2,034	110	19,169	1,461	497
May	33,885	2,446	84	40,909	524	31	11,764	501	141
June	39,978	1,692	79	23,182	306	25	8,858	312	82

Popular Themes

For the website, physical activity related resources were the most popular across all age groups throughout the months of April, May, and June. In May, mindfulness resources were the second most popular overall. The age categories of "Adults" and "Seniors and Older Adults" were the most popular age specific pages by a large margin.

On social media, mental health topics were popular on Twitter and Instagram, while posts with either exercise or a combination of both exercise and non-fitness topics were more popular on Facebook. Stand alone non-fitness related posts were popular across all platforms, especially at home activities such as DIY face masks, decorating your front door, or getting a free digital Library card, indicating an interest in a variety of topics. Across social media platforms, use of authentic imagery and content received more engagement than stock imagery and generic content, no matter the topic.

Conclusion

Live Well @ Home was an immediate success, gathering thousands of visitors to the page for the first few weeks of quarantine beginning at the end of March 2020. A strong promotional campaign via press conferences, telebriefings, eblasts, and social media showed increased traffic to the site. To maintain high levels of traffic, a sustained marketing campaign would be needed for future projects. As traffic to the website and engagment on social media subsided, it was decided not to run a challenge in June.

For the *Live Well San Diego* 5K & Fitness Challenge in July, it was determined that considerable promotion would be needed to engage the public in another fitness challenge so soon. Additional incentives were offered, including a fitness tracker with leaderboard, virtual meetups, fitness plan, a souvenir hat, and a culminating event to inspire sustained fitness over the month. Future social media campaigns will focus on using more authentic, user-generated-style photos and videos, in addition to a more conversational, direct-to-consumer tone, including words of encouragement and questions, to encourage more engagement from followers.

Next Steps

Post pandemic, Live Well @ Home will shift to replace the Live Well Every Day page on LiveWellSD.org to provide individuals and families with resources and opportunities for living well and being engaged and active in their community in support of the *Live Well San Diego* vision.

COVID-19 Response: Long-Term Care & Residential Care Sector

Overall Sector Goal

The County of San Diego Long-Term Care and Residential Care Facilities Sector was formed in March 2020 as part of the Emergency Operations Center Education & Outreach Branch in response to the COVID-19 pandemic. Also known as the "LTC Sector", this team provides education, guidance from federal, state, and county authorities, technical assistance such as securing personal protective equipment, testing supplies, on-site vaccination clinics, infection prevention and control support, and overall support to long-term care facilities and concerned family members of residents.

Long-Term Care Sector Efforts

The activities conducted by the LTC Sector to support long-term care facilities has resulted in increased communication and strengthened working relationships with licensing entities, specifically the Regional Offices of the California Department of Public Health (CDPH) and the California Department of Social Services, Community Care Licensing Division (CCL). This has led to expanded outreach and more tailored information provided to long-term care facilities.

Telebriefing participation increased when CCL promoted sector telebriefing invitations and participated as guest speakers. It is presumed that this increase in attendance has resulted in enhanced knowledge of and adherence to important COVID-19 guidance for a greater number of facility staff due to their telebriefing participation.

Themes focused on for outreach and education were <u>determined</u> through incoming generic emails, inquires submitted through the sector webpage, weekly meetings with CCL and CDPH regarding facility needs and concerns, assessments, and telebriefings. Common needs and themes were also identified through connecting with the County COVID-19 Medical Operations Center, Healthcare Provider Status Taskforce, and the County of San Diego Long-Term Care Ombudsman Program

Common themes of need and concern have been <u>addressed</u> through the following:

Telebriefings
- Highlighted Focus Areas: Evolving State and County Guidance, Testing, Infection Prevention and Control, Vaccination, Mental Health, Visitation, Emergency Preparedness, and more.
- Hosted guest speakers from licensing entities and other key partners to present relevant information and answer questions.
- Answered pre-submitted and live questions by a County physician consultant and other subject matter experts

Weekly Updates
- Content was driven by common themes of incoming inquiries through generic email inquiries, sector webpage questions, telebriefing discussions, and information from licensing entities (testing, vaccination, personal protective equipment, infection prevention and control, and more).

