SAN JOAQUIN COUNTY

# COVID-19 Pandemic Response

**After Action Report/Improvement Plan**

**29 December 2022**

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# Overview

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| **Name** | San Joaquin County Coronavirus-19 (COVID-19) Pandemic After Action Report/Improvement Plan (AAR/IP) |
| **Response Operations** | This AAR covers the January 2020–September 2022 response period, which is not inclusive of the entire response effort. |
| **Scope** | The AAR assesses the County's response and provides recommendations for the San Joaquin County's Disaster Council on elements of the public health and emergency response that should be considered successes and sustained as well as recommendations and assignments to improve plans, processes, and procedures. The research process involved large and diverse groups of stakeholders and a comprehensive review of documents related to incident response. Quantitative and qualitative data were collected and analyzed to construct this report. |
| **Mission Area** | Response |
| **Capabilities** | This document examines the operations of the County and its partners relative to the core competencies expected during response by the Federal Emergency Management Agency (FEMA), the Centers for Disease Control and Prevention's (CDC) Public Health Emergency Preparedness and Response Capabilities, and the U.S. Department of Health and Human Services (HHS) Office of the Assistant Secretary for Preparedness and Response (ASPR). Each of these categories are represented in the report based on the data collected.<br><br>The FEMA Core Capabilities for response operations included in this report are infrastructure; logistics and supply chain management; environmental response & health and safety; on-scene security, protection, and law enforcement; operational communication; operational coordination; planning; public health; public information and warning; situational assessment; and volunteer management.<br><br>The CDC Public Health Emergency Preparedness and Response Capabilities included in this report are community preparedness; emergency operations coordination; emergency public information and warning; information sharing; medical countermeasure dispensing and administration; medical surge; nonpharmaceutical interventions; public health surveillance and epidemiological investigation; responder safety health; and volunteer management.<br><br>The ASPR Health Care Preparedness and Response Capabilities included in this report are the Foundation for Health Care and Medical Readiness; Health Care and Medical Response Coordination; Continuity of Health Care Service Delivery; and Medical Surge. |
| **Threat or Hazard** | Global pandemic (COVID-19) |
| **Sponsor** | San Joaquin County |
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# Executive Summary

This After Action Report/Improvement Plan (AAR/IP) analyzes San Joaquin County's operational response to the COVID-19 incident, determines the strengths to be maintained and built upon, identifies areas for potential improvement, and supports the enhancement of corrective actions.

This AAR reviews and documents the actions taken by San Joaquin County and select partners during the response to COVID-19 spanning from January 2020–September 2022. Although the pandemic has not ended, Tetra Tech conducted an AAR process from September 2022–November 2022 to capture lessons learned and areas for improvement.

Findings included within the AAR were developed with input from San Joaquin County staff; local, county, and state public sector partners; private sector partners; and community-based organizations. Data was gathered through a document review, an online survey, a series of facilitated focus group meetings, and virtual individual interviews.

Response operations for other incidents occurred simultaneously with COVID-19, which was a draw down on already limited resources and capabilities (e.g., wildfire).

See the *Analysis, Findings, and Recommendations* section of the AAR for more details.

## Major Strengths

Numerous strengths were observed throughout the response:

- Many staff demonstrated exceptional professionalism and dedication in regard to life, safety, and incident stabilization.
- Contracting data scientists to establish an innovative system tailored to COVID-19 data analytics allowed for faster risk based analysis of data to inform critical decisions.
- The Emergency Medical Services Agency/Medical Health Operational Area Coordinator's relationship with members of the San Joaquin Operational Area Healthcare Coalition was a successful element of surge capacity management in COVID-19 response operations.
- Having access to an existing Mass Vaccination Plan provided guidelines that were tailored to the incident at hand, permitted staff to focus on operations and delivery of vaccinations to the community.
- The Finance and Administration Section of the EOC was proactive with County departments regarding tracking COVID-19 costs, which maximized reimbursement of funds from the CARES Act through December 2020 and FEMA starting in January 2021.
- Public Health's Resilient Community Advisory Committee was an exceptionally effective format for gathering and disseminating information with community-based and faith-based partners in San Joaquin County.
- The Public Information Officers Group meeting was a best practice for communication strategies during COVID-19 response operations.

## Primary Areas for Improvement

Several areas for improvement were identified in response to COVID-19:

- Lack of a Standardized Emergency Management System (SEMS) structure between County Departments, The Board of Supervisors, Public Health, Emergency Medical Services Agency, and Office of Emergency Services.
- Public Health response plans were not applied in a timely manner to COVID-19 response operations.
- County leadership's expectations and staff's expectations for attention to stress reduction strategies, mental health resources, and work recognition were not aligned.
- COVID-19 pandemic response operations placed unprecedented strains on response staff, resulting in potential moral injury or post-traumatic stress for many staff.
- Public Health Information Technology suffered from inadequate infrastructure, a shortage of personnel, and a historical lack of funding.
- Inconsistent messaging from federal and state levels of government and private sources regarding transmission, testing, masks, and vaccines affected messaging credibility at the county level.

## Analysis, Findings, and Recommendations

Participants provided valuable observations and insights related to San Joaquin County's COVID-19 pandemic response through the online survey, focus group meetings, and virtual interviews. These observations were used to derive key findings and develop actionable recommendations, which are listed below.

The AAR/IP is organized by the following FEMA, CDC, and ASPR capabilities:

1. Environmental Response/Health and Safety
2. Infrastructure
    a. Information Systems
    b. Human Resources
    c. Finance
3. Logistics and Supply Chain Management/Nonpharmaceutical Interventions/Health Care and Medical Response Coordination
4. On-Scene Security, Protection, and Law Enforcement
5. Operational Communication
6. Operational Coordination/Emergency Operations Coordination/Health Care and Medical Response Coordination
7. Planning/Foundation for Health Care and Medical Readiness
8. Public Health, Healthcare, and Emergency Medical Services/Medical Surge
    a. Public Health Laboratory Testing
    b. Public Health Surveillance and Epidemiological Investigation
    c. Medical Countermeasure Dispensing and Administration
    d. Medical Surge
9. Public Information and Warning/Emergency Public Information and Warning
10. Situational Assessment/Information Sharing
11. Volunteer Management

# 1. Environmental Response & Health and Safety/Responder Safety and Health

*FEMA Core Capability - Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all hazards in support of responder operations and the affected communities*

*CDC Public Health Emergency Preparedness and Response Capability - Responder safety and health is the ability to protect public health and other emergency responders during pre-deployment, deployment, and post-deployment.*

**Observation 1.1 Strength:** The personal protective equipment (PPE)**,** provided through the Medical Health Operational Area Coordinator (MHOAC) and the EMS Agency DOC enabled public and private sector frontline healthcare workers from hospitals, clinics, long term care, behavioral health, surgery centers and pre-hospital care, to safely provide patient care throughout the incident.

**Analysis:** The EMS Agency DOC Logistics Section received, approved, deployed, and tracked more than 10 million pieces of PPE for frontline healthcare workers throughout the incident.

***Recommendation 1.1.1:*** Highlight the life safety mission priority and make the deployment of PPE through engaged partnerships a standard operating procedure for future incidents.

**Observation 1.2 Area for Improvement:** County leadership's expectations and staff's expectations for attention to stress reduction strategies, mental health resources, and work recognition were not aligned.

**Analysis:** In the early stages of the incident, personnel at all levels of the organization were willing to mobilize and commit to an operational work rhythm outside of normal parameters due to the emergence of COVID-19 as a worldwide health threat. People worked long hours for months, and leadership both expected and praised such behavior. As the months became a year and incident response continued, staff indicated the stress of this operational rhythm manifested in multiple negative ways and led to burnout, stress, resentment, and ultimately workforce turnover. Overall, staff stated that there were few opportunities to take time off. There were some measures taken to address workplace stress. Some managers and supervisors implemented rotating scheduled time off, and some conducted short team-based activities to manage stress. These were generally well accepted but inconsistent in application across the organization.

***Recommendation 1.2.1:*** At the onset of response operations, organizational leadership needs to conduct appropriate measures to ensure it is capable of accounting for safety, mental health concerns, and stress on people who are deployed to incident response.

***Recommendation 1.2.2:*** After the first 30 days of response operations, time-off policies should be established, published, and enforced (e.g., all deployed personnel should be required to take one full day off each week). Leadership should demonstrate acceptance by modeling time-off requirements.

***Recommendation 1.2.3:*** Operating under the Incident Command System (ICS), assign an Assistant Safety Officer-Resilience under the Command Staff Safety Officer to adopt and enforce guidelines for mental health and wellness of all response staff.

***Recommendation 1.2.4:*** The County is encouraged to develop a work group including staff who responded to COVID-19, medical staff, HR representatives, mental health, and leadership to determine proactive steps to implement before future responses and to assure a resilience plan exists for staff before, during, and after future prolonged responses.

**Observation 1.3 Area for Improvement:** COVID-19 pandemic response operations placed unprecedented strains on response staff, resulting in potential moral injury or post-traumatic stress for many staff.

**Analysis:** A variety of factors that impacted potential moral injury or possible post-traumatic stress were presented by participants. Almost all addressed the overwhelming feeling that they could not do their jobs well enough, no matter how hard they tried, because of seemingly insurmountable barriers. These ranged from a lack of institutional support, a culture of fear, a lack of respect for science and data, poor infrastructure maintenance, and political cruelty.

***Recommendation 1.3.1:*** Conversations at the highest level of government in the County and the State of California should address how to mitigate the detrimental effects of moral injury and post-traumatic stress among public health and healthcare workers will have on the health and wellness of all residents of the State.

***Recommendation 1.3.2:*** Consider implementing a series of Critical Incident Stress Debriefing teams to address prolonged issues caused by this incident that are impacting staff resilience.

**Observation 1.4 Area for Improvement:** Public health workers were publicly threatened and feared for the safety of their coworkers and themselves.

**Analysis:** For the first time in their careers, public health staff identified threats and safety issues related to their profession. Many staff reported watching their Public Health Officer routinely berated at Board of Supervisors meetings. Staff reported routine public interactions where the scientific data they were presenting was rebuked and discourse had aggressive and antagonistic tones. They took diversionary actions to avoid potentially threatening situations.

***Recommendation 1.4.1*:** The County should institute a reporting system for any threatening behavior or harassment directed at Public Health workers or their loved ones. The data should be shared with all appropriate authorities accompanying a request for action to improve security.

# 2. Infrastructure

*FEMA Core Capability - Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.*

*CDC Public Health Emergency Preparedness and Response Capability - Decrease and stabilize immediate infrastructure threats to the affected population, to include survivors in the heavily damaged zone, nearby communities that may be affected by cascading effects, and mass care support facilities and evacuation processing centers with a focus on life sustainment and congregate care services.*

## Information Systems

**Observation 2.1. Strength:** Community partners recognize that Public Health is data-driven and evidenced-based and adapts to changing conditions and adjusts accordingly based on new data.

> **Analysis:** Public Health ramped up its data capacity quickly and was able to negotiate issues well when given time to analyze unique conditions. With the emergence of variants, staff adapted to the intellectual stress required to analyze large amounts of new data. Even with community resistance to the evolving nature of information, staff was steadfast. Partners who rely on Public Health data expressed appreciation for the efficacy of the data.
>
> ***Recommendation 2.1.1:*** Make the data collection process from this incident a standard operating procedure for continued use by a dedicated data team in the Data Section for EOC and DOC activations.

**Observation 2.2. Strength:** Contracting data scientists to establish an innovative system tailored to COVID-19 risk analysis allowed for accelerated analysis of data used to inform critical decisions.

> **Analysis:** Focusing data science and risk analysis on community members who may be the most vulnerable to the impact of COVID-19 is an excellent example of using data in a predictive manner to mitigate the spread of the virus. This data analysis system had the capability to perform an individual risk assessment for each resident. This was accomplished through the purchase of a proprietary database that provides household-level data. The County purchased the database using CARES Act funds. Using this data resulted in the ability to prioritize vaccines, messaging, and outreach to individuals most at risk. The data offered significant predictive value regarding the transmission of the virus through specific neighborhoods based on human behavior.
>
> ***Recommendation 2.2.1:*** Use of innovative data application systems to mitigate the impact of COVID-19 on community members is a best practice and should be captured in appropriate reports, presentations, and Public Health plans, training, and exercises.
>
> ***Recommendation 2.2.2:*** The County should embrace evidence-based actions as the foundation of effective public health mitigation, response, and recovery. Policymakers, the leadership positions in the EOC/DOC should prioritize the application and monitoring of scientific data collection to support the goal of life safety.

**Observation 2.3. Area for Improvement:** Public Health Information Technology (IT) suffered from inadequate infrastructure, shortage of personnel, and a historical lack of funding.

**Analysis:** Data is required in various formats for various partners at various times, and during this incident, Public Health IT staff was often expected to be available on a 24-hour cycle to make sure reports could be run correctly. There was no surge force deployed to help IT during this incident; the existing Public Health IT staff had to work more hours until new staff could be hired. This was challenging because salaries are not competitive for the region. When new staff was added, it was accomplished through the use of emergency funds, but it is unknown whether keeping the staff will be sustainable after the funds are depleted. The amount of routine funding Public Health has received has declined over the last several years.

To maintain the operational rhythm required of this incident, tasks normally delivered and maintained by IT were handed to other departments (e.g., Communications) because response operations and daily routine work objectives could not be dually accomplished. That was coupled with assignments from the State with the County used as beta testers for the CalConnect and CalREDIE systems. Staff reported feeling overburdened, understaffed, and underfunded, which has caused work to go uncompleted, staff to quit, and difficulties in hiring.

Based on cultural standards and expectations for rapid access to data, the demand on the Data Informatics staff is anticipated to grow. As such, the staff feel pressure to meet the information demands of senior leaders, healthcare partners, law enforcement, state and federal partners, and the community.

***Recommendation 2.3.1:*** The County Board of Supervisors should seek an assessment of the status of the infrastructure of the Public Health technology department and identify sustainable sources for funding personnel and equipment at a level that allows the system to provide essential services to the County.

***Recommendation 2.3.2:*** Develop a Memo of Understanding for all County IT personnel (ISD) to support each other and PHS IT and create a staffing plan for 24/7 IT coverage during EOC activations.

**Observation 2.4. Area for Improvement:** All individuals who represent the County in response operations and engage in public discourse should base their interactions and public conversations on evidence that is clear and easy to understand.

**Analysis:** Differences in perspective and politicization of data interpretation occurred within the response, consistent with what occurred in the larger public discourse. Differences in perspective contributed to some challenging issues because the discourse was not evidence-based. The focus on essential elements of information is important for credibility

***Recommendation 2.4.1:*** Evidence-based actions are the foundation of Public Health. Leadership positions in the DOC should prioritize monitoring data collection and providing useable data sets to engaged response partners, including the EOC.

***Recommendation 2.4.2:*** Provide support or training as needed for data staff on how to navigate conversations and conflicts in biases when people respond to objective data.

### Human Resources

**Observation 2.5. Strength:** Many County employees transitioned easily to remote work and continued to offer essential services to the community.

**Analysis:** The County was able to pivot many employees to remote work quickly because those employees' work could be accomplished outside of an office setting and they had the necessary computer skills and equipment, and the infrastructure was in place. Some positions need to be on-site due to the nature of the work. Participants identified the efficacy of this dual model.

***Recommendation 2.5.1:*** Use of dual models of work that offer some staff remote work, office work, or a blended format should be considered as a long-term policy change for appropriate County positions and where such work flexibility still assures operational needs are met.

**Observation 2.6. Area for Improvement:** There were significant challenges in hiring and onboarding new personnel.

**Analysis:** It was difficult to hire regular staff through the traditional HR hiring process, which generally takes several months. Multiple department representatives in the AAR process reported that they needed people immediately rather than months down the road. While some surge capacity staff was available, it was not enough to meet the needs, and there were not enough qualified volunteers. Overall, it was reported that the antiquated HR systems limited the capacity of the response. During COVID-19, there was a finite budget jump of $25 million, which led to additional temporary staff and an increased workload. However, the County still does not have the number of personnel required to meet its needs for daily operations.

***Recommendation 2.6.1***: The County Human Resources Department should review the use of Disaster Service Workers (DSW's) before hiring additional staff.

***Recommendation 2.6.2:*** The County Human Resources Department should form a Task Force composed of representatives from different departments to examine surge capacity hiring, expedited hiring, and traditional hiring practices.

## Finance

**Observation 2.7. Strength:** The EOC Finance and Administration Section was proactive with County departments regarding tracking COVID-19 costs, which maximized reimbursement of funds from the CARES Act through December 2020 and FEMA starting January 2021.

**Analysis:** At the onset of response operations, EOC staff and the Finance and Administration Section pushed the word *tracking* to make sure everyone monitored COVID-19-associated costs. This included working with the Auditor's Office. They created and delivered just-in-time training with many departments and individuals to help understand requirements and provided templates of FEMA documents. This training sequence also included hosting webinars.

***Recommendation 2.7.1:*** Make the just-in-time finance tracking training from this incident a standard operating procedure for continued use by dedicated finance subject matter experts in future planning, training, exercises, and EOC/DOC incident activations.

***Recommendation 2.7.2:*** Write a *planning assumption* in all County plans that identifies financial tracking as mission essential for all deployed personnel.

**Observation 2.8. Area for Improvement:** Frustration with FEMA forms, lack of situational awareness, and general operational fatigue among other departments hampered the Finance and Administration Section operations.

**Analysis:** When the County chose to not extend the use of CARES Act funding in December 2021, and County transitioned to FEMA reimbursement, the Finance and Administration Section (F&A Section) experienced pushback from people who did not want to track or fill out forms, stating that they receive grant funding, so they wanted to just rely on that revenue stream. Several County entities did not universally track staff time.

***Recommendation 2.8.1:*** Write a *planning assumption* in all County Office of Emergency Services and Public Health Plans that identifies financial tracking as mission essential.

**Observation 2.9. Area for Improvement:** The EOC Finance and Administration Section lacked access to qualified staffing.

**Analysis:** There were seven staff members in the initial EOC activation, of the Finance and Administration Section. When requests for additional workers went out, they found that County departments did not want to release subject matter experts in finance from their staff. The minimum qualification was for individuals who knew how to use the Excel program with formula experience, yet individuals sent to them did not arrive with that competency. The F&A Section would provide that basic training and found that their original department would call them back after two weeks on temporary assignment. That resulted in the F&A Section only being able to utilize Disaster Service Workers with limited qualifications.

***Recommendation 2.9.1:*** Work with County Human Resources to procure qualified financial staff from temporary staffing agencies.

***Recommendation 2.9.2*:** If Disaster Service Workers are deployed to Finance and Administration, Human Resources should pre-screen them for minimum qualifications required by the Finance and Administration Section Chief.

**Observation 2.10. Area for Improvement:** Supply chain disruptions caused challenges for purchasing and contract management.

**Analysis:** Worldwide supply chains were disrupted, which resulted in orders for essential equipment being backlogged or delayed. When regular vendors were constrained, the Finance team tried leveraging contacts to look for alternatives. However, the Finance and Administration Section team was overextended, which resulted in backlogs on contract obligations and audits. Finance could have used a dedicated position to manage supply chain issues.

***Recommendation 2.10.1:*** Deploy a dedicated purchasing agent to the Finance and Administration Section, Procurement Unit when the EOC/DOC is activated for response operations.

# 3. Logistics and Supply Chain Management/Non-Nonpharmaceutical Interventions

*FEMA Core Capability - Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.*

*CDC Public Health Emergency Preparedness and Response Capability - Nonpharmaceutical interventions are actions that people, and communities can take to help slow the spread of illness or reduce the adverse impact of public health emergencies. This capability focuses on communities, community partners, and stakeholders recommending and implementing nonpharmaceutical interventions in response to the needs of an incident, event, or threat.*

**Observation 3.1: Strength:** Community-wide partnerships were critical to resource acquisition and distribution of healthcare supplies.

**Analysis:** Participants explained how multiple agencies assisted with getting resources in and out of storage and were critical for successful healthcare logistics and distribution. Effective partnerships met the requirements of the initial surge capacity and were vital to successful operations.

***Recommendation 3.1.1:*** Memorialize all results of resource acquisition and distribution in plans, reports, and public facing communications and continue partnership development as a best practice for incident response operations.

***Recommendation 3.1.2:*** Engage whole community partnerships in logistics-specific planning, training, and exercises to maintain and expand response capabilities for future incidents.

**Observation 3.2: Strength:** Preplanning vaccine logistics is a best practice for pandemic response operations.

**Analysis:** Public Health coordinated the pre-positioning of vaccines before they were developed and available for distribution. This included ordering ultra-cold storage freezers and other equipment, procuring space, and ensuring logistical needs were in place so they functioned effectively. They engaged warehouse personnel, pharmacy technicians, and couriers into the planning process. Due to this foresight, San Joaquin County was one of the first jurisdictions in the state to receive COVID-19 vaccines. Feedback from healthcare partners and physicians identified this as a best practice because it expedited distribution of thousands of vaccines to the community once they were on-site.

***Recommendation 3.2.1:*** Capture the planning process and partnership engagement for vaccine storage in all publications and presentation opportunities.

***Recommendation 3.2.2:*** Integrate planning assumptions related to unique challenges for logistics and into revisions of Office of Emergency Services/Public Health response operations plans.

**Observation 3.3: Strength:** Establishing the use of the San Joaquin County Public Health-hosted Healthy Futures/RIDE Regional Immunization Registry System for vaccine ordering and management was successful.

**Analysis:** San Joaquin County found that the State vaccine system had significant limitations with ordering and delivery cadences that were challenging to maintain so they built their own system for ordering. The Healthy Futures system has been used for other Public Health incidents, including influenza and monkeypox and is a key part of Public Health's technology infrastructure.

***Recommendation 3.3.1:*** Review standard operating procedures regarding the Healthy Futures system, followed by routine training and exercises on processes needed for rapid deployment in future incidents.