Webpage
- Content was driven by common themes of incoming inquiries through generic email inquiries, sector webpage questions, telebriefing discussions, and information from licensing entities (testing, vaccination, personal protective equipment, infection prevention and control, and more).

A feedback assessment of 1,300+ long-term care facilities was conducted February 22 through March 8, 2021, to ascertain if Sector activities were meeting their needs. Ninety-eight percent of the respondents stated they were either highly satisfied, somewhat satisfied, or satisfied with the LTC Sector outreach and education efforts. Two respondents were not satisfied out of 118 feedback survey results. Based on the responses of the sector assessment, sector staff made two changes:

- Shortened the clinical COVID-19 telebriefing updates and increased the time for Q&A
- Began attaching a copy of the weekly update in a pdf format to the electronic version of the update.

Long-Term Care and Residential Care Sector Telebriefing Attendance

The data shows that we had an average of 80 attendees per telebriefing before CCL began promoting the telebriefings in approximately in January 2021. From January 2021-March 2021, we had an average of 137 attendees pre telebriefing. We assume this increased attendance is hopefully the result of CCL's support in promoting these telebriefings, which in turn is due to our enhanced relationship and communication with CCL.
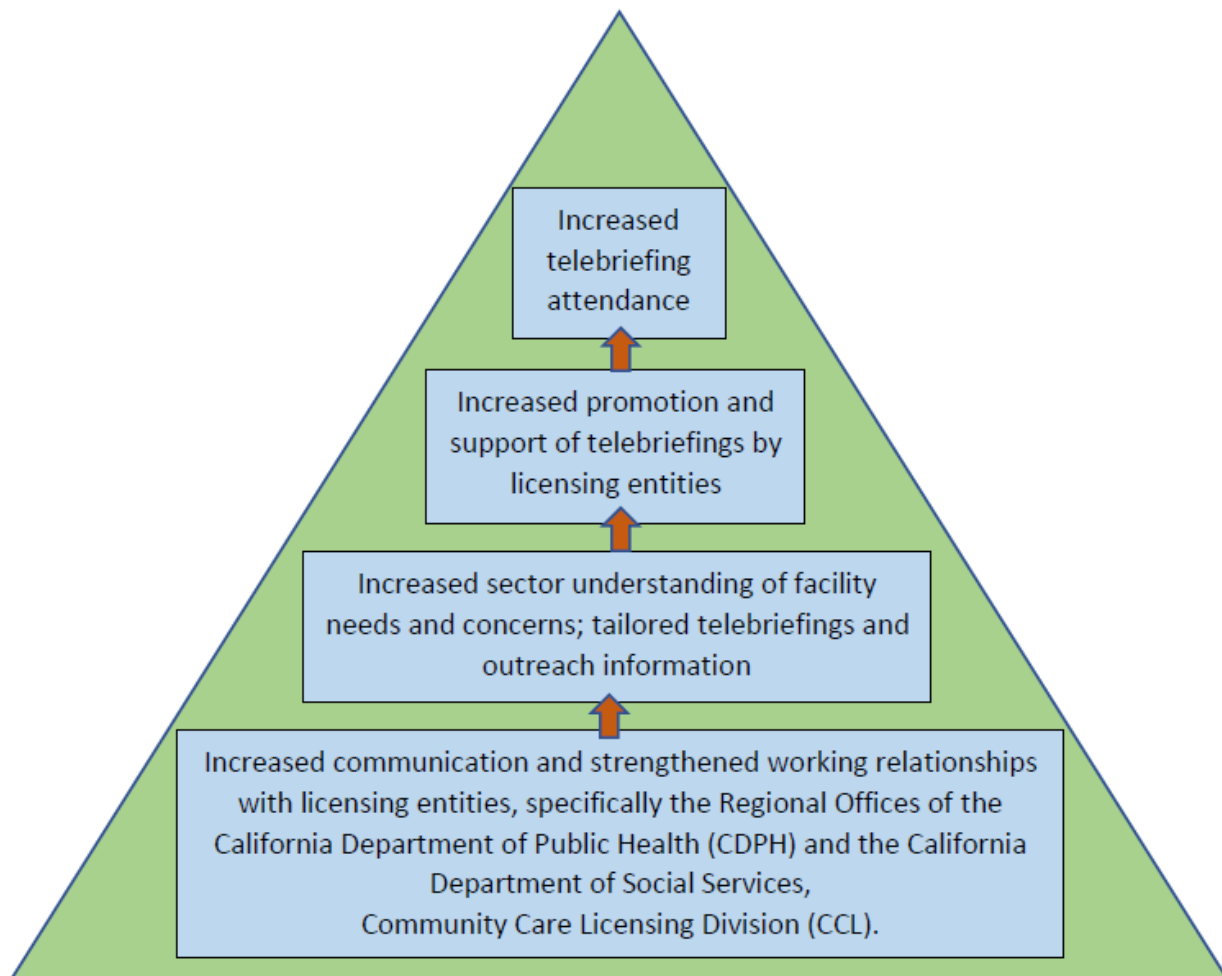
Next Steps