**Observation 3.4: Strength:** The Medical Health Operational Area Coordinator (MHOAC) and EMS Agency DOC Logistics Section effectively and efficiently processed medical and health mutual aid resource requests, using the WebEOC Resource Request and Deployment Module (RRDM).

**Analysis:** The EMS Agency DOC Logistics Section had a clear mission to support the healthcare delivery system by providing needed resources, such as PPE, lab supplies, rapid antigen tests, therapeutics, and medical personnel, through the medical and health mutual aid system. The EMS Agency DOC Logistics Section was able to expand operations to meet the increasing demand by utilizing Disaster Service Workers (DSWs) provided by other county departments. Once the DSWs completed Incident Command System (ICS) training the efficiency of the Logistics Section greatly increased. San Joaquin General Hospital donated additional warehouse space to Logistics, which enabled the receipt of semi-truck loads of palletized resources directly from the state warehouse. This significantly increased the volume of resource requests that could be processed and deployed each day.

The EMS Agency, in conjunction with the San Joaquin Operational Area Healthcare Coalition, has developed, exercised, and refined the WebEOC resource requesting process since 2014. The use of WebEOC enabled the Logistics Section to receive, approve, deploy and track more than 10 million pieces of PPE for distribution and meet resource requests throughout the incident.

The EMS Agency DOC activated a Healthcare Coalition Support Branch, to add new healthcare organizations into WebEOC and train the new users on how to submit resource requests. The Healthcare Coalition Support Branch added 165 new healthcare organizations into WebEOC during the public health emergency, who successfully submitted numerous resource requests.

***Recommendation 3.4.1:*** Require all San Joaquin County employees to receive Incident Command System (ICS) training, in accordance with the National Incident Management System (NIMS) training program, to improve County Disaster Services Worker performance during disasters.

***Recommendation 3.4.2:*** Continue to use and maintain WebEOC for resource requesting and information sharing.

**Observation 3.5: Strength:** The San Joaquin Operational Area Healthcare Coalition PPE cache, managed by the EMS Agency, met local resource needs at the onset of incident response.

**Analysis:** The San Joaquin Operational Area Healthcare Coalition PPE cache was established in 2008, to enhance the continuity of healthcare services, during supply chain disruptions. The cache was purchased and has been maintained using Federal Hospital Preparedness Program (HPP) grant funds. The PPE cache was sufficient to meet the needs of the healthcare coalition for the first 6 weeks of the pandemic. By the

time the cache was depleted the California Medical Health Coordination Center (MHCC) had activated its Logistics Section and was able to distribute PPE from the state warehouse and the Strategic National Stockpile (SNS).

***Recommendation 3.5.1:*** Continue to use HPP funds to maintain the cache.

**Observation 3.6. Area for Improvement:** Public Health experienced challenges with the EOC Logistics Section regarding requests for services and best use of WebEOC.

**Analysis:** Accessing logistics services from internal Public Health partners was reported to work efficiently, but its staff was stretched thin. When they reached out with resource requests, it resulted in difficult relationships. Setting up new office space, relocating staff, and then needing to relocate a second time was interpreted as less than effective planning. Efforts to understand the process just led to additional conflict. Many WebEOC requests were not fulfilled or responded to in a timely manner which required PHS to become self-sufficient.

***Recommendation 3.6.1:*** All County partners who have a role in emergency management should participate in yearly planning, training, and exercises to expand their knowledge of data sharing, logistics and WebEOC processes and procedures for better resource coordination and to build trust among partners.

# 4. On-Scene Security, Protection, and Law Enforcement/Responder Safety

*FEMA Core Capability - Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.*

*CDC Public Health Emergency Preparedness and Response Capability - Responder safety and health is the ability to protect public health and other emergency responders during pre-deployment, deployment, and post-deployment.*

**Observation 4.1: Strength:** Law enforcement partners were available to maintain on-scene security as requested throughout the incident response.

> **Analysis:** Law enforcement partners were engaged and available to support vaccination clinics, manage traffic patterns, and ensure the safety of workers and community members to address the concern over potential protests or interference.
>
> ***Recommendation 4.1.1:*** Incident Command should continue to deploy ESF-13 to the Operations Section of the EOC when it is activated.

**Observation 4.2. Area for Improvement:** The presence of law enforcement at certain community vaccination events was interpreted negatively by some community members.

> **Analysis:** Community-based organizations expressed that the large law enforcement presence at some County vaccination sites may have deterred some populations from receiving the vaccine. For example, there were six police officers present at one site, and when they were asked to lessen their visibility, they expressed a lack of awareness of how their actions may negatively impact or affect specific cultural or ethnic community members. Some organizers were concerned that this would be seen negatively by the community and would ultimately cause people to not show up for these or future vaccination events. However, changes were made to the placement of law enforcement after the initial incident in order to accommodate community requests.
>
> ***Recommendation 4.2.1:*** Incident management should engage the community- and faith-based organizations in initial planning meetings when organizing mass vaccination events to address the intersection of cultural and safety concerns.

# 5. Operational Communication/Information Sharing

*FEMA Core Capability - Ensure the capacity for timely communications in support of security, situational awareness, and operations, by any and all means available, among and between affected communities in the impact area and all response forces.*

*CDC Public Health Emergency Preparedness and Response Capability - The ability to conduct multijurisdictional and multidisciplinary exchange of health-related information and situational awareness data among federal, state, local, tribal, and territorial levels of government and the private sector. This capability includes the routine sharing of information as well as issuing of public health alerts to all levels of government and the private sector in preparation for and in response to events or incidents of public health significance.*

**Observation 5.1. Strength:** The operational briefings structure OES implemented at the weekly EOC meetings was an effective reporting structure for Emergency Support Function (ESF) representatives to share information.

**Analysis:** The weekly meetings maintained a reporting system that highlighted essential elements of information from ESF representatives and provided updates to mission advancement among partners at the EOC. The meetings were used to coordinate strategies and establish information sharing within the EOC.

***Recommendation 5.1.1:*** Operational Briefings at the EOC should remain standard practice to support response and recovery activities.

**Observation 5.2. Strength:** WebEOC was an effective real-time information sharing platform for Emergency Support Function-08, including private healthcare providers and members of the San Joaquin Operational Area Healthcare Coalition.

**Analysis:** The San Joaquin County EMS Agency purchased and implemented WebEOC in 2014, as a countywide all-hazards information sharing and emergency management platform, using Federal Hospital Preparedness Program (HPP) grant funds. The EMS Agency in conjunction with the San Joaquin Operational Area Healthcare Coalition – Emergency Preparedness Committee (EPC) developed and implemented a series of healthcare facility status report boards for hospitals, clinics, long term care, and behavioral health facilities. In addition, a Medical Health Interagency Situation Report board was created for ESF-08 county departments to share real-time information with all WebEOC users.

A new Hospital COVID-19 Situation Report board was created and implemented, in consultation with the Medical Health Operational Area Coordinator (MHOAC) and hospital representatives, to collect pandemic specific information pertaining to staffing needs, medical surge activities, and resource needs. The board was later modified to collect and report additional information required by the California Department of Public Health (CDPH). All of the boards listed above are programmed to send automatic email notifications when reports are created and/or updated.

***Recommendation 5.2.1:*** Continue to maintain WebEOC for real-time information sharing.

**Observation 5.3. Area for Improvement:** Ineffective use of the Incident Command System (ICS) resulted in poor information management from the EOC/DOC which impacted situational awareness and communication among partners and negatively affected incident response.

**Analysis:** Partners reported hearing about mission critical response operations that they could have contributed to well after they occurred. Communication formats were varied, inconsistent, and not well tracked in the Planning Branch, so messages were missed, and status updates were inconsistent, rendering them ineffective. The use of a situation status board was not deployed, so follow-up on mission objectives was dependent on interpersonal relationships. Protocols for interoperability are clear but were not utilized by command staff at the EOC/DOC, so the general staff did not utilize them either. Some participants noted that ICS was not meant for such long-term response, so everyone just adapted. However, other participants identified that ICS structured communication protocols have been found to be effective in long-term response operations for agricultural incidents. ICS organization charts were available but not well applied.

***Recommendation 5.3.1:*** ICS and SEMS training should be part of training and exercises for all County employees so it can be understood and implemented to its full capacity from the start of incident response.

***ICS and SEMS training should be tracked in PeopleSoft Training Tracking System so it is easy to identify the status of staff training.***

***Recommendation 5.3.2:*** The EOC/DOC Planning Section should employ a variety of communication technology types to disperse critical elements of information to partners for each operational period update.

***Recommendation 5.3.3:*** The EOC/DOC should host daily internal team briefings, as many staff were working remotely as a COVID-19 mitigation strategy and there was no ability for EOC/DOC team members to organically interact in person and this may have contributed to County staff working more in silos.

# 6. Operational Coordination/Emergency Operations Coordination/ Health Care and Medical Response Coordination

*FEMA Core Capability - Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.*

*CDC Public Health Emergency Preparedness and Response Capability - Emergency operations coordination is the ability to coordinate with emergency management and to direct and support an incident or event with public health or health care implications by establishing a standardized, scalable system of oversight, organization, and supervision that is consistent with jurisdictional standards and practices and the National Incident Management System (NIMS).*

*ASPR Capability - Health care organizations, the healthcare coalition, their jurisdiction(s), and the Emergency Support Function -8 lead agency plan and collaborate to share and analyze information, manage, and share resources, and coordinate strategies to deliver medical care to all populations during emergencies and planned events.*

**Observation 6.1. Strength:** Most staff demonstrated exceptional professionalism and dedication regarding life safety and incident stabilization. Despite ongoing challenges, people took personal ownership of problems, worked with mid-level managers and supervisors to fill various leadership gaps, and persevered through an incident that was politicized by many different entities.

**Analysis:** Participants in this AAR/IP data gathering process identified individuals who did their job in spite of the physical danger, lack of leadership, and political cruelty. Dr. Maggie Park, the Public Health Officer, was referenced by name more than 50 times for her perseverance and professionalism in the midst of public berating and death threats. Just as often, the discord, poor leadership, and lack of county-wide organization was mentioned, along with sadness over the loss of colleagues.

***Recommendation 6.1.1:*** Openly express gratitude to colleagues and community members for their efforts to provide service during COVID-19 response operations. Make conscious decisions to learn from mistakes, take ownership of actions, and publicly commit to meaningful change.

***Recommendation 6.1.2:*** Address the organizational structure of the Health Officer and DOC Director roles.

**Observation 6.2. Area for Improvement:** Lack of unity, purpose, structure, and respect between Public Health, EMS, OES, the CAO's Office, and the Board of Supervisors.

**Analysis:** A version of Unified Command was not instituted at the onset of the incident, which resulted in a lost opportunity for policy direction, Command and Control, and mission setting. Each department/organization was identified for some notable activity independently, but because they were not in compliance with the National Incident Management System, each is culpable. In all 83 interactions with interview participants, they identified individuals and some departments that they consider trusted partners, and in all 83 interviews, lack of effective senior leadership and coordination among the entities listed above at the onset of COVID-19 was identified as having negative impacts on response operations. The desire to level set and course correct was regularly expressed as was the need for the County to re-establish its credibility with the community it purports to serve.

***Recommendation 6.2.1****:* Adopt and implement the National Incident Management System at all levels of County government.

***Recommendation 6.2.2****:* Conduct a moderated Critical Incident Stress Debriefing for senior leadership in Public Health, EMS, OES, the CAO's Office, and the Board of Supervisors to address continued hostility among these partners.

***Recommendation 6.2.3:*** When hiring senior leadership positions, include people in equitable positions from around the county to begin the process of team building and establishing trust between departments.

***Recommendation 6.2.4:*** According to ICS and NIMS, ESF-8 takes the lead on all Public Health crisis events and, by default, is the presumed lead in the COVID-19 response.

# 7. Planning

*FEMA Core Capability - Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.*

*CDC Public Health Emergency Preparedness and Response Capability - Communities use standardized language to set targets that reflect the level of capability they plan to build and sustain. Communities use the same standardized language to measure how much capability they have. Not all standardized targets may be required for all communities.*

*ASPR capability - The community's health care organizations and other stakeholders—coordinated through a sustainable health care coalition—have strong relationships, identify hazards and risks, and prioritize and address gaps through planning, training, exercising, and managing resources.*

**Observation 7.1. Area for Improvement:** Rapidly adapt Incident or Emergency Action Plans to address issues that are unique to the incident, such as the emergence of vaccine deniers who became a new and unanticipated vulnerable population.

**Analysis:** Existing planning assumptions address populations that are considered more vulnerable in an incident (e.g., those with pre-existing medical conditions, the very young or very old, those who speak English as an additional language, etc.) Participants in the AAR process noted that they did not anticipate the national politicization of COVID-19 vaccines and the emergence of deniers. The environment in the County at the onset of the incident was a call for safe and rapid development and delivery of effective medical countermeasures. This devolved into contentious public dialogue that was challenging for Public Health to respond to because they are prepared to address interactions through scientific reasoning. What emerged was a new vulnerable population: community members with no interest in masking and vaccines. Opportunities could have been created to expand outreach to understand the foundation of beliefs and establish trusted relationships with community members in this population segment.

***Recommendation 7.1.1:*** Write a planning assumption in all OES and Public Health Department plans that identifies the emergence of unexpected political challenges. Use the planning process to address organizational strategies to adapt and tailor response and recovery operations that address issues that emerge from the whole community.

***Recommendation 7.1.2:*** Improve and increase investments and outreach in rural communities and through community- and faith-based organizations that are yet to have strong relationships with Public Health and OES.

**Observation 7.2. Area for Improvement:** Public Health response plans were not applied in a timely manner to COVID-19 response operations.

**Analysis:** Although there was an existing set of plans and annexes available to address response operations to public health emergencies similar to a pandemic, they were not fully used at the onset of the incident.

***Recommendation 7.2.1:*** Update and revise the Pandemic Plan with the active engagement of the whole community, then train and exercise all stakeholders in the operational expectations, followed by a robust updating process that occurs every three years.

# 8. Public Health, Healthcare, and Emergency Medical Services/Medical Surge

*FEMA Core Capability - Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, complete health assessments, medical, plus behavioral health support, and products to all affected populations.*

ASPR Capability - Health care organizations—including hospitals, EMS, and out-of-hospital providers—deliver timely and efficient care to their patients even when the demand for health care services exceeds available supply. The HCC, in collaboration with the ESF-8 lead agency, coordinates information and available resources for its members to maintain conventional surge response. When an emergency overwhelms the HCC's collective resources, the HCC supports the health care delivery system's transition to contingency and crisis surge response and promotes a timely return to conventional standards of care as soon as possible.

## Public Health Laboratory Testing

*CDC Public Health Emergency Preparedness and Response Capability - Public health laboratory testing is the ability to implement and perform methods to detect, characterize, and confirm public health threats. It also includes the ability to report timely data, provide investigative support, and use partnerships to address actual or potential exposure to threat agents in multiple matrices, including clinical specimens and food, water, and other environmental samples.*

**Observation 8.1. Strength:** Having a County Public Health Lab with long-term dedicated personnel who had a deeply felt sense of purpose to support operations.

**Analysis:** San Joaquin County has a public health laboratory, whereas most counties in the state do not. It is an incredibly valuable resource staffed with highly trained individuals that made a substantial effort to maintain this regional asset that supports the public health lab needs of 7 additional counties. Staff collaborated well together, working hard during busy times, working in pairs during testing, and supporting each other. They were able to apply their experience from H1N1 to this new incident type. There was significant institutional knowledge among senior staff, and it was relied upon by the full team as a foundation for how to deal with both the task at hand and the stress surrounding it. The San Joaquin County Public Health Lab was the first entity in the county to implement COVID-19 testing in addition to implementing an ordering system for COVID-19 tests to be done by local FQHCs in homeless shelters and farmworker settings.

***Recommendation 8.1.1:*** Official recognition of the Laboratory staff for their role in response operations would be appropriate.

**Observation 8.2. Strength:** Laboratory staff was adaptive to the unique and rapidly changing incident.

**Analysis:** Participants noted that they were able to adapt a half-dozen new testing platforms and train staff on new automated instruments purchased with incident funding sources. They created and provided just-in-time training for surge capacity staff. They identified appreciation for how warehouse logistics staff supported their efforts by conducting the courier runs.

***Recommendation 8.2.1:*** Document the newly developed lab training as standard operating procedures.

**Observation 8.3. Area for Improvement:** The laboratory was understaffed, causing existing staff to feel overwhelmed.

**Analysis:** The laboratory was open seven days per week for the first several months of the pandemic. During that period, individuals were given a single day off, which was a rotating weekday. They report being understaffed and under a lot of pressure. Participants indicated that much of the work pressure came from those making requests of the lab without understanding the process it took to complete tests or the time required. This work pace pushed them to go above and beyond reasonable work rhythms and resulted in burn out and physical damage to their bodies.

***Recommendation 8.3.1:*** A representative from the Lab should be a liaison to the Operations Section in the DOC/EOC and provide realistic mission objectives that can be included in the operational period Emergency Action Plan and achieved in the operational period.

***Recommendation 8.3.2:*** Any staff with an injury caused by work should report it to their supervisor and follow applicable county HR procedures and policies.

**Observation 8.4. Area for Improvement:** Supply chain shortages on laboratory equipment.

**Analysis:** There were significant shortages of lab equipment, such as pipettes and reagents, as well as delays in national and international supply chain deliveries. Staff indicated that other labs around the state shared supplies as practical, but that ended quickly. When CARES Act funding helped procure the equipment, eventually they had a surplus of supplies and storage needs. They reported a huge influx of materials and not having the space, and then having to find storage.

***Recommendation 8.4.1:*** The laboratory should work through the Logistics Section of the DOC/DOC to request resource storage for response operations materials.

## Public Health Surveillance and Epidemiological Investigation

*CDC Public Health Emergency Preparedness and Response Capability - Public health surveillance and epidemiological investigation is the ability to create, maintain, support, and strengthen routine surveillance and detection systems and epidemiological investigation processes. It also includes the ability to expand these systems and processes in response to incidents of public health significance.*

**Observation 8.5. Strength:** Epidemiologists set up a COVID-19 tracking system rapidly resulting in valid data collection of morbidity reports, which were made available to response partners who needed up-to-date patient counts.

**Analysis:** When the team of epidemiologists were deployed to the DOC to begin response operations for COVID-19, they developed a system overnight. This was a quick adaptation to rapidly changing public health issues. This team saw a critical issue and understood the implications of having a data tracking system. This rapid and accurate data collection was utilized by Public Health and other response operations partners. The result was evidenced-based planning and operations applied to help protect the safety and health of the public.

***Recommendation 8.5.1:*** Access to data systems and transparency of the process should be a standard planning assumption and operationalized in the DOC.

***Recommendation 8.5.2:*** Planning assumptions should include identifying that data systems will need to be developed or tailored to the incident at hand, so personnel and support should be available to ensure support of that process.

**Observation 8.6. Strength:** The Case Investigation and Contact Tracing Teams (CI/CT teams) established a flexible communication system that adapted to both the formal and informal communication requirements of the group.

**Analysis**: Conditions at the start of the incident changed daily, so the CI/CT team began to address needs for communication surges by having daily huddles and adjusting briefing schedules as needed. The stress of the incident was met by strengthening interpersonal relationships on the team as well as establishing redundancies so more than one persona had access to data and briefing points. There were primary points of contact, with clearly identified back-up people who had the same information. The operational management load was big between long term care facilities, nursing facilities, developmentally delayed individuals' homes, that communication was key to operational success on a daily basis. Members of the focus group noted that they were proud of the intentional efforts they made to strengthen communication channels because it had immediate positive implications on their operations.

***Recommendation 8.6.1:*** Capture the process of strengthening group dynamics by assessing and meeting the continuous communication needs of team members. Add examples captured from the CI/CT teams to lessons learned and incorporate into ICS training.

**Observation 8.7 Strength:** The CI/CT teams provided just-in-time training to new team members on policies related to their operations and additional training opportunities to established team members.

**Analysis**: New staff was brought on and time was provided to train them on operational guidelines and policies. This helped keep the team on the same page when they felt pressure from everchanging guidelines. Participants in the hotwash noted that they were encouraged by management to sign up for trainings that were provided by other local health jurisdictions, so they felt that sharing ideas in those settings with other professionals was helpful.

***Recommendation 8.7.1.:*** A training needs assessment should be conducted to determine just-in-time-training requirements for all deployed individuals as a standard operating procedure for continued use by a dedicated disaster field operations training (DFTO) team assigned to the EOC or DOC under Operations.

**Observation 8.8 Area for Improvement**: The awkward political environment throughout County government and its stakeholders impacted contract tracing and investigations.

**Analysis:** There were three distinct groups the CI/CT outbreak teams worked with, schools, businesses, and Care Homes. While there was strong communication in each of the teams, there was a lot of overlap in guidance among the three groups. There needed to be a lead to support and guide these groups together. It would have helped with consistency in service delivery. Participants noted that they would ask Public Health management for support regarding overarching policy decisions and receive feedback that it was going to delivered soon, only to be told that Public Health leadership did not support the

suggested policy suggestions. Beyond the Public Health Department level, participants noted that they felt they did not get support from the Board of Supervisors. That group was providing different information to members of the county than Public Health was. Additionally, participants noted that some school districts did not allow school nurses to be involved with COVID-19, so they had workarounds with janitorial staff to provide the school with COVID-19 information. Some reported having secret calls from school nurses asking for COVID-19 information. The overarching theme from these participants was how groups were operating independently and there was a lack of understanding of the mission of Public Health and specifically about the contract investigation and tracing function. This impacted the public because all County partners could have had consistent message instead of many.

***Recommendation 8.8.1:*** ESF-8 is the lead on Public Health crisis events and as such other County agencies and institutions should align their objectives to support the overarching mission of life protection.

**Observation 8.9 Area for Improvement**: There are opportunities to improve engagement with vulnerable populations throughout the County.

**Analysis:** The website SJC Engage was a major outreach tool, but some community members could not access it. This was generally due to lack of computer skills, internet connection, or ease of interacting in English. Other participants noted that some unhoused individuals did not have cellphones, or were in shelters, then would move on without providing follow up information. There was also lag in technology translations services for Spanish speaking community members. 2-1-1 was one work around that was identified as successful. While participants noted that they would eventually find ways to address issues among vulnerable populations, they were surprised that these community members had not been well planned for previously, and that lack of planning led to delayed response to their needs.

***Recommendation 8.9.1:*** Planning assumptions, training, and exercises should be constructed to prioritize essential services (e.g., safety, health, communication) needed by vulnerable populations throughout the County.

## Medical Countermeasure Dispensing and Administration

*CDC Public Health Emergency Preparedness and Response Capability - Medical countermeasure dispensing and administration is the ability to provide medical countermeasures to targeted population(s) to prevent, mitigate, or treat the adverse health effects of a public health incident, according to public health guidelines. This capability focuses on dispensing and administering medical countermeasures, such as vaccines, antiviral drugs, antibiotics, and antitoxins.*

**Observation 8.10. Strength:** Public Health's vaccine strategy had a clear mission to focus on vulnerable populations as priority eligible groups, which likely mitigated health impacts on the community.

**Analysis:** Although federal vaccination guidance changed rapidly, San Joaquin County was still able to successfully prioritize eligibility groups. Participants noted that it was their fierce adherence to the mission that contributed to ensuring health care workers and vulnerable populations had first access to the vaccine. Utilizing Community Centers as trusted partners, points of distribution had access and functional needs support via logistics and public information (e.g., golf carts to transport patients from personal vehicles to the vaccination area, and critical information was available in multiple languages). In-home

delivery of vaccination was provided by PHS to those with high access and functional needs. Public Health also coordinated vaccination at skilled nursing facilities, agriculture partners, homeless shelters, jails, the Port, businesses, churches, youth events, WIC, and community events and centers for every age group, as they became eligible, for more than 18 months utilizing department staff and a mobile unit from the state as vaccinators. Vaccination sites, events, and partners were chosen with a combination of community input and evidence-based decision making.

***Recommendation 8.10.1:*** Memorialize strategies and tactics utilized to support vulnerable populations as a priority mission for medical countermeasures operations and identify it as a best practice.

***Recommendation 8.10.2:*** Develop and update checklists to operationalize critical information logistical support for access and functional needs populations at points of distribution.

***Recommendation 8.10.3***: Vaccine delivery strategies need to be multi-modal to address whole community planning factors.

***Recommendation 8.10.4***: Medical Countermeasures Plan updates, training, and exercise schedules should include membership from community-based organizations, advocacy groups, and private sector partners who support transient community members working in agriculture.

**Observation 8.11. Strength:** The San Joaquin County Medical Countermeasures Plan (mass dispensing operations) was considered a successful model by others in California.

**Analysis**: As the County reported to State and regional partners how successfully mass dispensing operations were operating, representatives from other organizations, including the state, reached out for information about best practices as well as how to develop an in-home vaccination program. Some individuals visited on-site to observe and bring best practices back to their organizations. The EMS Agency created and posted a video online that detailed how to set up a new vaccination site and was able to refer others to this as a support tool.

***Recommendation 8.11.1:*** Memorialize mass dispensing operations as a best practice in all reports and documentation related to this operation

***Recommendation 8.11.2:*** Consider presentations or publications that can publicize the success of mass dispensing operations to highlight the County as a subject matter expert in this area.

**Observation 8.12: Area for Improvement:** Promotional methods identifying transportation support options require improvement.

***Analysis:*** Participants in the Community Based Organization stakeholder groups identified the inequity of those without private transportation having negative impacts regarding the access to testing and vaccination sites. However, PHS had a strike team for homebound residents, used Mobile Snap Nurse teams for outreach, had significant vaccination and testing at schools and community centers in neighborhoods. The EOC and DOC partnered with RTD to provide free rides to those sites. While these positions may seem diametrically opposed, each can be true based on access to information about where the need for transportation services is greatest, and in what format and frequency the solutions are being offered.

***Recommendation 8.12.1:*** The EOC and DOC should establish relationships with Community Based and Faith Based Organizations early in response operations to address emerging transportation needs for those community members without personal transportation.

***Recommendation 8.12.2:*** The JIC should work with CBO and FBO's to develop a communication outreach plan that uses the most effective communication formats to reach community members including no-technology, low technology, and high-technology methods (face-to-face, print, social media).

***Recommendation 8.12.3:*** The County should anticipate supplementing the cost of transportation to and from testing and vaccination sites as a planning factor associated with equitable access to this essential service.

## Medical Surge

*CDC Public Health Emergency Preparedness and Response Capability - Medical surge is the ability to provide adequate medical evaluation and care during events that exceed the limits of the normal medical infrastructure of an affected community. It encompasses the ability of the health care system to endure a hazard impact, maintain or rapidly recover operations that were compromised, and support the delivery of medical care and associated public health services, including disease surveillance, epidemiological inquiry, laboratory diagnostic services, and environmental health assessments.*

**Observation 8.13. Strength:** Having access to an existing Mass Vaccination Plan provided guidelines that could be tailored to the incident in hand, permitting staff to rapidly focus on operations and delivery of vaccinations to the community.

**Analysis:** The County's Mass Vaccination Plan was adaptable to the evolving circumstances of COVID-19. This incident quickly moved from a local to a worldwide epidemic, and the staff at Public Health were able to adjust planning assumptions, strategies, operations, and tactics to meet the essential needs of the impacted community. The plan was tailored to the specific needs of the community, including health educators for schools; a drive-through testing event for children with free food, backpacks, and coloring books; and outbreak management teams to handle outbreaks in jails, essential businesses, cruise ships, and fishing and agriculture industries.

***Recommendation 8.13.1.*** In all appropriate documents, memorialize the process of adapting the Mass Vaccination Plan as a best practice for COVID-19 response operations.

***Recommendation 8.13.2:*** Put the Mass Vaccination Plan on a four-year update schedule that includes whole community engagement in the process of review, revision, training, and exercising the new plan.

**Observation 8.14. Strength:** Public Health's partnership with healthcare providers was a successful element of surge capacity in COVID-19 response operations.

**Analysis**: A variety of stakeholders who partnered with Public Health provided surge capacity to expand vaccine clinic effectiveness. Healthcare providers responded early in the incident, and along with Public Health staff, quickly provided up to thousands of vaccines a day. That number advanced by 300–500% rapidly once categories for priority distribution were established and Hospital Clinics were part of surge

capacity. The Human Services Agency (HSA) assisted with surge capacity staff to meet operational demands of ongoing events.

***Recommendation 8.14.1:*** In all appropriate documents, memorialize the successful partnership with healthcare providers in the County and its positive impact on public health.

**Observation 8.15. Strength:** Public Health's partnership with community-based and faith-based organizations coupled with excellent health data targeting was a successful element of surge capacity planning in COVID-19 response operations.

**Analysis**: It was a successful strategy to use a data system to identify at risk community members by zip code and prioritize them for vaccination. This deliberate action shows a strong understanding the efficacy of models that reach out to impacted populations, rather than hoping they come to the healthcare system for assistance. This approach shows an understanding of the historic distrust some community members have regarding healthcare systems. The use of an evidence-based strategy, coupled with partnerships with community- and faith-based organizations helped Public Health gain access to at-risk populations and mitigated the impact of COVID-19.

***Recommendation 8.15.1:*** Pre-established long-term relationships with community-based and faith-based organizations should be identified as a critical element in the success of mass vaccination surge capacity in all planning, training, and exercise activities.
***Recommendation 8.15.2:*** Public Health should examine its existing plans for areas where it can expand upon equity issues.

**Observation 8.16. Strength:** San Joaquin County hospitals successfully increased medical surge capacity, well beyond licensed bed capacity, to meet increasing demand.

**Analysis**: The Medical Health Operational Area Coordinator (MHOAC)/EMS Agency Administrator facilitated weekly San Joaquin Operational Area Medical Health Multiagency Coordination (Med MAC) group conference calls with hospital and Healthcare Services executives, to maintain situational awareness, as well as establishing policy concerning daily COVID-19 bed polling, surge planning activities and the allocation of limited resources.

In late 2020, the EMS Agency was awarded a $151,713 Hospital Preparedness Program (HPP) COVID-19 Supplemental Grant, to support the COVID-19 response in San Joaquin County. The MHOAC and Med MAC members unanimously agreed that the best use the funds would be for expanding Intensive Care Unit capacity, by purchasing a cache of Philips MP5 portable patient monitors. The EMS Agency purchased and deployed the monitors to the hospitals in May 2021. On September 22, 2021, the average hospital ICU bed capacity in San Joaquin County was 153%. During this same month, San Joaquin General Hospital reached an ICU capacity of 231% and St. Joseph's Medical Center 181%. According to the U.S. Department of Health and Human Services Assistant Secretary for Preparedness and Response (HHS ASPR) Region IX Project Officer, San Joaquin County hospitals had the highest ICU surge capacity in the United States at this time during the pandemic.

***Recommendation 8.16.1:*** Continue to convene Med MAC group meetings to provide a forum for executive level healthcare leadership to work collaboratively during times of extreme service demands or

other emergency conditions which threaten to overload resources or disrupt the delivery of medical care in the county.

**Observation 8.17. Area for Improvement:** There is no identified end point for the role of Public Health in COVID-19 response operations.

**Analysis:** Response operations to COVID-19 have entered a steady state that involves a variety of healthcare partners providing community access to vaccines. The future of COVID-19 immunizations will need to become a component of the overall healthcare system. Public Health cannot be expected to lead this response indefinitely. There should be an identified transition point (e.g., similar to emergency management phases of a disaster) when COVID-19 risk, information, and immunization programs are in a similar operational rhythm to Public Health programming for flu shots.

***Recommendation 8.17.1:*** Command Staff engaged in COVID-19 response operations from Public Health and OES should work cooperatively with private sector healthcare partners to prepare a transition strategy for the end of the COVID-19 healthcare emergency and the demobilization of Public Health staff and resources.

***Recommendation 8.17.2:*** Public Health should consider establishing either a demobilization plan or a long-term recovery plan for this incident so it can anticipate implications to the community as the COVID-19 public healthcare emergency ends.

# 9. Public Information and Warning/Emergency Public Information and Warning

*FEMA Core Capability - Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken, and the assistance being made available.*

*CDC Public Health Emergency Preparedness and Response Capability - Emergency public information and warning is the ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management personnel.*

**Observation 9.1: Strength:** Communications staff expanded its use of technology to meet response operation needs.

**Analysis:** As Public Health IT exceeded its resources and capabilities, they worked to train Risk Communications staff to assume direct responsibility for posting material on the County internet site using Hoot Suite, Adobe Pro, and video editing software. This expanded access to software programs also expanded the trusted relationship between programs while addressing the communication needs of the community. Where Public Health put out 1–2 messages on social media per week pre-incident, Risk Communication was posting 3–4 a day during the height of response operations.

***Recommendation 9.1.1:*** Document the operating procedures for software use, internet access, and social media posting in a Joint Information Operations Manual for application in future activations.

***Recommendation 9.1.2:*** Adopt and enforce an updated schedule, training, and exercise plan for the Joint Operations Manual.

**Observation 9.2: Strength:** The Public Information Officers Group meeting was a best practice for communication strategies during COVID-19 response operations.

**Analysis:** Within two weeks of activating the EOC, a Public Information Officer (PIO) group was formed and began meeting with 20 County and City PIOs. It was the first time a group of this nature was operationalized. The operational rhythm was daily meetings, eventually shifting to weekly meetings. The focus was to speak with one voice when constructing alerts and disseminating messages to the community. The OES EOC never closed during response operations, so the group remains activated if needed.

***Recommendation 9.2.1:*** Document the formation of the PIO Group as a best practice in COVID-19 response operations and capture the information in all appropriate documents and presentations.

***Recommendation 9.2.2:*** The PIO Group can serve the community in preparedness as well as response and recovery operations, so it should remain active and establish countywide objectives to strengthen communication channels with the community.

***Recommendation 9.2.3:*** The PIO Group would benefit from an intentional focus on communicating with community members who have access and functional needs and including PIOs from community- and faith-based organizations.

**Observation 9.3: Strength:** County departments combined forces to appropriately staff the Joint Information Center.

**Analysis:** The EOC reached out to partners throughout the County requesting specific individuals who had relevant experience and training as PIOs, emergency response operations, or social media. Fire Departments sent staff to support operations. Disaster Service Workers were also activated to work in the Joint Information Center (JIC) in support roles, including content building, monitoring phones, answering questions, basic translation, and general research. CBO's and FBO's assisted with message content and design through the Resilient Community Group.

***Recommendation 9.3.1:*** A JIC that is staffed with a combination of volunteer and professional communicators is uniquely positioned to conduct communication that is both reflective of San Joaquin County and serves its population well. This staffing pattern should be documented as a best practice for JIC formation and functioning.

***Recommendation 9.3.2:*** In the initial stages of EOC activation, personnel deployed to the JIC should conduct a communication needs assessment and develop a staffing plan and work plan that supports messaging and systems designs that address the needs of the whole community.

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**Observation 9.4: Strength:** Community-based organizations supported PHS Risk Communication, Mitigation teams and the JIC through public outreach campaigns.

**Analysis:** To address gaps in communication strategies, community-based organization members volunteered to construct messages that were intentionally designed for younger community members. One volunteer created a video titled "COVID WTF (What's the Facts)" with the support of professional staff from Public Health. It resulted in an increase in youth vaccinations. PHS contracted with 5 CBOs for Testing Messaging and when the JIC disbanded in July 2021, most outreach and messaging migrated to the PHS Risk Comms and Mitigation teams, including a Superheroes vaccination campaign with the creation of Boost the Raccoon as its mascot and an art contest where 170 entries from County youth were received.

***Recommendation 9.4.1:*** Partnerships with community members for communication campaigns is an effective force multiplier for response operations messaging and are a best practice for community engagement. This practice should be captured and incorporated into planning, training, and exercises for ESF 15 in future EOC activations.

***Recommendation 9.4.2:*** Strengthen working relationships with non-traditional media outlets for greater access to public health emergency information (e.g., bloggers, vloggers, influencers, etc.).

**Observation 9.5: Area for Improvement:** Inconsistent messaging from federal and state levels of government and private sources regarding transmission, testing, masks, and vaccines affected messaging credibility at the county level.

**Analysis:** At the onset of the incident the community lacked understanding about COVID-19, its transmission and mitigation measures in part because it was a rapidly changing incident but also because of and conflicting information from various sources around the County. Information and misinformation came from a variety of government agencies and private sources, which resulted in information overload. It is critical that in a high-risk environment, the public have access to routine messaging from subject matter experts in Public Health.

***Recommendation 9.5.1:*** Train more County staff in crisis and risk communication techniques.

***Recommendation 9.5.2:*** Train all County staff on mis/disinformation campaigns and how to effectively address mis/disinformation.

***Recommendation 9.5.3:*** Focus on sustained engagement with the community to re-establish trust lost over the extended COVID-19 incident.

**Observation 9.6. Area for Improvement:** The JIC was not fully prepared to distribute information in the 10 languages most common in the community or to a diverse population that speaks at least 39 languages at home.

**Analysis**: The JIC did well to produce materials in English and Spanish but is noted as having a gap in other languages, a similar issue found with most public agencies.

***Recommendation 9.6.1:*** Update the JIC guidelines to include pre-scripted templates for emergency messaging in multiple languages by partnering with City, County, and community groups to pool resources.

***Recommendation 9.6.2:*** Strengthen working relationships with non-English media outlets for public health and OES response information.

**Observation 9.7: Area for Improvement:** The JIC's focus on messaging in English and Spanish may have inadvertently created gaps in outreach and communication efforts to other underserved community members.

Analysis: The deaf and hard of hearing community needs more consistent access and American Sign Language (ASL) interpreters and closed captioning. Response staff need to understand how to better access and disseminate information through networks that reach deaf and hard of hearing community members. While it was noted that the JIC was excellent at producing social media and written communications for the mass public, focus on underserved communities required additional work. While there was a clear effort to close caption and provide some interpretation services, overall, this was a lost opportunity and created a credibility gap with historically marginalized communities.

***Recommendation 9.7.1:*** Establish stronger working relationships with disability advocacy groups and incorporate their communication strategy ideas into emergency management and public health plans and training and exercise schedules.

**Observation 9.8: Area for Improvement:** Stronger coordination between the EOC Command Staff and the JIC will focus efforts on mission critical assignments.

**Analysis:** The JIC, like other functions in the EOC, is mission-focused and prioritizes work based according to mission objectives. This is accomplished by a coordinated effort among all personnel deployed to the JIC. Participants in the AAR discussion group noted that this operational rhythm was often interrupted by department leaders who jumped the line and did not collaborate with other response organizations in an effort to prioritize other projects. Assignments that came in from leadership were expected to be acted upon without regard to staff capabilities and existing workloads. The result was often stopping mission critical activities (e.g., risk communication, IT, and translation/captioning services). There was an assumption that resource requests from those who had day-to-day leadership roles still had priority over ICS leadership roles. This impacted essential communication functions.

***Recommendation 9.8.1:*** All County employees, including senior leadership, need to understand the process of incident command systems and the focus on mission objectives to manage incidents. Staff roles should be supported agency-wide during response operations, and the chain of command should be followed, rather than day-to-day organizational leadership positions.

**Observation 9.9: Area for Improvement:** There is a need for regular training and exercise opportunities for people who will deploy to the JIC for response and recovery operations.

**Analysis:** Participants in the focus group noted the excitement they felt when the JIC was functioning at a high level with a unified purpose. That was linked to the development of partnerships and a mission-centered workplace. The more they worked in a joint environment, the better they met community communication needs. This operational rhythm comes with objective setting, practice, feedback, and performance measures. This can be established through routine training and exercise opportunities. Each agency in the County needs a designated full-time PIO to attend JIC training and exercises, participate regularly in EOC activations, and contribute to the JIC Guidelines updates. If there is only one PIO for the department, redundancy plans should be established so critical department communications can continue and the JIC is staffed as well

***Recommendation 9.9.1.:*** Identify County staff that can deploy to the JIC.

***Recommendation 9.9.2:*** OES should schedule quarterly engagements for individuals who may be deployed to the JIC. It should progress from planning, operational updates, training, and exercise each year with an all-hazards approach to incident type.

# 10. Situational Assessment/Information Sharing

*FEMA Core Capability - Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.*

*CDC Public Health Emergency Preparedness and Response Capability - The ability to conduct multijurisdictional and multidisciplinary exchange of health-related information and situational awareness data among federal, state, local, tribal, and territorial levels of government and the private sector. This capability includes the routine sharing of information as well as issuing of public health alerts to all levels of government and the private sector in preparation for and in response to events or incidents of public health significance.*

**Observation 10.1: Strength:** Outreach and information sharing with the private sector guided mitigation measures for essential workers.

**Analysis:** Private sector agricultural businesses reported strong relationship-building efforts on the part of Public Health. Guidance on health and safety issues were provided and on-site visits for discussions about the incident were presented. Factories opened doors to show off mitigation measures that were implemented to protect essential workers.

***Recommendation 10.1.1:*** Continue to expand outreach and information sharing with agricultural private sector businesses in the County to grow trusted relationships.

***Recommendation 10.1.2:*** Invite representatives from the agricultural industry to participate in emergency management planning, training, and exercises on a yearly basis.

**Observation 10.2: Strength:** The use of phone banks and the 2-1-1 call center for additional support provided two-way communication for members of the impacted community.

**Analysis:** A variety of community members require a variety of communication formats to access information. The use of staff to answer questions directly, call individuals back, and take the time to explain processes and impacts was an excellent outreach effort to encourage situational awareness. This addressed an equity issue for community members who are less comfortable with social media or have limited access to technology. It helps with language barriers and the desire to follow up with detailed or tailored information.

***Recommendation 10.2.1:*** The use of telephone technology that reaches specific community members should be considered an effective outreach format to support situational awareness during response operations.

**Observation 10.3: Strength:** Pre-existing relationships among San Joaquin Operational Area Healthcare Coalition member organizations permitted rapid expansion of information sharing groups, such as the Emergency Preparedness Committee (EPC) and Medical Health Multiagency Coordination (Med MAC) Group MedMAC, to address critical issues during response operations.

**Analysis:** Exchanging health-related information and situational awareness data with healthcare providers was conducted weekly on group calls. This engaged executives, physicians, and senior leaders who discussed a wide variety of topics, including therapeutics/vaccines, staffing, and patients. Information was

shared about funding and grants to purchase patient monitors and address medical surge needs. This was possible in part due to effectively functional relationship between the MHOAC, EMS Agency, healthcare emergency preparedness coordinators, and Public Health. It was sustained because of timely, updated, and forthright information sharing that provided partners with the appropriate foundation for decision-making. Dr. Park was noted as an exceptional Med MAC partner in this process.

***Recommendation 10.3.1:*** Memorialize the functions and impact the MedMAC had on COVID-19 response operations by including it in all publications, presentations, and records of the incident.

***Recommendation 10.3.2:*** Prioritize support of communication sharing venues among private sector healthcare partners by engaging them in planning, training, and exercises conducted by healthcare coalition members.

**Observation 10.4: Strength:** The Farming Bureau and the Office of the Agricultural Commissioner were active and engaged participants in advocating for situational awareness for workers in the agricultural industry.

**Analysis:** Private sector partners in the agricultural industry required connections to State and County Public Health departments, the health officer, and local health clinics to understand the nature and extent of the hazard, any cascading effects, and the status of the response relative to their business and the people they employed.

Situational awareness for farm workers meant reaching out to them in the community or on work sites. Information sharing was followed by deployment of testing and vaccinations. The Hispanic community, who disproportionately represent the County farm workers, were represented in the decision-making and considered as a key stakeholder since they were considered essential workers. Coordination with the Public Health Officer, Dr. Park, was noted as effective and resulted in her providing both PPE and guidance on operational adjustments.