The Long-Term Care Sector will conduct another assessment by August 2021 to elicit feedback on facility needs as the COVID-19 pandemic continues to evolve. Regular telebriefings and response to inquiries from facility staff and family members will continue. Long-Term Care Sector staff will also continue collaborating with partners in the long-term care arena to enhance facility preparedness and response to current and potential public health threats.

Background

March 2020-May 2021

In March 2020, the Military and Veterans COVID-19 Response Sector of the County of San Diego Emergency Operations Center (EOC) was formed to support the needs of the military community in the San Diego region to provide support and resources to prevent the spread of COVID-19. In order to provide timely information, resources, and guidance through the pandemic, the Sector communicated relevant health information through biweekly telebriefings and e-newsletters to active duty members, veterans, families, and non-profit organizations.

GOAL: To evaluate the satisfaction of San Diego County's military community on the Sector's targeted outreach and engagement strategies. This evaluation will assess whether adequate resources and support are being provided to active duty members, veterans, and their families during the COVID-19 pandemic through the Sector.

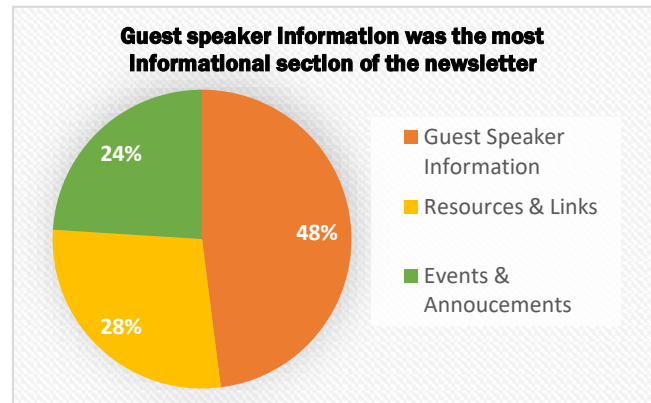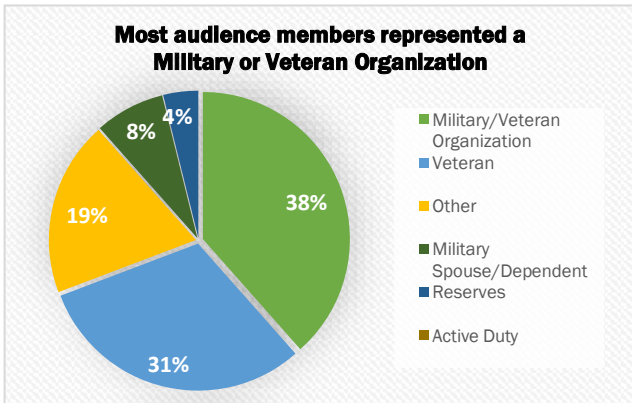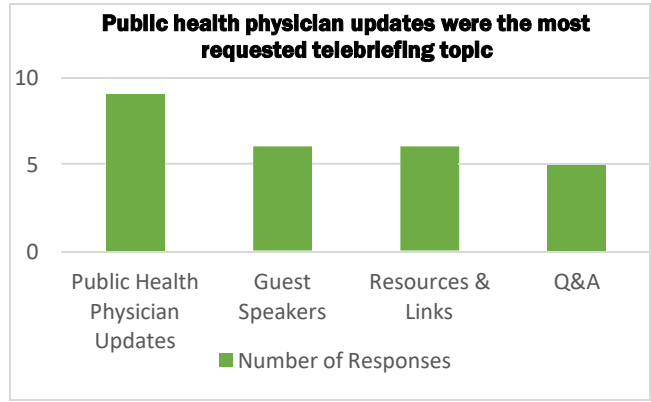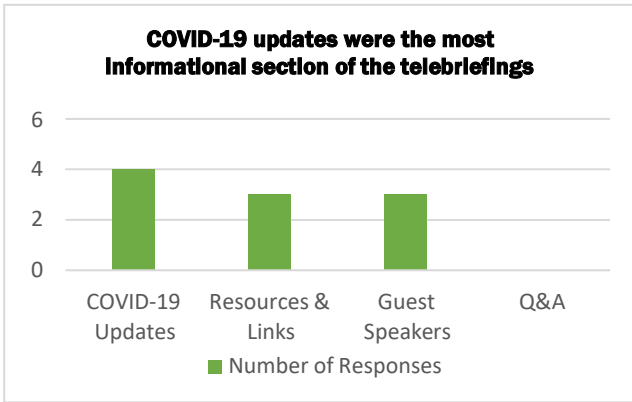| Military & Veterans Sector Activities by the Numbers *March 2020-May 2021*			
34 Telebriefings	33 Newsletters	100% Attendee Satisfaction	92% Felt Attending was Informative