***Recommendation 10.4.1:*** Capture the engagement of the Farming Bureau and Office of the Agricultural Commissioner as a best practice for providing tailored information to essential workers during response operations.

***Recommendation 10.4.2:*** Engage agricultural partners in planning, training and exercises conducted by OES and Public Health partners on a routine basis.

**Observation 10.5: Strength:** The Resilient Community Advisory Committee was an exceptionally effective format for gathering and disseminating information with community-based and faith-based partners in San Joaquin County.

**Analysis:** Situational awareness is directed at all decision makers, which includes trusted organizations in a community. The obligation to provide decision-relevant information about the incident should be equitable and presented in formats that are actionable from credible sources. The focus groups that participated in this process represented a variety of community-based and faith-based organizations. Each represented the community members around the County that they interact with routinely. Each group provided feedback that they felt respected in the relationship and were provided significant information

in a variety of effective formats to address the nature and extent of the hazard. Their specific feedback is represented in the recommendations.

***Recommendation 10.5.1:*** The Resilient Community Advisory Committee is a national standard for an equitable community engagement model. It should be identified as a best practice, continually expanded to address the evolution of San Joaquin County, and supported with the necessary resources.

***Recommendation 10.5.2:*** Representatives from the JIC should continue to utilize the subject matter experts on the Resilient Community Advisory Committee to inform its communication strategies.

***Recommendation 10.5.3:*** Both OES and Public Health planners should utilize the Resilient Community Advisory Committee to extend relationships into the community with members who can be active participants and inform the planning process for both organizations. Going forward, plans should reflect whole community standards.

**Observation 10.6. Area for improvement:** Establishing long-term partnerships between the Agricultural Task Force, Community-Based Organizations, Public Health, and OES.

**Analysis:** There are specific capabilities and requirements that intersect between many community stakeholders and agriculture. This may include supply chain disruptions, translation services, school lunch supplies, liaison functions with farm workers, or regulation enforcement. There was a noted gap in communication and limited coordination with agriculture workers. An Agricultural Task Force was formed by El Concilio, a CBO to establish partnerships and to make up for lack of clarity in response operations plans, services, and communication strategies from the County.

***Recommendation 10.6.1:*** Identify establishing an Agricultural Task Force as a best practice to conduct the multidisciplinary exchange of information that was relevant for COVID-19 response operations.

***Recommendation 10.6.2:*** Public Health and OES should strengthen working relationships and partner in planning, training, and exercise development.

**Observation 10.7. Area for improvement:** Providing decision-relevant information should not be dependent on access to technology and its infrastructure.

**Analysis:** Participants noted that the County website for community-based organizations only had online vaccination registration available, and some community members lacked the necessary technology to access it. This created some obstacles. It was identified that there should be other options available, such as paper copy distribution sites for registration. Some elements of the gap were addressed by contracting with 2-1-1 to answer a variety of questions by phone.

***Recommendation 10.7.1:*** Planning assumptions for logistics and operations should anticipate a percentage of the population who does not use technology and adjust operations accordingly.

**Observation 10.8. Area for improvement:** Inconsistent messaging from federal and state levels of government regarding guidance for childcare center operations impacted health and safety.

**Analysis:** Conflicting guidance and information made it difficult to develop operational plans for childcare centers. Participants felt they were held up by waiting on new guidance and trying to understand the ever-

changing information. Aligning licensing requirements with OSHA mandates, Head Start federal program guidance, and local mandates was confusing.

***Recommendation 10.8.1:*** Decision-relevant information for childcare centers needs to be coordinated through the County EOC, which can engage appropriate State and Federal partners capable of rectifying inconsistent policies.

# 11. Volunteer Management

*FEMA Core Capability - Volunteer management is the ability to coordinate with emergency management and partner agencies to identify, recruit, register, verify, train, and engage volunteers to support the jurisdictional public health agency's preparedness, response, and recovery activities during pre-deployment, deployment, and post-deployment.*

**Observation 11.1. Strength:** Using Disaster Healthcare Volunteers (DHVs), during mass vaccination events, increased San Joaquin County's ability to provide COVID-19 vaccinations for residents.

**Analysis**: San Joaquin County EMS Agency personnel has served as the Administrator of the San Joaquin County Unit of the California Disaster Healthcare Volunteers, since 2007. The San Joaquin County Unit has 650 pre-registered volunteers willing to assist during local and/or out of county disasters. During the pandemic 101 San Joaquin County Unit members were deployed to 24 mass vaccination events around the county.

***Recommendation: 11.1.1:*** Include the use of volunteers in all Public Health and OES plans to supplement and enhance preparedness, response, and recovery efforts.

***Recommendation: 11.1.2:*** Planning assumptions should identify and provide just-in-time training for unaffiliated volunteers who will emerge and offer to support incident operations.

***Recommendation: 11.1.3:*** Fund and support the training and exercise program for Disaster Healthcare Volunteers.

**Observation 11.2. Area for improvement:** Managers and supervisors had inconsistent knowledge of the process of volunteer deployment and employment.

**Analysis**: Some managers and supervisors indicated that they were able to request and employ volunteers through the EOC quickly. Others indicated they were utilizing community-based organizations (e.g., retirement agencies) to access additional assistance. In addition, there were inconsistencies in understanding where volunteers could be used and how FEMA regulations intersected with their deployment eligibility (e.g., contact tracing was not considered a medical function, so the use of volunteers was non-FEMA allowable). Others indicated they understood all deployment and employment of volunteers should go through Human Resources. The issue of Workers' Compensation Insurance limiting volunteers to a single assigned location was raised in detail in conversation and was contradicted as a non-issue by another subject matter expert. When volunteers were deployed, some managers and supervisors noted that training was generally a briefing at the start of an operational period or through shadowing of a more experienced individual, with limited access to just-in-time training set aside for specific skill development, tracking/reporting requirements, or safety briefings.

***Recommendation 11.2.1:*** The Finance and Administration Section, in coordination with the EMS Volunteer Coordinator, and the Logistics Section in the EOC should be responsible for writing, distributing, and briefing command and general staff on guidelines for the deployment, employment, and demobilization of volunteers.

***Recommendation 11.2.2:*** The Logistics Section in the EOC should work with disaster field training operations to ensure just-in-time training is available for all volunteers assigned to response operations.

***Recommendation 11.2.3:*** Standardized just-in-time training on safety, tracking, and reporting requirements should be developed and conducted for all volunteers mobilized before they are deployed to incident response operations.

**Observation 11.3. Area for improvement:** Some Disaster Healthcare Volunteers were wrongly redirected to report for duty to a different location from the location they were assigned to by the San Joaquin County DHV Administrator.

**Analysis**: Only the San Joaquin County DHV Administrator is authorized to change volunteers mission assignments. The redirecting of volunteers to report for duty at a different location is considered a self-deployment, thereby nullifying the state funded Workers' Compensation protection provided by the California Disaster Service Worker Volunteer Program (19 CCR, §2570-2573.3).

***Recommendation 11.3.1:*** The requesting entity needs to immediately notify the San Joaquin County DHV Administrator if there is a need to change any volunteer assignment, to ensure changes are documented correctly and communicated to the volunteers. The volunteer is then given the choice to accept or turn down the new mission assignment.

***Recommendation 11.3.2:*** The requesting entity needs to be familiar with the requirements of the California Disaster Service Worker Volunteer Program (19 CCR, §2570-2573.3), to ensure volunteers are properly managed.

# Appendix A: Acronyms

| | |
|---|---|
| AAR | After Action Report |
| AFN | Access and Functional Needs |
| ASL | American Sign Language |
| CAHAN | California Health Alert Network |
| CARES | Coronavirus Aid, Relief, and Economic Security Act |
| CBO | Community Based Organization |
| CI/CT teams | Contact Investigation and Contact Tracing teams |
| CDC | Centers for Disease Control and Prevention |
| DOC | Department Operations Center |
| DHV | Disaster Healthcare Volunteers |
| EMS | Emergency Medical Services Agency |
| EOC | Emergency Operations Center |
| ESF | Emergency Support Function |
| FBO | Faith Based Organization |
| FEMA | Federal Emergency Management Agency |
| HHS | Us. Department of Health and Human Services |
| HR | Human Resources |
| HSA | Human Services Agency |
| ICS | Incident Command System |
| IP | Improvement Plan |
| IT | Information Technology |
| JIC | Joint Information Center |
| JIS | Joint Information System |
| MedMAC | Medical/Health Multi-Agency Coordination Group |
| MHOAC | Medical Health Operational Area Coordinator |
| NIMS | National Incident Management System |
| OES | Office of Emergency Services |
| OSHA | Occupational Safety and Health Administration |
| PH | Public Health |
| PHS | Public Health Service |
| PIO | Public Information Officer |
| PPE | Personal Protective Equipment |
| SEMS | Standardized Emergency Management System |

| | |
|---|---|
| WebEOC | Web-based information sharing and emergency management platform |

# Appendix B: Improvement Plan

This Improvement Plan (IP) has been developed specifically for the San Joaquin County in response to the COVID-19 Pandemic and resultant after action process. The sequence of AAR/IP recommendations is not significant or mandatory; stakeholders should prioritize tasks as appropriate in the order in which corrective actions will be completed (including concurrent efforts).

The AAR/IP Review Team determined priority rankings for these recommendations as such: 3 = high, 2 = medium, 1 = low. It was noted that some of these actions may have already begun before the AAR/IP was undertaken