Partner Collaborations

The Military and Veterans Sector built and maintained relationships with several military-related stakeholders in San Diego County by having them as guest speakers during telebriefings. The Sector partnered with the San Diego Veterans Coalition (SDVC) to connect with the military community. The President of SDVC provides administrative support during telebriefings and strengthens relationships between the County of San Diego and the military community. The Sector also worked closely with the Director from the Office of Military and Veterans Affairs (OMVA) to provide information about veteran benefits during telebriefings. Additionally, the Sector partnered with the Director of the Regional VA Health Care Systems to nest and align County COVID-19 response with the VA COVID-19 health care response. On May 8, 2020, the Sector partnered with Courage to Call (C2C), a non-profit organization in San Diego County dedicated to improving mental wellness for veterans, active duty, reservists, national guardsman, and their families. On May 15, 2020, C2C began providing the Sector with data on the top needs of veterans in San Diego from their 24/7 helpline, including the numbers of calls from the helpline, active cases, and referrals to community partners.

Feedback Polls

Two evaluation feedback polls were conducted by the Sector during Zoom telebriefings on December 10, 2020 (N=11) and February 25, 2021 (N=26) to assess participant's satisfaction of the telebriefings and newsletters. The initial poll on 12/10/20 was used as a pulse check, while the poll conducted on 2/25/21 was used as a follow-up. These polls allowed the sector to recognize Q&A sessions were the least informational portion of telebriefings, while public health physician updates were the most requested telebriefing topic. The follow-up poll revealed low participation rates from active duty members. This is due to the Department of Defense (DOD) restricting Zoom on military bases, thus limiting active duty members' ability to attend live telebriefings. Guest speaker information was identified as the most informational section of newsletters.

COVID-19 updates were the most informational section of the telebriefings

Number of Responses
- COVID-19 Updates: 4
- Resources & Links: 3
- Guest Speakers: 3
- Q&A: 0

Public health physician updates were the most requested telebriefing topic

Number of Responses
- Public Health Physician Updates: 9
- Guest Speakers: 6
- Resources & Links: 6
- Q&A: 5

Most audience members represented a Military or Veteran Organization

- Military/Veteran Organization: 38%
- Veteran: 31%
- Other: 19%
- Military Spouse/Dependent: 8%
- Reserves: 4%
- Active Duty

Guest speaker information was the most informational section of the newsletter

- Guest Speaker Information: 48%
- Resources & Links: 28%
- Events & Announcements: 24%

Top Needs of the Military Community in San Diego

Since September, the Military & Veterans Sector has been recording the top needs of the community with data provided by C2C. Housing/shelter, food, and legal were the top three needs.

Courage to Call Data: Top Needs of Military Members

- Housing/Shelter: 13
- Food: 11
- Legal: 9
- Individual/Family...: 8
- Mental Health...: 6
- Public Assistance...: 2
- Information Services
- Material Goods
- Employment: 2
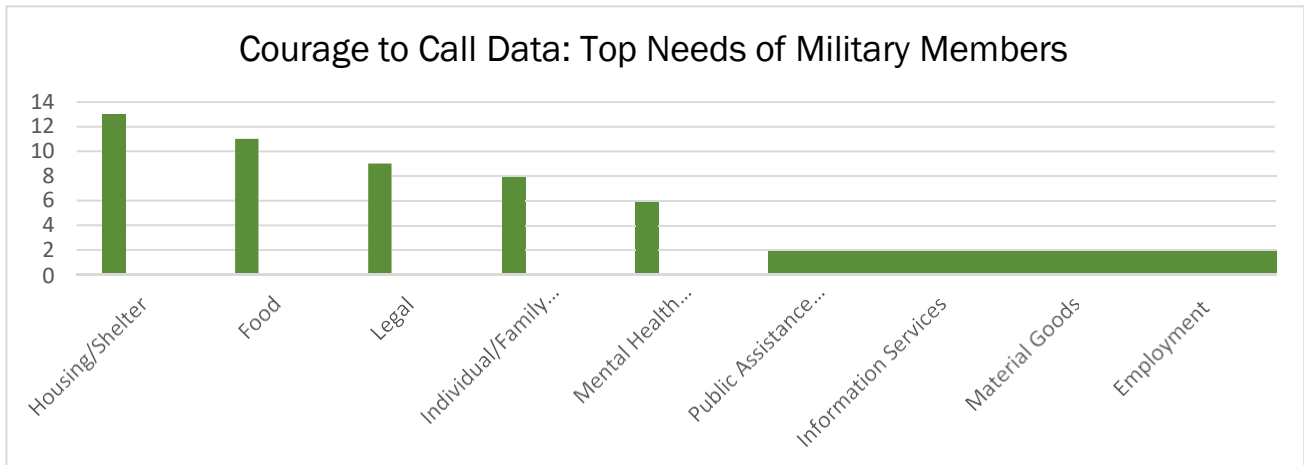
Next Steps

As a result of the feedback polls, decreasing telebriefing attendee numbers, and the current state of the pandemic, the Sector will be adapting its outreach strategies. Instead of providing bi-weekly telebriefings, the Sector Lead and Medical SME will appear as guest speakers during the SDVC monthly meetings. COVID-19 updates will be included in the SDVC newsletters. The needs identified in the feedback polls will be addressed within the SDVC monthly meetings and newsletters. The Sector will continue to monitor the e-mail for questions and send out timely COVID-19 updates, and update the website to provide resources to the military community. Websites will also be "linked" to ensure ready access to County post-pandemic response and recovery-related information.

COUNTY OF SAN DIEGO COVID-19 RESPONSE

OLDER ADULT AND DISABILITY SECTOR
OVERVIEW

HHSA
COUNTY OF SAN DIEGO
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

INTRODUCTION

Older adults have been the age group hardest hit by the COVID-19 pandemic. Older adults faced heightened risks of becoming infected and getting severe illness from COVID-19, with the greatest impacts felt among Hispanic and African American communities. Led by staff in Aging & Independence Services (AIS), the Older Adult and Disability Sector Support team worked quickly to ascertain needs, identify and create resources to address those needs, and share information as it became available.
.

OUR GOAL

Provide timely and accurate COVID-19 education, outreach, and supportive services to promote the health and safety of older adults and individuals with disabilities during the pandemic.

Needs Assessment

- Conducted welfare check calls with > 20,400 In-Home Supportive Services recipients (older or disabled); Made referrals to address individual needs.
- Survey of > 45 senior and disability service organizations; 33 interviews with disability service providers; and collected input in community meetings to evaluate COVID-related needs.
- With the input above, identified the top issues to be **food, isolation, and caregiver support. Later in year, vaccine access became a top priority.**