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 1.1** **Strength:** The personal protective equipment (PPE), provided through the Medical Health Operational Area Coordinator (MHOAC) and the EMS Agency DOC enabled public and private sector frontline healthcare workers from hospitals, clinics, long term care, behavioral health, surgery centers and pre-hospital care, to safely provide patient care throughout the incident. | ***Recommendation 1.1.1:*** Highlight the life safety mission priority and make the deployment of PPE through engaged partnerships a standard operating procedure for future incidents. | | | | | |
| **Observation 1.2 Area for Improvement:** County leadership's expectations and staff's | ***Recommendation 1.2.1:*** At the onset of response operations, organizational leadership needs to conduct appropriate measures to ensure it is capable of | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| expectations for attention to stress reduction strategies, mental health resources, and work recognition were not aligned. | accounting for safety, mental health concerns, and stress on people who are deployed to incident response. | | | | | |
| | ***Recommendation 1.2.2:*** After the first 30 days of response operations, time-off policies should be established, published, and enforced (e.g., all deployed personnel should be required to take one full day off each week). Leadership should demonstrate acceptance by modeling time-off requirements. | | | | | |
| | ***Recommendation 1.2.3:*** Operating under the Incident Command System (ICS), assign an Assistant Safety Officer-Resilience under the Command Staff Safety Officer to adopt and enforce guidelines for mental health and wellness of all response staff. | | | | | |
| | ***Recommendation 1.2.4:*** The County is encouraged to develop a working group including staff who responded to COVID-19, medical staff, HR representatives, and leadership to determine proactive steps it can have in place before future responses to have a resilience plan for staff before, during, and after future prolonged responses. | | | | | HIGH |
| **Observation 1.3 Area for Improvement:** COVID-19 pandemic response operations | ***Recommendation 1.3.1:*** Conversations at the highest level of government in the County and the State of California should address how to mitigate the detrimental | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| placed unprecedented strains on response staff, resulting in potential moral injury or post-traumatic stress for many staff. | effects of moral injury and post-traumatic stress among public health and healthcare workers will have on the health and wellness of all residents of the State | | | | | |
| | ***Recommendation 1.3.2:*** Consider implementing a series of Critical Incident Stress Debriefing teams to address prolonged issues caused by this incident that are impacting staff resilience. | | | | | |
| **Observation 1.4 Area for Improvement:** Public Health workers were publicly threatened and feared for the safety of their coworkers and themselves. | ***Recommendation 1.4.1*:** The County should institute a reporting system for any threatening behavior or harassment directed at Public Health workers or their loved ones. The data should be shared with all appropriate authorities accompanying a request for action to improve security. | | | | | |
| **Observation 2.1. Strength:** Community partners recognize that Public Health is data-driven and evidenced-based and adapts to changing conditions and adjusts accordingly based on new data. | ***Recommendation 2.1.1:*** Make the data collection process from this incident a standard operating procedure for continued use by a dedicated data team in the Data Section for EOC and DOC activations. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 2.2.** **Strength:** Contracting data scientists to establish an innovative system tailored to COVID-19 risk analysis allowed for accelerated analysis of data used to inform critical decisions. | ***Recommendation 2.2.1:*** Use of innovative data application systems to mitigate the impact of COVID-19 on community members is a best practice and should be captured in appropriate reports, presentations, and Public Health plans, training, and exercises. | | | | | |
| | ***Recommendation 2.2.2:*** The County should embrace evidence-based actions as the foundation of effective public health mitigation, response, and recovery. Policymakers, the leadership positions in the EOC/DOC should prioritize the application and monitoring of scientific data collection to support the goal of life safety. | | | | | |
| **Observation 2.3. Area for Improvement:** Public Health Information Technology suffered from inadequate infrastructure, shortage of personnel, and a historical lack of funding. | ***Recommendation 2.3.1:*** The County Board of Supervisors should assess the infrastructure of the Public Health technology department and identify sustainable sources for funding personnel and equipment at a level that allows the system to provide essential services to the County. | | | | | |
| | ***Recommendation 2.3.2:*** Develop a Memo of Understanding for all County IT personnel (ISD) to support each other and PHS IT and | | | | | HIGH |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | create a staffing plan for 24/7 IT coverage during EOC activations. | | | | | |
| **Observation 2.4. Area for Improvement:** All individuals who represent the County in response operations and engage in public discourse should base their interactions and public conversations on evidence that is clear and easy to understand. | ***Recommendation 2.4.1:*** Evidence-based actions are the foundation of Public Health. Leadership positions in the DOC should prioritize monitoring data collection and providing useable data sets to engaged response partners, including the EOC. | | | | | |
| | ***Recommendation 2.4.2:*** Provide support or training as needed for data staff on how to navigate conversations and conflicts in biases when people respond to objective data. | | | | | |
| **Observation 2.5. Strength:** Many County employees transitioned easily to remote work and continued to offer essential services to the community. | ***Recommendation 2.5.1:*** Use of dual models of work that offer some staff remote work, office work, or a blended format should be considered as a long-term policy change for appropriate County positions and where such work flexibility still assures operational needs are met. | | | | | |
| **Observation 2.6. Area for Improvement:** There were significant challenges in hiring and | ***Recommendation 2.6.1***: The County Human Resources Department should review the use of Disaster Service Workers (DSW's) before hiring additional staff. | | | | | HIGH |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| onboarding new personnel. | ***Recommendation 2.6.2:*** The County Human Resources Department should form a Task Force composed of representatives from different departments to examine surge capacity hiring, expedited hiring, and traditional hiring practices. | | | | | HIGH |
| **Observation 2.7.** **Strength:** The EOC Finance and Administration Section was proactive with County departments regarding tracking COVID-19 costs, which maximized reimbursement of funds from the CARES Act through December 2020 and FEMA starting January 2021. | ***Recommendation 2.7.1:*** Make the just-in-time finance tracking training from this incident a standard operating procedure for continued use by dedicated finance subject matter experts in future planning, training, exercises, and EOC/DOC incident activations. | | | | | |
| | ***Recommendation 2.7.2:*** Write a *planning assumption* in all County plans that identifies financial tracking as mission essential for all deployed personnel. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 2.8. Area for Improvement:** Frustration with FEMA forms, lack of situational awareness, and general operational fatigue among other departments hampered the Finance and Administration Section operations. | ***Recommendation 2.8.1:*** Write a *planning assumption* in all County Office of Emergency Services and Public Health Plans that identifies financial tracking as mission essential. | | | | | HIGH |
| **Observation 2.9. Area for Improvement:** The EOC Finance and Administration Section lacked access to qualified staffing. | ***Recommendation 2.9.1:*** Work with County Human Resources to procure qualified financial staff from temporary staffing agencies. | | | | | |
| | ***Recommendation 2.9.2*:** If Disaster Service Workers are deployed to Finance and Administration, Human Resources should pre-screen them for minimum qualifications required by the Finance and Administration Section Chief. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 2.10. Area for Improvement:** Supply chain disruptions caused challenges for purchasing and contract management. | ***Recommendation 2.10.1:*** Deploy a dedicated purchasing agent to the Finance and Administration Section, Procurement Unit when the EOC/DOC is activated for response operations. | | | | | |
| **Observation 3.1: Strength:** Community-wide partnerships were critical to resource acquisition and distribution of healthcare supplies. | ***Recommendation 3.1.1:*** Memorialize all results of resource acquisition and distribution in plans, reports, and public facing communications and continue partnership development as a best practice for incident response operations. | | | | | |
| | ***Recommendation 3.1.2:*** Engage whole community partnerships in logistics-specific planning, training, and exercises to maintain and expand response capabilities for future incidents. | | | | | |
| **Observation 3.2: Strength:** Preplanning vaccine logistics is a best practice for pandemic response operations. | ***Recommendation 3.2.1:*** Capture the planning process and partnership engagement for vaccine storage in all publications and presentation opportunities. | | | | | |
| | ***Recommendation 3.2.2:*** Integrate planning assumptions related to unique challenges for logistics and into revisions of Office of | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | Emergency Services/Public Health response operations plans. | | | | | |
| **Observation 3.3:** **Strength:** Establishing the Healthy Futures/RIDE System for ordering was successful. | ***Recommendation 3.3.1:*** Review standard operating procedures regarding the Healthy Futures system, followed by routine training and exercises on processes needed for rapid deployment in future incidents. | | | | | |
| **Observation 3.4:** **Strength:** The Medical Health Operational Area Coordinator (MHOAC) and EMS Agency DOC Logistics Section effectively and efficiently processed medical and health mutual aid resource requests, using the WebEOC Resource Request and Deployment Module (RRDM). | ***Recommendation 3.4.1:*** Require all San Joaquin County employees to receive Incident Command System (ICS) training, in accordance with the National Incident Management System (NIMS) training program, to improve County Disaster Services Worker performance during disasters. | | | | | |
| | ***Recommendation 3.4.2:*** Continue to use and maintain WebEOC for resource requesting and information sharing. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 3.5:** **Strength:** The San Joaquin Operational Area Healthcare Coalition PPE cache, managed by the EMS Agency, met local resource needs at the onset of incident response. | ***Recommendation 3.5.1:*** Continue to use HPP funds to maintain the cache. | | | | | |
| **Observation 3.6. Area for Improvement:** Public Health experienced challenges with the EOC Logistics Section regarding requests for services and best use of WebEOC. | ***Recommendation 3.6.1:*** All County partners who have a role in emergency management should participate in yearly planning, training, and exercises to expand their knowledge of Logistics and WebEOC processes and procedures for better resource coordination and to build trust among partners. | | | | | HIGH |
| **Observation 4.1:** **Strength:** Law enforcement partners were available to maintain on-scene security as requested throughout the incident response. | ***Recommendation 4.1.1:*** Incident Command should continue to deploy ESF-13 to the Operations Section of the EOC when it is activated. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 4.2. Area for Improvement:** The presence of law enforcement at certain community vaccination events was interpreted negatively by some community members. | ***Recommendation 4.2.1:*** Incident management should engage the community- and faith-based organizations in initial planning meetings when organizing mass vaccination events to address the intersection of cultural and safety concerns. | | | | | |
| **Observation 5.1. Strength:** The operational briefings structure OES implemented at the weekly EOC meetings was an effective reporting structure for Emergency Support Function (ESF) representatives to share information. | ***Recommendation 5.1.1:*** Operational Briefings at the EOC should remain standard practice to support response and recovery activities. | | | | | |
| **Observation 5.2. Strength:** WebEOC was an effective real-time information sharing platform for Emergency Support Function-08, including private healthcare providers and members of the San Joaquin Operational | ***Recommendation 5.2.1:*** Continue to maintain WebEOC for real-time information sharing. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| Area Healthcare Coalition. | | | | | | |
| **Observation 5.3. Area for Improvement:** Ineffective use of the Incident Command System (ICS) resulted in poor information management from the EOC/DOC which impacted situational awareness and communication among partners and negatively affected incident response. | ***Recommendation 5.3.1:*** ICS and SEMS training should be part of training and exercises for all County employees so it can be understood and implemented to its full capacity from the start of incident response. | OES and CAO | Director of Emergency Operations | 1 Jan 23 | 30 Dec 23 | HIGH |
| | ***Recommendation 5.3.2:*** The EOC/DOC Planning Section should employ a variety of communication technology types to disperse critical elements of information to partners for each operational period update. | | | | | HIGH |
| | ***Recommendation 5.3.3:*** The EOC/DOC should host daily internal team briefings, as many staff were working remotely as a COVID-19 mitigation strategy there was no ability for EOC/DOC team members to organically interact in person and this may have contributed to County staff working more in silos. | | | | | HIGH |
| **Observation 6.1 Strength:** Most staff demonstrated exceptional professionalism and dedication in regard to life safety and incident | ***Recommendation 6.1.1:*** Openly express gratitude to colleagues and community members for their efforts to provide service during COVID-19 response operations. Make conscious decisions to learn from mistakes, take ownership of actions, and publicly commit to meaningful change. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| stabilization. Despite ongoing challenges, people took personal ownership of problems, worked with mid-level managers and supervisors to fill various leadership gaps, and persevered through an incident that was politicized by many different entities. | ***Recommendation 6.1.2:*** Address the organizational structure of the Health Office and DOC Director roles | | | | | |
| **Observation 6.2. Area for Improvement**: Lack of unity, purpose, structure and respect between Public Health, EMS, OES, the CAO's Office and the Board of Supervisors. | ***Recommendation 6.2.1****:* Adopt and implement the National Incident Management System at all levels of County government (Board of Supervisors, CAO's Office, Public Health, EMS, OES). | | | | | HIGH |
| | ***Recommendation 6.2.2****:* Conduct a moderated Critical Incident Stress Debriefing for senior leadership in Public Health, EMS, OES, the CAO's Office and the Board of Supervisors to address continued hostility among these partners. | | | | | |
| | ***Recommendation 6.2.3:*** When hiring senior leadership positions, include people in equitable positions from around the county to begin the process of team building and establishing trust between departments. | | | | | |
| | ***Recommendation 6.2.4:*** According to ICS and NIMS, ESF-8 takes the lead on all Public | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | Health crisis events and, by default, is the presumed lead in the COVID-19 response. | | | | | |
| **Observation 7.1. Area for Improvement:** Rapidly adapt Incident or Emergency Action Plans to address issues that are unique to the incident, such as the emergence of vaccine deniers who became a new and unanticipated vulnerable population. | ***Recommendation 7.1.1:*** Write a planning assumption in all OES and Public Health Department plans that identifies the emergence of unexpected political challenges. Use the planning process to address organizational strategies to adapt and tailor response and recovery operations that address issues that emerge from the whole community. | | | | | |
| | ***Recommendation 7.1.2:*** Improve and increase investments and outreach in rural communities and through community- and faith-based organizations that are yet to have strong relationships with Public Health and OES. | | | | | |
| **Observation 7.2. Area for Improvement:** Public Health response plans were not applied in a timely manner to COVID-19 response operations. | ***Recommendation 7.2.1:*** Update and revise the Pandemic Plan with the active engagement of the whole community, then train and exercise all stakeholders in the operational expectations, followed by a robust updating process that occurs every three years | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 8.1. Strength: Having a County Public Health Lab with long-term dedicated personnel** who had a deeply felt sense of purpose to support operations. | ***Recommendation 8.1.1:*** Official recognition of the Laboratory staff for their role in response operations would be appropriate. | | | | | |
| **Observation 8.2. Strength:** Laboratory staff was adaptive to the unique and rapidly changing incident. | ***Recommendation 8.2.1:*** Document the newly developed lab training as standard operating procedures. | | | | | |
| **Observation 8.3. Area for Improvement:** The laboratory was understaffed, causing existing staff to feel overwhelmed. | ***Recommendation 8.3.1:*** A representative from the Lab should be a liaison to the Operations Section in the DOC/EOC and provide realistic mission objectives that can be included in the operational period Emergency Action Plan and achieved in the operational period. | | | | | |
| | ***Recommendation 8.3.2:*** Any staff with an injury caused by work should report it to their supervisor and follow applicable county HR procedures and policies. | | | | | |
| **Observation 8.4. Area for Improvement:** Supply chain shortages on laboratory equipment. | ***Recommendation 8.4.1:*** The laboratory should work through the Logistics Section of the EOC/DOC to request resource storage for response operations materials. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 8.5.** **Strength:** Epidemiologists set up a COVID-19 tracking system rapidly resulting in valid data collection of morbidity reports, which were made available to response partners who needed up-to-date patient counts. | ***Recommendation 8.5.1:*** Access to data systems and transparency of the process should be a standard planning assumption and operationalized in the DOC | | | | | |
| | ***Recommendation 8.5.2:*** Planning assumptions should include identifying that data systems will need to be developed or tailored to the incident at hand, so personnel and support should be available to ensure support of that process. | | | | | |
| **Observation 8.6.** **Strength:** The Contact Investigation Contact Tracing teams (CI/CT teams) established a flexible communication system that adapted to both the formal and informal communication requirements of the group. | ***Recommendation 8.6.1:*** Capture the process of strengthening group dynamics by assessing and meeting the continuous communication needs of team members. Add examples captured from the CI/CT teams to lessons learned and incorporate into ICS training. | | | | | |
| **Observation 8.7** **Strength:** The CI/CT teams provided just-in-time training to new team members on policies related to their operations and | ***Recommendation 8.7.1.:*** A training needs assessment should be conducted to determine just-in-time-training requirements for all deployed individuals as a standard operating procedure for continued use by a dedicated disaster field | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| additional training opportunities to established team members. | operations training (DFTO) team assigned to the EOC or DOC under Operations. | | | | | |
| **Observation 8.8 Area for Improvement**: The awkward political environment throughout County government and its stakeholders impacted the Contact Investigation Contact Tracing team's efficacy. | ***Recommendation 8.8.1:*** ESF-8 is the lead on Public Health crisis events and as such other County agencies and institutions should align their objectives to support the overarching mission of life protection. | | | | | |
| **Observation 8.9 Area for Improvement**: There are opportunities to improve engagement with vulnerable populations throughout the County. | ***Recommendation 8.9.1:*** Planning assumptions, training, and exercises should be constructed to prioritize essential services (e.g., safety, health, communication) needed by vulnerable populations throughout the County. | | | | | |
| **Observation 8.10. Strength:** Public Health's vaccine strategy had a clear mission to focus on vulnerable populations as priority eligible groups, which likely mitigated health impacts on the community. | ***Recommendation 8.10.1:*** Memorialize strategies and tactics utilized to support vulnerable populations as a priority mission for medical countermeasures operations and identify it as a best practice. | | | | | |
| | ***Recommendation 8.10.2:*** Develop and update checklists to operationalize critical information logistical support for access and | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | functional needs populations at points of distribution. | | | | | |
| | ***Recommendation 8.10.3***: Vaccine delivery strategies need to be multi-modal to address whole community planning factors. | | | | | |
| | ***Recommendation 8.10.4***: Medical Countermeasures Plan updates, training, and exercise schedules should include membership from community-based organizations, advocacy groups, and private sector partners who support transient community members working in agriculture. | | | | | |
| **Observation 8.11.** **Strength:** The San Joaquin County Medical Countermeasures Plan (mass dispensing operations) was considered a successful model by others in California. | ***Recommendation 8.11.1:*** Memorialize mass dispensing operations as a best practice in all reports and documentation related to this operation | | | | | |
| | ***Recommendation 8.11.2:*** Consider presentations or publications that can publicize the success of mass dispensing operations to highlight the County as a subject matter expert in this area. | | | | | |
| **Observation 8.12: Area for Improvement:** Promotional methods identifying transportation support | ***Recommendation 8.12.1:*** The EOC and DOC should establish relationships with Community Based and Faith Based Organizations early in response operations to address emerging transportation needs | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| options require improvement. | for those community members without personal transportation. | | | | | |
| | ***Recommendation 8.12.2:*** The JIC should work with CBO and FBO's to develop a communication outreach plan that uses the most effective communication formats to reach community members including no-technology, low technology, and high-technology methods (face-to-face, print, social media). | | | | | HIGH |
| | ***Recommendation 8.12.3:*** The County should anticipate supplementing the cost of transportation to and from testing and vaccination sites as a planning factor associated with equitable access to this essential service. | | | | | |
| **Observation 8.13.** **Strength:** Having access to an existing Mass Vaccination Plan provided guidelines that could be tailored to the incident in hand, permitting staff to rapidly focus on operations and delivery of vaccinations to the community. | ***Recommendation 8.13.1.*** In all appropriate documents, memorialize the process of adapting the Mass Vaccination Plan as a best practice for COVID-19 response operations. | | | | | |
| | ***Recommendation 8.13.2:*** Put the Mass Vaccination Plan on a four-year update schedule that includes whole community engagement in the process of review, revision, training, and exercising the new plan. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 8.14.** **Strength:** Public Health's partnership with healthcare providers was a successful element of surge capacity in COVID-19 response operations. | ***Recommendation 8.14.1:*** In all appropriate documents, memorialize the successful partnership with healthcare providers in the County and its positive impact on public health | | | | | |
| **Observation 8.15.** **Strength:** Public Health's partnership with community-based and faith-based organizations coupled with excellent health data targeting was a successful element of surge capacity planning in COVID-19 response operations. | ***Recommendation 8.15.1:*** Pre-established long-term relationships with community-based and faith-based organizations should be identified as a critical element in the success of mass vaccination surge capacity in all planning, training, and exercise activities. | | | | | |
| | ***Recommendation 8.15.2:*** Public Health should examine its existing plans for areas where it can expand upon equity issues. | | | | | |
| **Observation 8.16.** **Strength:** San Joaquin County hospitals successfully increased medical surge capacity, well beyond licensed bed capacity, to meet increasing demand. | ***Recommendation 8.16.1:*** Continue to convene Med MAC group meetings to provide a forum for executive level healthcare leadership to work collaboratively during times of extreme services demands or other emergency conditions which threaten to overload resources or disrupt the delivery of medical care in the county. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 8.17. Area for Improvement:** There is no identified end point for the role of Public Health in COVID-19 response operations. | ***Recommendation 8.17.1:*** Command Staff engaged in COVID-19 response operations from Public Health and OES should work cooperatively with private sector healthcare partners to prepare a transition strategy for the end of the COVID-19 healthcare emergency and the demobilization of Public Health staff and resources. | | | | | |
| | ***Recommendation 8.17.2:*** Public Health should consider establishing either a demobilization plan or a long-term recovery plan for this incident so it can anticipate implications to the community as the COVID-19 public health emergency ends. | | | | | |
| **Observation 9.1: Strength:** Communications staff expanded its use of technology to meet response operation needs. | ***Recommendation 9.1.1:*** Document the operating procedures for software use, internet access, and social media posting in a Joint Information Operations Manual for application in future activations. | | | | | |
| | ***Recommendation 9.1.2:*** Adopt and enforce an updated schedule, training, and exercise plan for the Joint Operations Manual. | | | | | |
| **Observation 9.2: Strength:** The Public Information Officers Group meeting was a best practice for | ***Recommendation 9.2.1:*** Document the formation of the PIO Group as a best practice in COVID-19 response operations and capture the information in all appropriate documents and presentations. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| communication strategies during COVID-19 response operations. | | | | | | |
| | ***Recommendation 9.2.2:*** The PIO Group can serve the community in preparedness as well as response and recovery operations, so it should remain active and establish countywide objectives to strengthen communication channels with the community. | | | | | |
| | ***Recommendation 9.2.3:*** The PIO Group would benefit from an intentional focus on communicating with community members who have access and functional needs and including PIOs from community- and faith-based organizations. | | | | | |
| **Observation 9.3:** **Strength:** County departments combined forces to appropriately staff the Joint Information Center. | ***Recommendation 9.3.1:*** A JIC that is staffed with a combination of volunteer and professional communicators is uniquely positioned to conduct communication that is both reflective of San Joaquin County and serves its population well. This staffing pattern should be documented as a best practice for JIC formation and functioning. | | | | | |
| | ***Recommendation 9.3.2:*** In the initial stages of EOC activation, personnel deployed to the JIC should conduct a communication needs assessment and develop a staffing plan and work plan that supports messaging and systems designs that address the needs of the whole community. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | | | | | | |
| **Observation 9.4:** **Strength:** Community-based organizations supported PHS Risk Communication, Mitigation teams and the JIC through public outreach campaigns. | ***Recommendation 9.4.1:*** Partnerships with community members for communication campaigns is an effective force multiplier for response operations messaging and are a best practice for community engagement. This practice should be captured and incorporated into planning, training, and exercises for ESF 15 in future EOC activations. | | | | | |
| | ***Recommendation 9.4.2:*** Strengthen working relationships with non-traditional media outlets for greater access to public health emergency information (e.g., bloggers, vloggers, influencers, etc.). | | | | | |
| **Observation 9.5: Area for Improvement:** Inconsistent messaging from federal and state levels of government and private sources regarding transmission, testing, masks, and vaccines affected | ***Recommendation 9.5.1:*** Train more County staff in crisis and risk communication techniques. | | | | | |
| | ***Recommendation 9.5.2:*** Train all County staff on mis/disinformation campaigns and how to effectively address mis/disinformation. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| messaging credibility at the county level. | ***Recommendation 9.5.3:*** Focus on sustained engagement with the community to re-establish trust lost over the extended COVID-19 incident. | | | | | |
| **Observation 9.6. Area for Improvement:** The JIC was not fully prepared to distribute information in the 10 languages most common in the community or to a diverse population that speaks at least 39 languages at home | ***Recommendation 9.6.1:*** Update the JIC guidelines to include pre-scripted templates for emergency messaging in multiple languages by partnering with City, County, and community groups to pool resources. | | | | | |
| | ***Recommendation 9.6.2:*** Strengthen working relationships with non-English media outlets for public health and OES response information. | | | | | |
| **Observation 9.7: Area for Improvement:** The JIC's focus on messaging in English and Spanish may have inadvertently created gaps in outreach and communication efforts to other underserved community members. | ***Recommendation 9.7.1:*** Establish stronger working relationships with disability advocacy groups and incorporate their communication strategy ideas into emergency management and public health plans and training and exercise schedules. | | | | | |
| **Observation 9.8: Area for Improvement:** Stronger coordination between the EOC | ***Recommendation 9.8.1:*** All County employees, including senior leadership, need to understand the process of incident command systems and the focus on mission | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| Command Staff and the JIC will focus efforts on mission critical assignments. | objectives to manage incidents. Staff roles should be supported agency-wide during response operations, and the chain of command should be followed, rather than day-to-day organizational leadership positions. | | | | | |
| **Observation 9.9: Area for Improvement:** There is a need for regular training and exercise opportunities for people who will deploy to the JIC for response and recovery operations. | ***Recommendation 9.9.1.:*** Identify County staff that can deploy to the JIC. | | | | | |
| | ***Recommendation 9.9.2:*** OES should schedule quarterly engagements for individuals who may be deployed to the JIC. It should progress from planning, operational updates, training, and exercise each year with an all-hazards approach to incident type | | | | | |
| **Observation 10.1: Strength:** Outreach and information sharing with the private sector guided mitigation measures for essential workers. | ***Recommendation 10.1.1:*** Continue to expand outreach and information sharing with agricultural private sector businesses in the County to grow trusted relationships. | | | | | |
| | ***Recommendation 10.1.2:*** Invite representatives from the agricultural industry to participate in emergency management planning, training, and exercises on a yearly basis. | | | | | |
| **Observation 10.2: Strength:** The use of phone banks and the 2- | ***Recommendation 10.2.1:*** The use of telephone technology that reaches specific community members should be considered | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| 1-1 call center for additional support provided two-way communication for members of the impacted community. | an effective outreach format to support situational awareness during response operations. | | | | | |
| **Observation 10.3:** **Strength:** Pre-existing relationships among San Joaquin Operational Area Healthcare Coalition member organizations permitted rapid expansion of information sharing groups, such as the Emergency Preparedness Committee (EPC) and Medical Health Multiagency Coordination (Med MAC) Group MedMAC, to address critical issues during response operations. | ***Recommendation 10.3.1:*** Memorialize the functions and impact the MedMAC had on COVID-19 response operations by including it in all publications, presentations, and records of the incident. | | | | | |
| | ***Recommendation 10.3.2:*** Prioritize support of communication sharing venues among private sector healthcare partners by engaging them in planning, training, and exercises conducted by healthcare coalition members. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 10.4:** **Strength:** The Farming Bureau and the Office of the Agricultural Commissioner were active and engaged participants in advocating for situational awareness for workers in the agricultural industry. | ***Recommendation 10.4.1:*** Capture the engagement of the Farming Bureau and Office of the Agricultural Commissioner as a best practice for providing tailored information to essential workers during response operations. | | | | | |
| | ***Recommendation 10.4.2:*** Engage agricultural partners in planning, training and exercises conducted by OES and Public Health partners on a routine basis. | | | | | |
| **Observation 10.5:** **Strength:** The Resilient Community Advisory Committee was an exceptionally effective format for gathering and disseminating information with community-based and faith-based partners in San Joaquin County. | ***Recommendation 10.5.1:*** The Resilient Community Advisory Committee is a national standard for an equitable community engagement model. It should be identified as a best practice, continually expanded to address the evolution of San Joaquin County, and supported with the necessary resources. | Public Health | Emerging Diseases Program | August 2020 | Ongoing | HIGH |
| | ***Recommendation 10.5.2:*** Representatives from the JIC should continue to utilize the subject matter experts on the Resilient Community Advisory Committee to inform its communication strategies. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| | ***Recommendation 10.5.3:*** Both OES and Public Health planners should utilize the Resilient Community Advisory Committee to extend relationships into the community with members who can be active participants and inform the planning process for both organizations. Going forward, plans should reflect whole community standards. | | | | | |
| **Observation 10.6. Area for improvement:** Establishing long-term partnerships between the Agricultural Task Force, Community-Based Organizations, Public Health, and OES. | ***Recommendation 10.6.1:*** Identify establishing an Agricultural Task Force as a best practice to conduct the multidisciplinary exchange of information that was relevant for COVID-19 response operations. | | | | | |
| | ***Recommendation 10.6.2:*** Public Health and OES should strengthen working relationships and partner in planning, training, and exercise development. | | | | | |
| **Observation 10.7. Area for improvement:** Providing decision-relevant information should not be dependent on access to technology and its infrastructure. | ***Recommendation 10.7.1:*** Planning assumptions for logistics and operations should anticipate a percentage of the population who does not use technology and adjust operations accordingly. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 10.8. Area for improvement:** Inconsistent messaging from federal and state levels of government regarding guidance for childcare center operations impacted health and safety. | ***Recommendation 10.8.1:*** Decision-relevant information for childcare centers needs to be coordinated through the County EOC, which can engage appropriate State and Federal partners capable of rectifying inconsistent policies. | | | | | |
| **Observation 11.1. Strength:** Using Disaster Healthcare Volunteers (DHVs), during mass vaccination events, increased San Joaquin County's ability to provide COVID-19 vaccinations for residents. | ***Recommendation: 11.1.1:*** Include the use of volunteers in all Public Health and OES plans to supplement and enhance preparedness, response, and recovery efforts. | | | | | |
| | ***Recommendation: 11.1.2:*** Planning assumptions should identify and provide just-in-time training for unaffiliated volunteers who will emerge and offer to support incident operations. | | | | | |
| | ***Recommendation: 11.1.3:*** Fund and support the training and exercise program for Disaster Healthcare Volunteers. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| **Observation 11.2. Area for improvement:** Managers and supervisors had inconsistent knowledge of the process of volunteer deployment and employment. | ***Recommendation 11.2.1:*** The Finance and Administration Section, in coordination with the EMS Volunteer Coordinator, and the Logistics Section in the EOC should be responsible for writing, distributing, and briefing command and general staff on guidelines for the deployment, employment, and demobilization of volunteers. | | | | | |
| | ***Recommendation 11.2.2:*** The Logistics Section in the EOC should work with disaster field training operations to ensure just-in-time training is available for all volunteers assigned to response operations. | | | | | |
| | ***Recommendation 11.2.3:*** Standardized just-in-time training on safety, tracking, and reporting requirements should be developed and conducted for all volunteers mobilized before they are deployed to incident response operations. | | | | | |
| **Observation 11.3. Area for improvement:** Some Disaster Healthcare Volunteers were wrongly redirected to report for duty to a different location from the location they were assigned to by the San | ***Recommendation 11.3.1:*** The requesting entity needs to immediately notify the San Joaquin County DHV Administrator if there is a need to change any volunteer assignment, to ensure changes are documented correctly and communicated to the volunteers. The volunteer is then given the choice to accept or turn down the new mission assignment. | | | | | |

| Observation | Recommendation | Responsible Party | Point of Contact | Target Start Date | Target Completion Date | Priority (High, Medium, Low) |
|---|---|---|---|---|---|---|
| Joaquin County DHV Administrator. | ***Recommendation 11.3.2:*** The requesting entity needs to be familiar with the requirements of the California Disaster Service Worker Volunteer Program (19 CCR, §2570-2573.3), to ensure volunteers are properly managed. | | | | | |

# Appendix C: Document Review

## Executive Summary and Key Themes

This Document Review Report provides information on existing policies and protocols and documentation that was prepared as part of the COVID-19 response effort. Key events, milestones, and document-specific recommendations identified during the document review will help direct and inform the COVID-19 after-action review process. This report addresses: (1) document review approach, (2) document-specific recommendations, (3) key events and milestones.

### Key Themes

The following key themes were identified during the document review and will be addressed during the after-action review one-on-one interviews and focus group discussions:

- Diversity, equity, inclusion, and accessibility considerations for residents and staff
- Adaptability and flexibility in support of County standardization
- Chain of command and protocol expectations
- Strategic leadership planning
- Multi-agency collaboration
- Risk communication
- Supply chain interruption planning

## Document Review Approach

### Methodology

Tetra Tech conducted a comprehensive assessment of COVID-19-related Public Health Diversity, Equity, Inclusion, and Accessibility (DEIA) will also be considered throughout this evaluation to ensure compliance with federal mandates and evolving industry norms and Emergency Management documents to identify the key themes, events, and milestones of the San Joaquin County COVID-19 response. Tetra Tech assessed the documents against requirements and best practices set forth by the following standards:

- International Association of Emergency Managers (IAEM): Core vs. Program Functions (iaem.org)
- Centers for Disease Control and Prevention (CDC): Public Health Emergency Preparedness and Response Capabilities
- Tetra Tech DEIA tool (undisclosed complimentary version)

Each Public Health Preparedness and Response Capability (PHEP) is considered in relation to how documents address the industry standards for DEIA during each phase of the Emergency Management Cycle as noted in the table on the following page.

**Table 1:** Industry Standards

| Public Health Emergency Preparedness and Response Capabilities | Diversity, Equity, Inclusion, and Accessibility | Emergency Management Cycle |
|---|---|---|
| • Community Preparedness<br>• Community Recovery<br>• Emergency Operations Coordination<br>• Emergency Public Information and Warning<br>• Fatality Management<br>• Information Sharing<br>• Mass Care<br>• Medical Countermeasures, Dispensing, and Administration<br>• Medical Material Management and Distribution<br>• Medical Surge<br>• Nonpharmaceutical Interventions<br>• Public Health Laboratory Testing<br>• Public Health Surveillance and Epidemiological Investigation<br>• Responder Safety and Health<br>• Volunteer Management | **DIVERSITY**<br>✓ Visible and invisible individual and community demographics<br>✓ Acknowledging formal and informal differences that enrich a community<br>✓ Establishing environments where all are able to maximize resilience<br>**EQUITY**<br>✓ Acknowledging historically disadvantaged and underrepresented community members<br>✓ Assessing barriers in cultural and organizational infrastructures<br>✓ Addressing and eliminating barriers to resources and opportunities<br>**INCLUSION**<br>✓ Engagement and outreach to the full range of community members<br>✓ Making conscious decisions to welcome, embrace, and leverage a variety of perspectives and capabilities<br>**ACCESSIBILITY**<br>✓ Intentional design of physical and information systems in multiple formats<br>✓ Deliberate actions to establish two-way community partner networks<br>✓ Address immediate conditions that limit the ability of community members to act related to an incident | **Mitigation** – Measures taken to prevent future incidents or minimize their effects<br>**Preparation** – Actions taken to be ready for an incident<br>**Response** – Prioritize life safety, incident stabilization, and protect the environment and property in an emergency<br>**Recovery** – Re-establish essential services and rebuild after an incident |

The above standards were used to guide the document evaluation process and were used to inform the Rubric of Standards noted in the crosswalk below:

*Table of Public Health, Emergency Management, and DEIA Capabilities Crosswalk*

**Table 2:** Rubric of Standards

| | Disaster Cycle | DEIA | Determination | Gap | |
|---|---|---|---|---|---|
| **Public Health Emergency Preparedness and Response Capability** | Mitigation | Diversity | Satisfied/Unsatisfied | Identified | **Recommendation** |
| | | Equity | | | |
| | | Inclusion | | | |
| | | Accessibility | | | |
| | Preparedness | Diversity | Satisfied/Unsatisfied | Identified | **Recommendation** |
| | | Equity | | | |
| | | Inclusion | | | |
| | | Accessibility | | | |
| | Response | Diversity | Satisfied/Unsatisfied | Identified | **Recommendation** |
| | | Equity | | | |
| | | Inclusion | | | |
| | | Accessibility | | | |
| | Recovery | Diversity | Satisfied/Unsatisfied | Identified | **Recommendation** |
| | | Equity | | | |
| | | Inclusion | | | |
| | | Accessibility | | | |

# Document-Specific Recommendations

The following document-specific recommendations were developed from a thorough review of submitted documents and assessed against the rubric of standards explained in the methodology section of the Document Review Approach. The recommendations were generated in response to the output of identified gaps that were determined not in alignment with the industry standard.

Plans were grouped into ten (10) sections to support the context of operational objectives. Sections include: **1.0 Emergency Operations Plans, 2.0 Emergency Medical Services Department Operations Center Demobilization Plans, 3.0 Emergency Medical Services Incident Action Plans, 4.0 Emergency Medical Services Situational Reports, 5.0 Emergency Medical Services Policy Memos, 6.0 Medical Health Multi-Agency Coordination Agendas, 7.0 Multi-Health Operations Area Press Releases, 8.0 Public Health Services Department Operations Center, 9.0 COVID-19 Master Timeline, 10.0 Grand Jury Documents**

## 1.0 Emergency Operations Plans

### Overview and Purpose

Tetra Tech evaluated the San Joaquin County Emergency Response Plans designed to pre-identify emergency response protocols from a county perspective. These plans provide an operational focus for Public Health when it works in coordination with other agencies. All plans are in support of the federal, state, and local mandates that emphasize a local response and request support when resources and capability are exhausted. The documents assessed include:

### ESF-5 Emergency Management Annex

**Strengths:**

- Good backup strategy for key roles (Assistant Public Information Officer)
- Strong contingency communications plan

**Weaknesses:**

- Emergency Operation Center (EOC) Director has selective authority in determining what will be included in the EOC process, whereas the FEMA Incident Command System guidelines are designed for all ESFs to participate
- Leaves the EOC Director with the sole discretion of how the EOC is staffed
- Takes a reactive position with minimal preparedness
- Insufficient communications testing for satellite phones or radio frequencies between partners

Recommendations: Consider incorporation and standardization of this risk communication protocol in all documents that have a risk communication dependency.

### ESF-7 Resources Annex

**Strengths:**

- Strong sense of urgency embedded in language

- Considers supply chain interruptions

### Weaknesses:

- Regional pre-positioned resources and logistics planning not addressed

Recommendation: Increase logistics planning and Continuity of Operations assumption-based planning to ensure there are ample resources in an immediate crisis.

## ESF-8 Public Health and Medical Annex

### Strengths:

- Strong coordination considerations for a wide range of highly probable events
- Most specific jurisdictional authority outlined in a document

### Weaknesses:

- Mental Health and Behavioral Health are not a priority considering that crises alter a community's mental health stability, including county employees
- Access and Functional Needs (AFN) planning is to be determined during the scenario by policymakers and not with pre-established mechanisms that transfer over into emergency response

Recommendation: Automate the decision for Public Health response lead to avoid chain of command confusion in a crisis.

## ESF-15 Public Information Annex

### Strengths:

- Comprehensive
- Prioritizes AFN considerations and provides a detail of options for communication
- Considers Assistant PIOs to maximize PIO responsibilities
- Supports WebEOC as a centralized mechanism for inter and intra communication
- Tests systems sufficiently addressed
- Addresses key components missing in the Crisis Communications Plan
- Strong alternate communications methods

### Weaknesses:

- Not applicable

Recommendations: Not applicable

## Nonpharmaceutical Disease Containment Plan

### Strengths:

- Clear medical protocols and outlined jurisdictional authority

### Weaknesses:

- Titles of leadership in authority are cited in multiple locations and documents, which can slow response approval times

Recommendation: Consider deputizing three in a chain of command to serve as proxies during events causing conflicting meeting schedules.

## Public Health Services Crisis Emergency Risk Communications Plan

### Strengths:

- Pairs well with the Public Information Annex
- Use of assistant PIO supports responsibilities in other planning documents

### Weaknesses:

- While the Crisis Risk Communication Plan has a section for AFN, AFN considerations are not applied throughout
- No real mention of communications system tests for satellite telephones and radio channel frequencies
- Minimal preparedness language throughout the documents
- No substantial coordination with identified groups for risk communication, such as American Disability Act (ADA), non-English speaking community organizations, or those who live independently but have a mobility concern
- No mention of tribal communities, migrant communities, or other communities that warrant a distinct plan for inclusion and information sharing
- Language is often reactive and indicative that the collection of information, personnel identification, and critical decisions would be made during a crisis and not before

Recommendation: Consider including total audience demographics, education levels, and critical infrastructure and drafting multiple communication campaigns in advance of a crisis.

## Public Health Emergency Response Plan-Communicable Disease Incident Response Plan

### Strengths:

- Telehealth planning assists with the practicality of a communicable disease crisis
- Steady considerations of scientific and research information gathering and sharing

### Weaknesses:

- Policy Group is composed of high-up decision-makers who are also tasked with approving public messaging, which can cause bottlenecking and hinder the PIO's ability to get messaging out frequently and urgently

Recommendation: Consider a simplified legal review on pre-approved templates authorized by a Subject Matter Expert/ PIO/Trained Proxy and approval of any singular member with availability on the PH or Joint Information Center (JIC) leadership team for the advancement of risk information sharing to the public and between stakeholders

## Public Health Services Health Officer Protocol

### Strengths:

- Comprehensive legal considerations for county, state, and federal mandates
- Industry standards promote redundant terms, concepts, and planning protocol between documents to ensure that all documents are conveying the same messages. This document provided sufficient redundancy for clarity
- Flexible and reliant on sound judgment of experienced decision-makers
- Itemized information for Communicable Diseases should be included and highlighted in the Public Health Services Crisis Emergency Risk Communications Plan

### Weaknesses:

- Documents read as a Communicable Disease Plan rather than a scope of responsibility

Recommendations: Consider redesigning the document with more of a Human Resource explanation

## Public Health Services Pandemic Influenza Response Plan

### Strengths:

- Includes all key components of a pandemic plan
- Prioritizes risk communication to the public with advance documentation preparations considered
- Strong preparedness language
- Document cites “just-in-time training” but does not include a document/section, however, the document structure provides an on-the-job checklist module service

### Weaknesses:

- Internal communications system not specifically identified with all the moving parts of PHO, Medical Multi-Agency Coordination (MED MAC) Group, and Disaster Service Workers
- Cites just-in-time training but does not include one
- Entities left with responsibility to make Pandemic Response arrangements in their own Emergency Operations Plans, which can cause divergent response among stakeholders
- Leaves vague messaging and guidance decisions to a variety of jurisdictions, which hinders unified messaging, and an established trusted source for the medical community

Recommendation: Med MAC, PHO, and PIO should plan a framework to be incorporated into all relevant plans to standardize private-public response and messaging.

## Public Health Services Medical Countermeasures Plan

### Strengths:

- Long document but checklist upfront for emergency use provides high-level of functional utility
- Designed with interoperability between other documents
- Serves as a comprehensive training manual and information document

### Weaknesses:

- Not applicable

Recommendation: Not applicable

## San Joaquin County Emergency Operations Plan 2021

### Strengths:

- In alignment with Incident Command System
- Federal mission areas modified to meet county standards and expectations
- Contextual information provided, such as critical supply chain considerations, demographics section, and geographic make-up, helps visualize capacity comprehensively

### Weaknesses:

- County demographics can be more inclusive to identify all ethnic groups, such as Indigenous populations, the specific migrant populations, Human Services dependent populations, and populations with specific education and median income levels
- The plans are in-depth, but no demonstration of just-in-time training or Bottom-Line Up Front (BLUFs) for immediate document use
- No real mention of communications system tests for satellite telephones and radio channel frequencies or general communications test exercises

Recommendations: Consider a comprehensive document which references and links out to all other documents for a unified view of a response.

## San Joaquin County Multi-Agency Coordination Support Annex

### Strengths:

- Provides an opportunity for relevant leadership to assemble for information sharing and crisis strategic planning
- Addresses key coordination focus areas and provides guidance to organize meeting structure
- Industry standards recommend redundant terms, concepts, and protocols to be embedded in other plans to ensure that messages and protocols are reinforced. This document provides sufficient redundancy for clarity

### Weaknesses:

- In a crisis, leadership titles appear in other county response documents, suggesting the majority of response time for decision-makers will be occupied in meetings which can hinder normal operations, emergency authorization, and slow communication flows

Recommendations: Maximize title redundancy by authorizing three deputized leaders to contingently serve as proxies for critical assemblies.

## San Joaquin County Operational Area Healthcare Coalition-Healthcare Surge Strategy

### Strengths:

- Considers alternatives for service continuity
- Works in alignment with other crisis management documents
- Covers the gaps in medical situations where not identified specifically in other documents

### Weaknesses:

- Not applicable

Recommendations: Not applicable

## San Joaquin Operational Area Medical/Health Multi-Agency Coordination Group

### Strengths:

- Comprehensive assembly of medical stakeholders
- Behavioral Health is incorporated to consider this specific population and the mental health effects on a community in a crisis

### Weaknesses:

- Med MAC team notified electronically, which may be impaired if communication systems are down
- Executive Leadership identified for assembly are cited in other key documents, which may cause a delay in decision-making, approvals, and organizational bottlenecking

Recommendation: Have an understanding to report for duty at a designated location with pre-identified triggers should communication systems be impaired. Consider deputizing three in a chain of command to serve as proxies during conflicting meeting schedules.

## 2019 Continuity of Operations Plan

### Strengths:

- In a crisis, plans need to be adaptable to accommodate a change in crisis or for ad hoc leadership. This document provided space for adaptability
- Incorporates key principles of standardization and maintains uniformity with other documents
- Comprehensive

### Weaknesses:

- Minimal preparedness language throughout the documents, especially as it pertains to supply chain interruptions due to road impairments
- Insufficient language for pre-identified vendors as a contingency during supply chain interruptions
- Shelter-in-place scenarios not developed in COOP
- Communication and collaboration with neighboring jurisdictions not addressed
- Insufficient CBRNE contingency planning when outdoor air quality is impaired

- Contingency plan needed for back-up generator source after the 27 hours of fuel generation has been exhausted

Recommendations: Invest in one on-site renewable back-up generator source. Consider supply chain planning and incorporate into all other plans in partnership with neighboring jurisdictions.

### ESF-6 Care and Shelter Annex

#### Strengths:

- Considers most essential components of mass care shelter
- Exhausts resources at the local level prior to managing upward- the response remains local
- Family reunification preparedness addressed

#### Weaknesses:

- No substantial medical mass care shelter plan; only plan is to refer out, which may be limited in a crisis, potentially causing a cascading mental health crisis
- Populations with undocumented status are sometimes reluctant to register for a mass care shelter in a crisis scenario; no plan to quell specific issues and concerns
- No medical plan for people who are medically evacuated
- Limited addressing of non-congregate settings

Recommendations: Ensure there are stakeholder organizations entrusted by affected communities present at intake process. Have two mass care shelters: one for general public and one for those requiring medical assistance.

#### Points to Integrate Throughout the Documents in This Section

Using the lens of AFN to build a comprehensive Emergency Operations Plan and assorted annexes will help ensure that the most vulnerable are being supported during lapses and overburdened staff.

1. In building a comprehensive communications plan, inclusive of all communications sections in county documents, all vulnerable populations should be pre-identified with the accompanying supports to ensure that messages are disseminated to those with nontraditional capacity.
2. Vulnerable populations should be prepped throughout the year and homes should be tested annually to ensure that those with mobility issues are maximizing self-management techniques in the event that response capacity is preliminarily limited.
3. Planning, training, and exercises should include vulnerable populations in planning assumptions, training objectives, and performance measures.
4. Plans should emphasize the transportation needs vulnerable populations will have regarding access to essential services.
5. Mental health is a critical component for community compliance and mitigation of socially activated cascading crises. Having a staff management plan inclusive of the mental health needs of a response team as well as the general public will curtail anxiety and actions of frustration. This has a strong impact

for shelter-in-place scenarios. Consider daily debriefs for responding staff to articulate their posture and limitations.

6. Consider staff self-care management plans in advance of a crisis. Offer templates for staff during the onboarding process to establish what their self-care management plan will be and provide training on how one can develop such a plan.
7. The demographics captured could benefit from a broader lens to assess all cultural components of San Joaquin County. Tribal communities within San Joaquin County may not be Federally recognized but may have cultural barriers for consideration. Median income and education level can also factor into the type of communication strategy needed to ensure compliance and battle disinformation.
8. Response operations communication strategies should reflect the wide range of community members captured in demographic data. Pre-scripted strategies should be constructed to address all education levels and provided in multiple languages. The strategies should include visual aids, apply culturally considerate practices, and be adapted to the incident at hand.
9. Leadership titles are repeated throughout the Emergency Management documents, which lends to the perception that a few key personnel will be expected to be in multiple places/functions. This can cause lapses in decision-making. To avoid bottlenecking of approvals and overburdened leadership, identify three persons in a chain of command for every identified leadership role.
10. Preparedness language and references to training and exercises of existing systems are lacking throughout the Emergency Management documents.
11. Back-up generator sources and planning are essential when limited quantity of fuel is available for storage. Consider solar or renewable back-up micro-infrastructure for critical needs for hospitals, mass care shelters, police and fire departments, and communication utility impairment.
12. To avoid human resources crises within a response scenario, just-in-time training should be made available. Pursuant to California law, all government employees are potentially DSWs and should be mandated to take ICS training as part of the normative onboarding hiring process. There should be an abridged version of critical documents to provide BLUFs to expedite familiarization with the county strategies.
13. Offline communications hinder the ability to coordinate and offer clear and timely information in a multi-agency effort. Testing the satellite phones and frequencies of radios should be conducted routinely and identified in the communications plan.
14. Consider an all-hazards approach to include layered catastrophes inclusive of radiological or other highly probable medical events.

## 2.0 Emergency Medical Services Department Operations Center (DOC) Demobilization Plans

### Overview and Purpose

The ICS forms are standardized forms routinely utilized nationally. The Emergency Medical Services Demobilization Plan outlines the specific tasks required to transition out of crisis mode successfully, efficiently, and responsibly.

Tetra Tech reviewed the EMS DOC Demobilization plans, which include:

- **ICS 221 Form**
- **ICS 225 Form**
- **ICS 236 Form**
- **Emergency Medical Services Demobilization Plan**

In keeping with the solid standardization process of California state and federal response protocols, the demobilization plan employs the following strengths and weaknesses:

**Strengths:**

- Efficient
- Clearly identifies expectations and triggers
- Document repository identified as OA EOC

**Weaknesses:**

- No definitive centralization of information for the moving parts of demobilization with mutual stakeholder access

*Points to Integrate*

1. Consider a debrief mechanism for communications team to convey next steps for staff, press, hospitals, and general public. If further precautions are necessary in a shelter-in-place scenario, next steps and information should be prepared to address stakeholders, administrators, and the general public.
2. For those with AFN considerations, consider how the demobilization will affect those populations and offer a county point of contact/hotline for any overlooked complications from demobilization.
3. Consider prioritizing this information in a central repository for multi-agency use.

## 3.0 Emergency Medical Services (EMS) DOC Incident Action Plans (IAP)

### Overview and Purpose

Tetra Tech reviewed DOC IAPs:

- From 3/23/20-3/1/22

IAP identified leadership roles and assignments, aggregated reports of issues, and outlined acute plans to manage the crisis. Tetra Tech reviewed EMC DOC IAPs to identify consistency in reporting as applied to the rubric previously outlined in the methodology section. The following assessment of strengths and weaknesses are identified as follows:

### Strengths:

- Uniformed system of reporting
- Appropriate response reported for the incidents identified
- Comprehensive scope of the crisis to include weather conditions, available staff, traffic plans with supporting maps, communication messaging prompts, and medical plans

### Weaknesses:

- Second in command/deputy often not identified, signaling burden of responsibility to one person
- Multiple pages of information that could be succinctly captured in a singular page
- Language is not deliberate in the structure of objectives requiring specific and measurable language

### *Points to Integrate*

1. Use centralized repositories of information that are mutually beneficial in a multi-agency coordination scenario.
2. Consider restricting the lead decision-makers from being cited as lead in no more than three plans.
3. Consider reformatting the IAPs to capture action items on the cover page in a bottom-line upfront format.
4. For specific and measurable deliberate language choice, consider the following language for example, “Publish and distribute daily COVID-19 hospitalization report to hospitals and Public Health by 1600 hours (Monday-Thursday).”

## 4.0 EMS Situational Reports

### Overview and Purpose

Situational reports were designed to facilitate information sharing, multi-agency coordination, and response support. Tetra Tech reviewed situation reports that include:

- San Joaquin County Operational Area Healthcare Coalition Clinic Status Report Form
- San Joaquin County Operational Area Healthcare Coalition Behavioral Health Status Report Form
- San Joaquin County Operational Area Healthcare Coalition Long Term Care Facility Status Report Form
- San Joaquin Operational Area Healthcare Coalition Hospital COVID-19 Situation Report Form
- San Joaquin Operational Area COVID-19 Medical/Health Situational Report
- WebEOC End User Training
- San Joaquin Medical/Health Interagency Situation Report
- Daily Operational Area Report Definitions
- Operational Area Report-1/11/21

- Hospital COVID-19 Licensing and Certification Report-8/20/21 and 8/26/21

Tetra Tech reviewed the situation reports and identified the following strengths and weaknesses:

**Strengths:**

- Comprehensive reporting
- Designed for multi-agency usage/compatibility

**Weaknesses:**

- None

***Points to Integrate***

1. Consider placing all situational reports in a centralized location and ensuring that all involved in the multi-agency coordination have access and alerts when new IAPs are submitted.
2. Information that is not determined classified or sensitive should be readily accessible to the partners of response.

## 5.0 Emergency Medical Services Policy Memos

### Overview and Purpose

- 2/20-12/22

San Joaquin County issued a variety of internal memos addressed to specific personnel/stakeholders or to the organization at large. The intent of the memos is to facilitate information sharing and documentation of the response process. Tetra Tech reviewed the memos and determined the following:

**Strengths:**

- Informative and clearly outlined purposes and intent of communication

**Weaknesses:**

- Unclear how the information is disseminated, who receives the information, and where the information repository is for organizational access
- Without this information, it is unclear whether AFN is addressed internally

***Points to Integrate***

1. Include in all of the communications planning components who should be the recipients of memos, even if addressed to a singular entity or person. Consider carbon copying (cc) into a repository for referencing and creating multiple channels of memo distribution based on content (i.e., Staff Memos, Organizational Memos, Outer-Agency Memos, Administrative Memos) to ensure only the appropriate audience has access to relevant information.

2. To ensure that AFN considerations are being met, ensure that the appropriate audiences have language and cultural tone in alignment. Research in advance these communities and have communication strategies in place prior to a crisis.
3. Details, leadership directions, and specifications for the general community should be included to ensure that any relayed messaging is accompanied by the appropriate supports of language translation, visual/audio aids, basic language suitable for reading levels of the county, and behavioral/mental health sensitivities.

## 6.0 Medical Health Multi-Agency Coordinating Agency Agendas

### Overview and Purpose

- 6/18/20-9/3/20
- Medical Health Operations Area Coordination (MHOAC) State Mutual Aid COVID-19 Resources Request Reports

The multi-agency coordinating agendas outline and document the current course of action in place as well as an outlook for mitigation in a multi-agency response environment. Tetra Tech reviewed the agendas throughout the COVID-19 response and identified the following strengths and weaknesses:

#### Strengths:

- Good documentation of meetings and objectives in alignment with response expectations

#### Weaknesses:

- Separate duty for administrators than the EOC Director leaves space for divergent response strategies
- The Public Health Officer is located low on the organizational chart and should be elevated as response principal

#### *Points to Integrate*

1. Consider mandating that County Administrators take advanced ICS training to understand the importance of timely information sharing, the moving parts of a response, and the jurisdictional authorities embedded within the National Incident Management System (NIMS).