ACHIEVEMENTS

Food Resources

- **Great Plates Delivered:** 41 restaurants delivered 3 meals/day to over 7000 participants from May 16 2020 – July 9, 2021; **Great Plates 2.0: Dinner Delivered:** 15 restaurants served over 1300 disabled and older residents one hearty meal per day from August 2020 – January 2021.
- **AIS contracted partners** quadrupled home-delivered and pick up meals from approximately 100,000 per month to over 400,000 in June 2020 alone.
- **Operation FACT Food:** Using only in-kind resources, this partnership delivered food boxes to over 2,000 households; 510 Operation FACT Food clients were also referred to Cal Fresh; Successful handoff to 211 San Diego and then to the Rock Church and these efforts are still ongoing.
- **Updated and disseminated food resource information:** website information on grocery store senior hours, commercial and nonprofit food resources, videos on how to use commercial food delivery services. www.Aging.SanDiegoCounty.gov

Vaccines

- **Provided tailored information** to older adults, disabled residents, caregivers, and service providers regarding eligibility, documentation requirements, and transportation resources.
- **Homebound San Diegans Vaccination:** developed and implemented program – referred over 1800 residents to 7 vaccine providers for in-home visits.
- **Mobile PODs:** Outreach to low-income senior apartments and other organizations to implement mobile vaccination clinics. Over 60 on-site vaccine events provided by County partners.

For more information about the Older Adult and Disability Sector:
Visit our website, www.coronavirus-sd.com/AgingAndDisability
Email us at COVID-AIS@sdcounty.ca.gov

ACHIEVEMENTS, continued

Isolation/Social Participation Support *(guides on Aging.SanDiegoCounty.gov)*
- **Ways2Engage from Home – COVID-19 Edition**
- **Get Connected Guide** (available in English and Spanish)
- **Piloted two new intergenerational (IG) programs**: 3 cohorts participated in Virtual IG Chat Groups with 4 – 5 sessions, including City Heights older adults and area college students; IG Book Discussion Group with Poway Library –*George Takei's "They Called us Enemy,"* included a mix of 9 college students and older adults participating in 3 virtual sessions.
- **Ride Well to Age Well Guide** Developed and updated COVID-19 Special Edition to catalog regional transportation options.
- **Piloting bilingual technology for older adults**' program. 60 Chula Vista older adults receive an iPad and training on how to use the device.
- **2020 Virtual Get Connected Technology Fair:** Partnered with Oasis San Diego to hold this virtual event, October 20-23; attracted over 2,500 participants.

Caregiver Support
- 3 Virtual Conferences and 10 Webinars on Caregiving Issue, reaching over 200 caregivers and available for on-demand viewing.

Outreach and Education - *information tailored for older adults and persons with disabilities*
- Telebriefings: 17 telebriefings (as of June 18, 2021)
- Weekly emails: 66 emails sent; over 5,600 people reached each week
- AIS website and Sector website
- AIS Monthly Newsletter – March 2020 Special COVID-19 edition, and COVID-19 updates each month thereafter, each issue reaching over 6000 community stakeholders
- 67 Presentations, reaching 1,839 community stakeholders
- Created and distributed six COVID-19 videos: "Safe Transportation Practices during COVID-19," "COVID-19 Information and Resources," "How to Protect Yourself from Scams," "Mental Health and Coping," "Ways to Engage," and "How You can Help During COVID-19."

PARTNERSHIPS AND COLLABORATIONS

- Organizations: 211 San Diego, American Red Cross, Facilitating Access to Coordinated Transportation (FACT), Feeding San Diego, Jewish Family Service, San Diego Regional Center, Serving Seniors, St. Paul's Senior Services, The Jacobs & Cushman San Diego Food Bank, and Voluntary Organizations Active in Disaster
- Community Coalitions: Caregiver Coalition of San Diego, Age Well San Diego Teams, Regional Community/County Action Networks, Fall Prevention Task Force, Health Promotion Committee

NEXT STEPS

- Continue to provide COVID-19 education, outreach, and supportive services to promote the health of older adults and individuals with disabilities during the pandemic and its aftermath.
- As Great Plates Delivered ends, provide referrals to the 5300 participants to other food programs.
- Continue Homebound Vaccination program; increase outreach for equity in vaccine access.

For more information about the Older Adult and Disability Sector:
Visit our website, www.coronavirus-sd.com/AgingAndDisability
Email us at COVID-AIS@sdcounty.ca.gov