## 7.0 Public Health Services DOC

### Overview and Purpose

Tetra Tech reviewed the following Public Health Services DOCs:

- COVID-19 Employee Health Protocol 2020
- Employee Covid-19 Screening Form
- Self-Monitoring Attestation Statement
- COVID-19 Standard Operating Procedure Case Investigation and Contact Tracing
- COVID-19 Containment Plan-August 2022
- COVID-19 Standard Operating Procedure Outbreak Management

- COVID-19 Standard Operating Procedure Intake
- COVID-19 DOC Plan
- COVID-19 Surge Plan
- COVID-19 Variance Attestation Form
- COVID-19 Response Action Plan
- Standard Operating Procedure for Staff Public Communications/Phone Bank
- Standard Operating Procedure for Skilled Nursing Facility (Updated)

The PHS DOC documents ensure that the Public Health response includes outreach, capability planning, and resources to manage containment, contact tracing, and vaccine roll-out. Tetra Tech reviewed the Public Health documents and assessed the following strengths and weaknesses:

### Strengths:

- Intention for outreach present
- Coverage of a variety of responsibilities in a crisis considered
- Surge planning is key to manage a pandemic and was adequately considered

### Weaknesses:

- Abundance of plans with critical information dispersed between multiple documents
- No preliminary document for novice DSWs

### *Points to Integrate*

1. Consider creating abridged one-pagers for quick review of critical documents with BLUF headers.
2. Consider embedding Just-in-time Training in critical documents.
3. Consider creating an EOP inclusive of all the considerations required to avoid needing to cross reference between multiple documents, which all may not have access to.

## 8.0 Press Releases

### Overview and Purpose

- 7/15/20-1/10/22

Risk communication is introduced to the public via public notices from the official county sources. Press Releases served to update the community-at-large with progress and next steps of the response phase, press releases signaled county policy, vaccine roll-out, and county effort updates. Tetra Tech reviewed the press releases and identified the following strengths and weaknesses:

### Strengths:

- Frequently issued
- Suitable to industry standard

### Weaknesses:

- No identified mechanism to reposit press releases in a centralized location
- No identified mechanism of dissemination to news outlets or otherwise during a crisis
- No identified mechanism to distribute messaging on social media during a crisis

### *Points to Integrate*

1. Consider a social media policy for quick dissemination of official notices.
2. Consider pre-drafted press releases for quick use and an organizational standard.
3. Consider an internal press release repository for staff to utilize for up-to-date information. This is essential when internet connectivity is unreliable. Staff who may have missed a notice can catch up through the repository.
4. Consider offline communication directives for staff.
5. Consider establishing rapport with cultural radio stations to ensure that they align with the county's needs of information sharing in advance of a crisis.
6. Document the list of news outlets to be included in the crisis/risk communication plan.

## 9.0 COVID-19 Master Timeline

### Overview and Purpose

San Joaquin County documented key milestones, mandates, and incidents that directed the course of the COVID-19 response. Documenting key moments in the response phase was documented as milestones over the duration of the COVID-19 pandemic.

There were no strengths or weaknesses to report; however, it is critical to mention the copious amount of documentation by San Joaquin County, which serves crisis review efforts well.

### *Points to Integrate*

No points to integrate.

## 10.0 Grand Jury Documents

### Overview and Purpose

- 2020-2021 San Joaquin County Grand Jury
- 2020-2021 San Joaquin County Grand Jury Follow-up

The Grand Jury conducted a review of the organizational process throughout the COVID-19 response. The findings included a list of gaps identified from documentation, interviews with disaster workers, and incidents germane to the response. The recommendations offered were consistent and in alignment with the findings.

Tetra Tech reviewed the Grand Jury's report and concurred with following:

- An increased need for a culture of transparency and information sharing is lacking in the existing documentation.
- Multi-agency efforts are operating as a separate and distinct function of the response rather than a component of the EOC protocol.
- Strategies to keep mission essential functions operational as DSWs are repositioned in the response.
- Lack of just-in-time training prevalent throughout the response.

Tetra Tech suggests the following:

- The Grand Jury report suggests there is no clear pathway for jurisdictional authority, which led to PHS being reluctant to take the primary role in a pandemic. According to ICS and NIMS, ESF-8 takes the lead on all Public Health crisis events and, by default, is the presumed lead in the COVID-19 response.

*Points to Integrate*

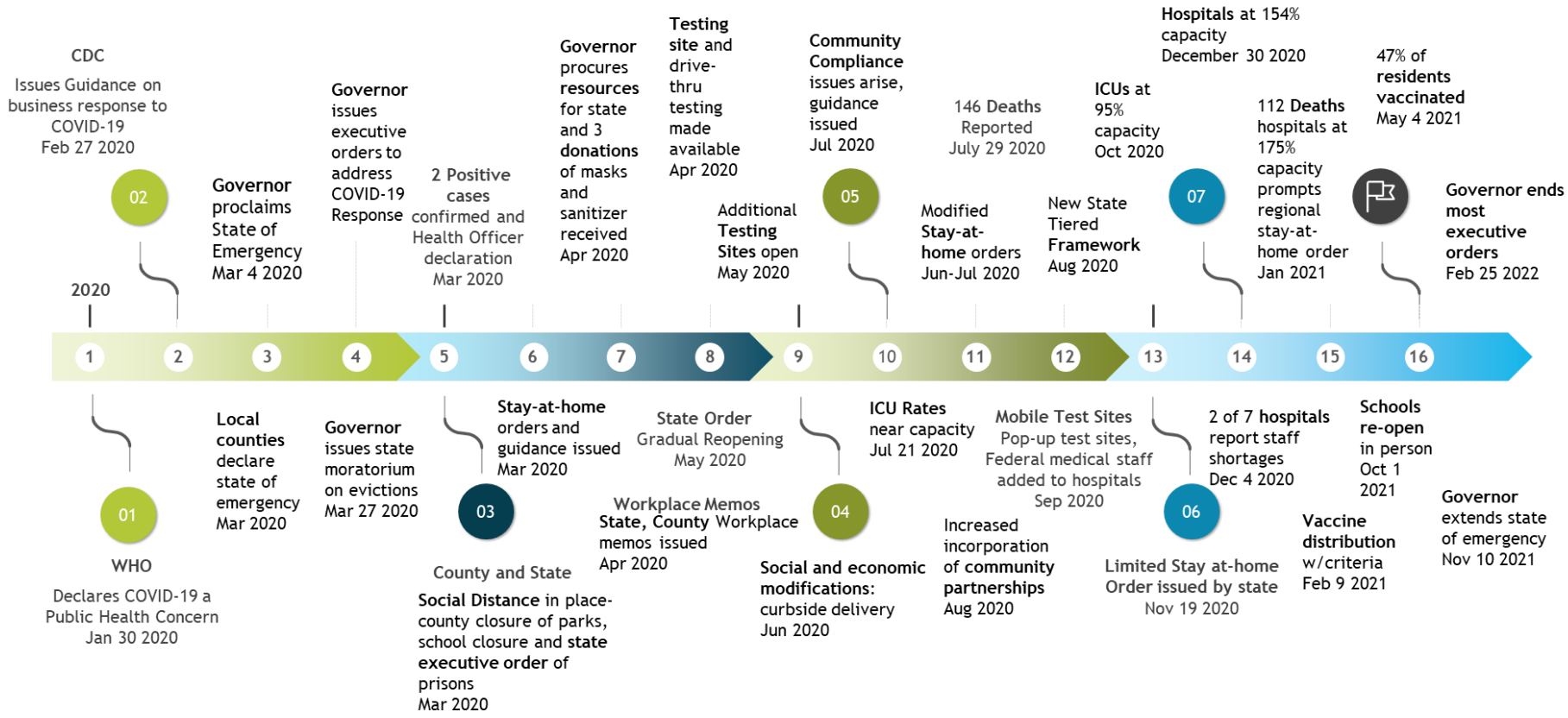
1. Re-establish leadership demands based on national ESF guidelines and expectations.

## Key Events and Milestones

This section provides the key events and milestones submitted by the county to inform the document review process. The key events and milestones were compiled to visually demonstrate impacting activity of the COVID-19 response.

## Timeline

### San Joaquin County Milestone Timeline 2020-2022



## ATTACHMENT A. Documents Assessed

The county documents assessed as part of the Document Review included:

### Emergency Operations Plans

- ✓ San Joaquin County Emergency Operations Plan 2021
- ✓ San Joaquin County Multi-Agency Coordination Support Annex
- ✓ San Joaquin County Operational Area Healthcare Coalition-Healthcare Surge Strategy
- ✓ San Joaquin Operational Area Medical/Health Multi-Agency Coordination Group
- ✓ Nonpharmaceutical Disease Containment Plan
- ✓ Public Health Emergency Response Plan-Communicable Disease Incident Response Plan
- ✓ 2019 Continuity of Operations Plan
- ✓ Public Health Services Crisis Emergency Risk Communications Plan
- ✓ Public Health Services Pandemic Influenza Response Plan
- ✓ Public Health Services Health Officer Protocol
- ✓ Public Health Services Medical Countermeasures Plan
- ✓ ESF-5 Emergency Management Annex
- ✓ ESF-7 Resources Annex
- ✓ ESF-8 Public Health and Medical Annex
- ✓ ESF-15 Public Information Annex
- ✓ ESF-6 Care and Shelter Annex

### Emergency Medical Services Department Operations Center (DOC) Demobilization Plans

- ✓ ICS 221 Form
- ✓ ICS 225 Form
- ✓ ICS 236 Form
- ✓ Emergency Medical Services Demobilization Plan

### EMS DOC Incident Action Plans

- ✓ From 3/23/20-3/1/22

### EMS Situational Reports

- ✓ San Joaquin County Operational Area Healthcare Coalition Clinic Status Report Form
- ✓ San Joaquin County Operational Area Healthcare Coalition Behavioral Health Status Report Form
- ✓ San Joaquin County Operational Area Healthcare Coalition Long Term Care Facility Status Report Form
- ✓ San Joaquin Operational Area Healthcare Coalition Hospital COVID-19 Situation Report Form
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- ✓ Daily Operational Area Report Definitions
- ✓ Operational Area Report-1/11/21
- ✓ Hospital COVID Licensing and Certification Report-8/20/21 and 8/26/21

### Emergency Medical Services Policy Memos

- ✓ 2/20-12/22

### Medical Health Multi-Agency Coordinating Agendas

- ✓ 6/18/20-9/3/20
- ✓ MHOAC State Mutual Aid COVID-19 Resources Request Reports

## Public Health Services Department Operations Center

- ✓ COVID-19 Employee Health Protocol 2020
- ✓ Employee COVID-19 Screening Form
- ✓ Self-Monitoring Attestation Statement
- ✓ COVID-19 Standard Operating Procedure Case Investigation and Contact Tracing
- ✓ COVID-19 Containment Plan-August 2022
- ✓ COVID-19 Standard Operating Procedure Outbreak Management
- ✓ COVID-19 Standard Operating Procedure Intake
- ✓ COVID-19 Department Operations Center Plan
- ✓ COVID-19 Surge Plan
- ✓ COVID-19 Variance Attestation Form
- ✓ COVID-19 Response Action Plan
- ✓ Standard Operating Procedure for Staff Public Communications/Phone Bank
- ✓ Standard Operating Procedure for Skilled Nursing Facility (Updated)

## Press Releases

- ✓ 7/15/20-1/10/22

## COVID-19 Master Timeline

## San Joaquin COVID-19 Pandemic Response Survey

## Grand Jury Documents

- ✓ 2020-2021 San Joaquin County Grand Jury
- ✓ 2020-2021 San Joaquin County Grand Jury Follow-up

## ATTACHMENT B. San Joaquin County COVID-19 Pandemic Response Survey Data Report

## Data Collection Tool

San Joaquin County COVID-19 Data Collection Tool provided participants an opportunity to give feedback on incident management, coordination, public information, information sharing, and communication during the COVID-19 response. The survey and focus group data informed the development of the COVID-19 AAR/IP to increase the County's capabilities and readiness by identifying strengths, opportunities for improvement, recommendations, and best practices. Forty-four (44) participants completed the multiple-choice and free-text survey.

## Respondent Discipline

Please select the discipline-based group you best identify with.

| Number of Respondents | Discipline |
|---|---|
| **1 (2%)** | Disaster Service Worker |
| **3 (7%)** | Healthcare |
| **2 (5%)** | Prehospital Care |
| **9 (21%)** | Emergency Management |
| **17 (40%)** | Public Health |
| **11 (26%)** | Other |

## Survey Questions

### Question 1: Do you feel the San Joaquin County COVID-19 Response supported your organization's mission during the COVID-19 Pandemic?

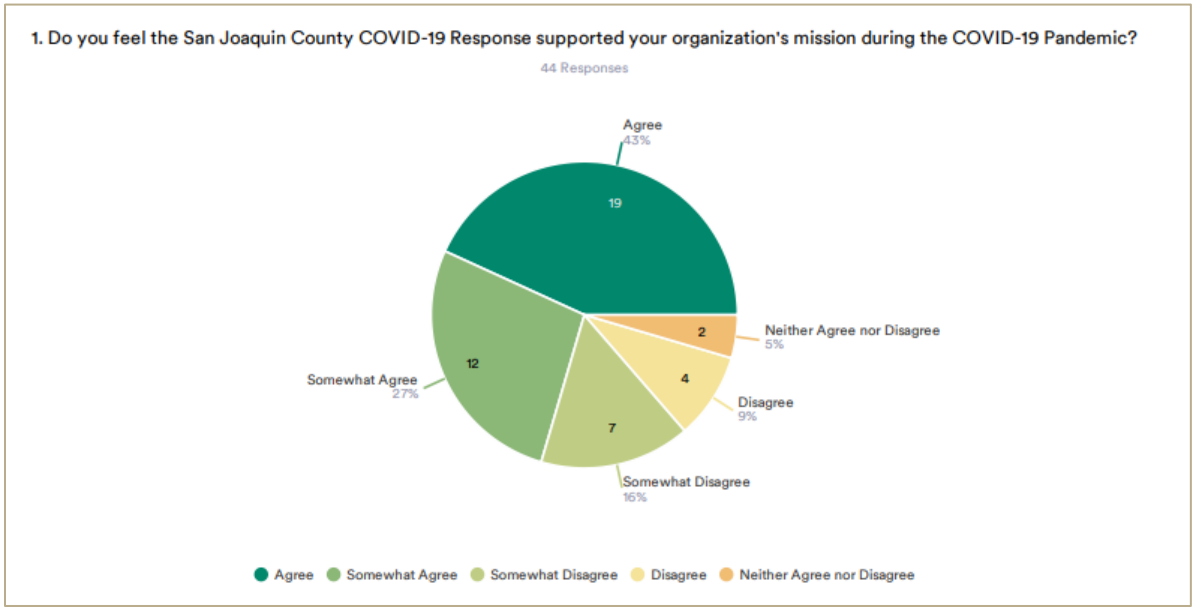



**Figure 1: Most participants agreed that their organization's mission was supported by the San Joaquin County COVID-19 response.**

**Question 2: Please rate the following statement "Information provided by the San Joaquin County COVID-19 Response helped support my organization's mission."**

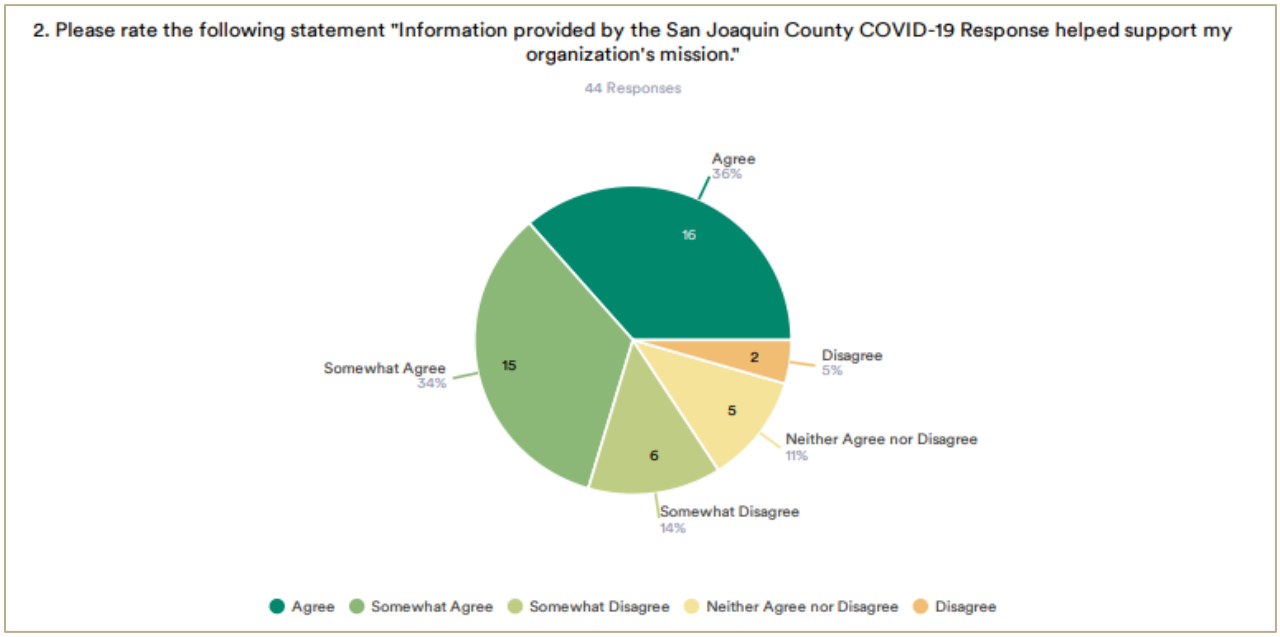



**Figure 2: Most participants agreed that information provided by the San Joaquin County COVID-19 response helped support their organization's mission.**

Question 3: On **a scale of 1-5, with 1 being the lowest and 5 being the highest, please rate the San Joaquin County COVID-19 Response achievement of the following:**

a) Coordinate information between State, County Leadership, Municipalities, and Health Care Facilities.

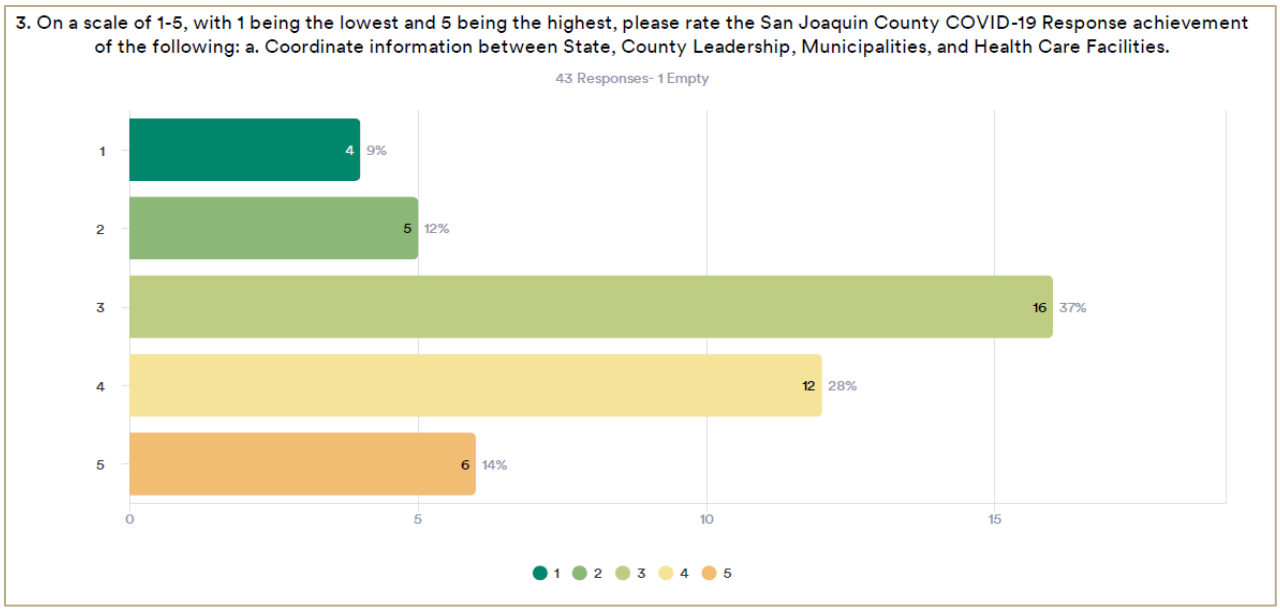



**Figure 3: Most participants rated San Joaquin County's ability to coordinate information between state, county leadership, municipalities, and health care facilities as a 3 or 4.**

b) Receive, prioritize, procure, and distribute requests and supplies to community partners.

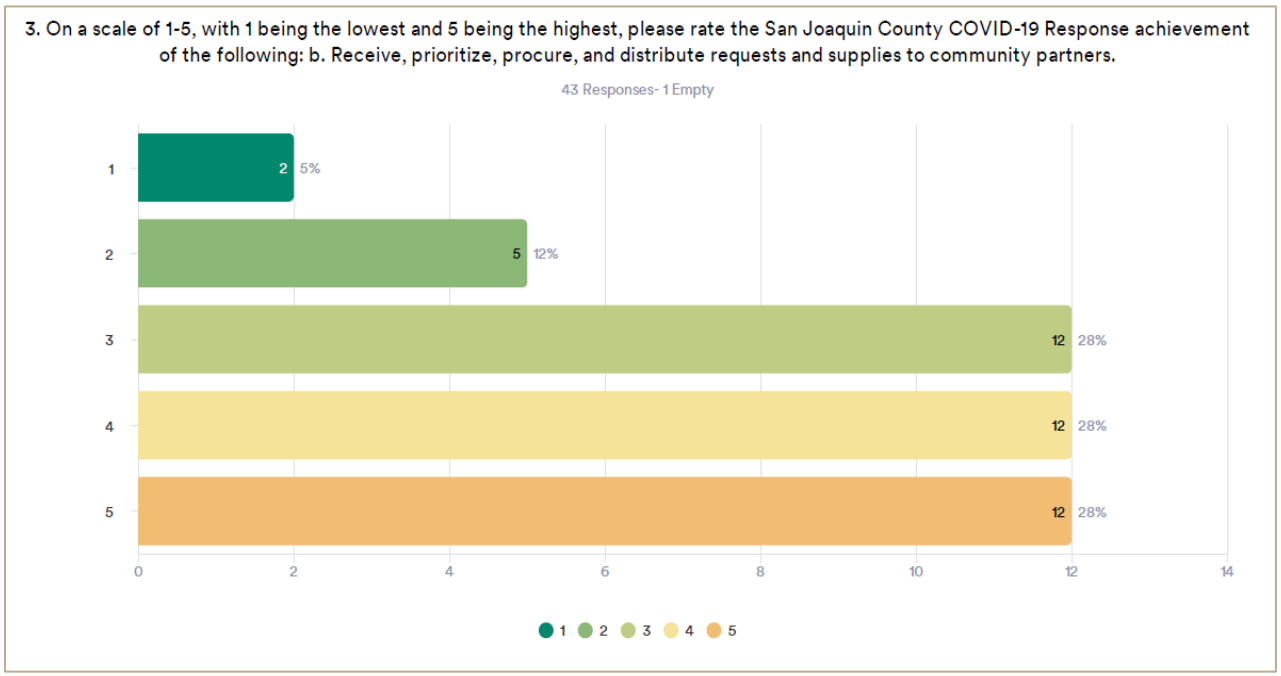



**Figure 4: Most participants rated San Joaquin County's ability to receive, prioritize, procure, and distribute requests and supplies to community partners as a 3, 4, or 5.**

c) Monitor and support school districts.

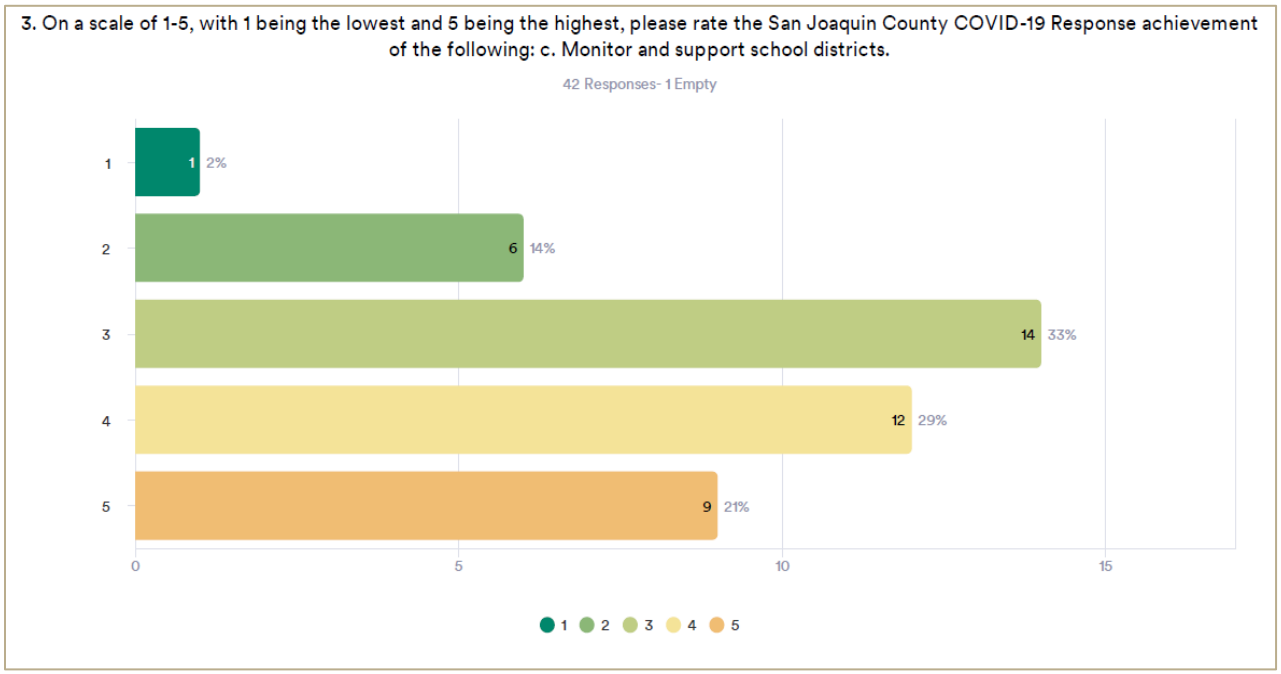



**Figure 5: Most participants rated San Joaquin County's ability to monitor and support school districts as a 3 or 4.**

d) Support community partner activities.

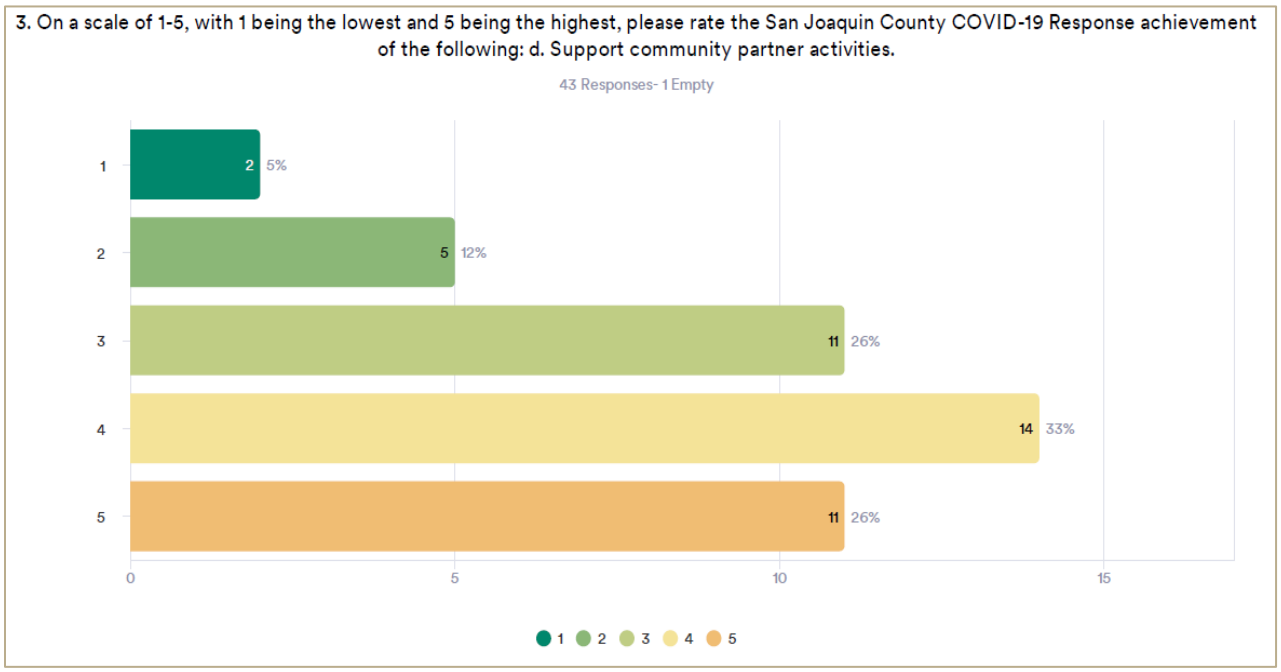



**Figure 6: Most participants rated San Joaquin County's ability to support community partner activities as a 4 or 5.**

e) Support community partners with timely and appropriate guidance.

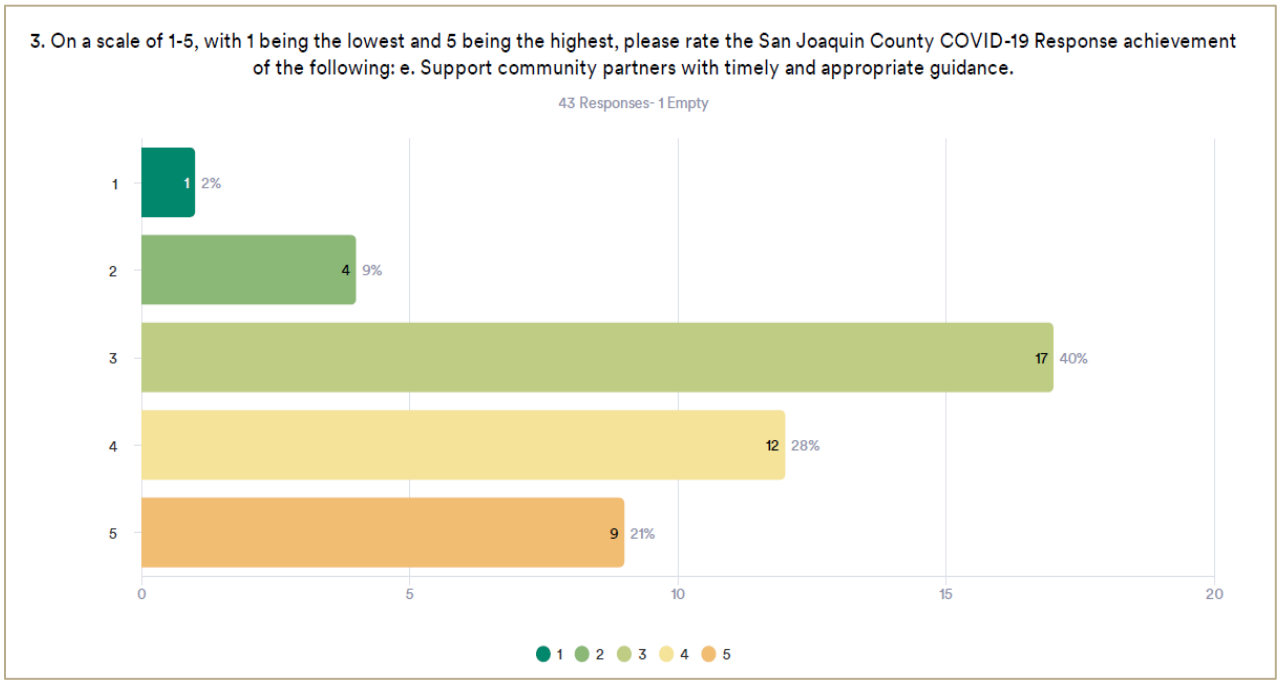



**Figure 7: A majority of participants rated San Joaquin County's ability to support community partners with timely and appropriate guidance as a 3 or 4.**

f) Participate in conference calls with community partners.

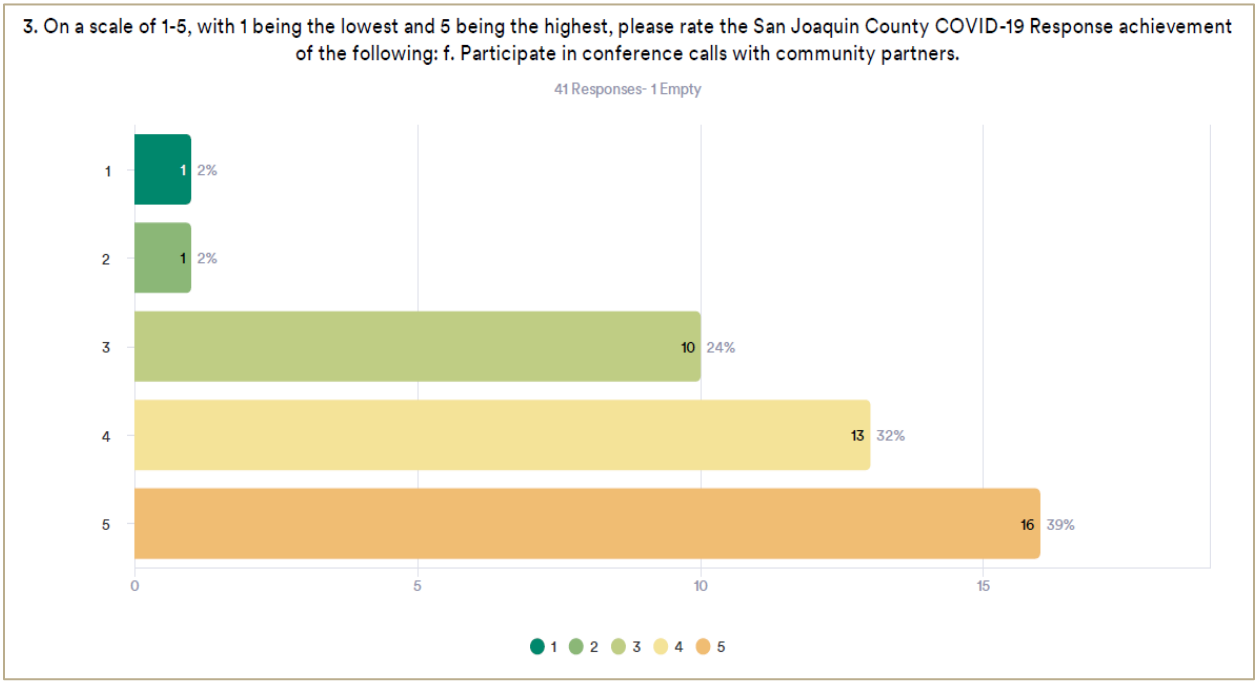



**Figure 8: Most participants rated San Joaquin County's ability to participate in conference calls with community partners as a 4 or 5.**

g) Coordination and support public health initiatives.

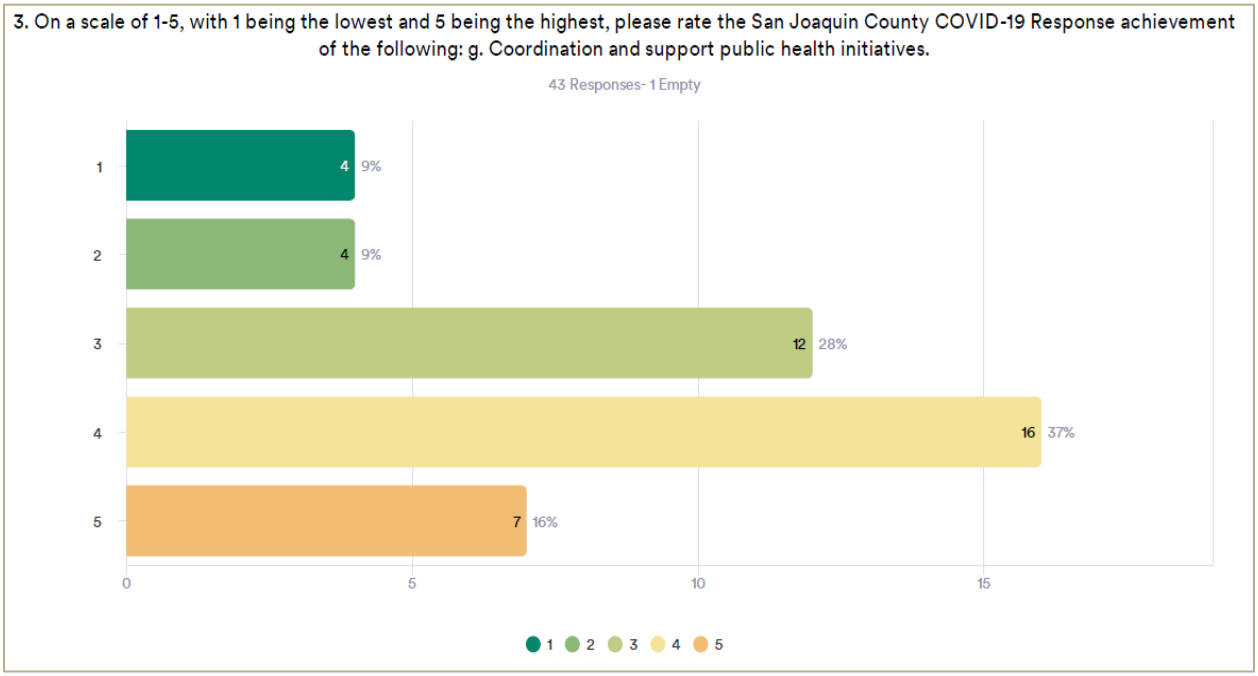



**Figure 9: Most participants rated San Joaquin County's ability to coordinate and support public health initiatives as a 4 or 5.**

h) Continuity of essential services in a safe manner.

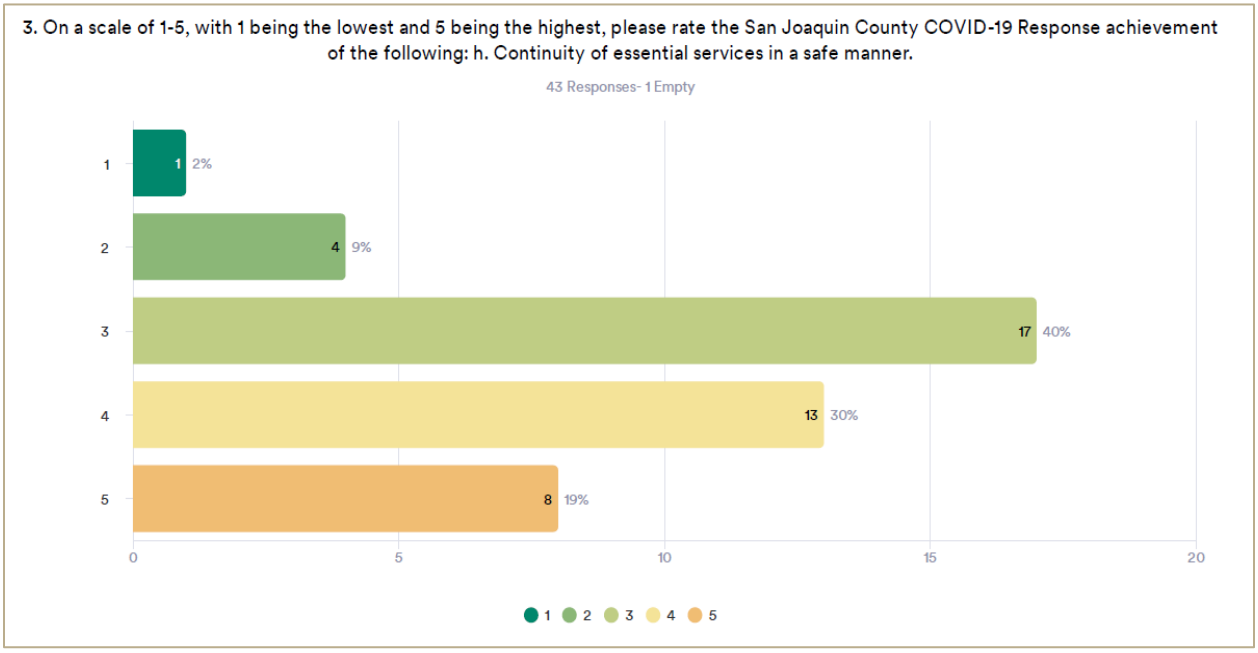



**Figure 10: Most participants rated San Joaquin County's ability to continue essential services in a safe manner as a 3 or 4.**

## Question 4: Please indicate how much you agree with the following statements based on your experience and knowledge of the San Joaquin County COVID-19 Response.

a) Organizational roles and responsibilities were clearly identified.

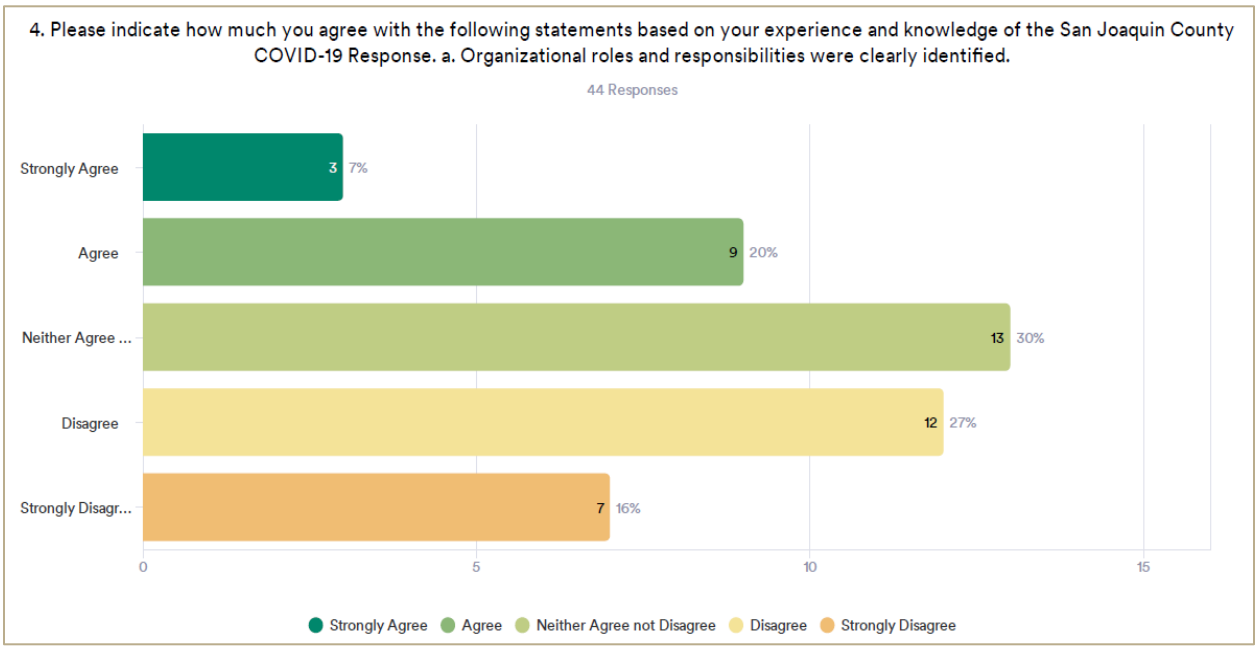



**Figure 11: Most participants did not agree that organizational roles and responsibilities were clearly identified within San Joaquin County's COVID-19 response.**

b) The incident was well structured and organized.

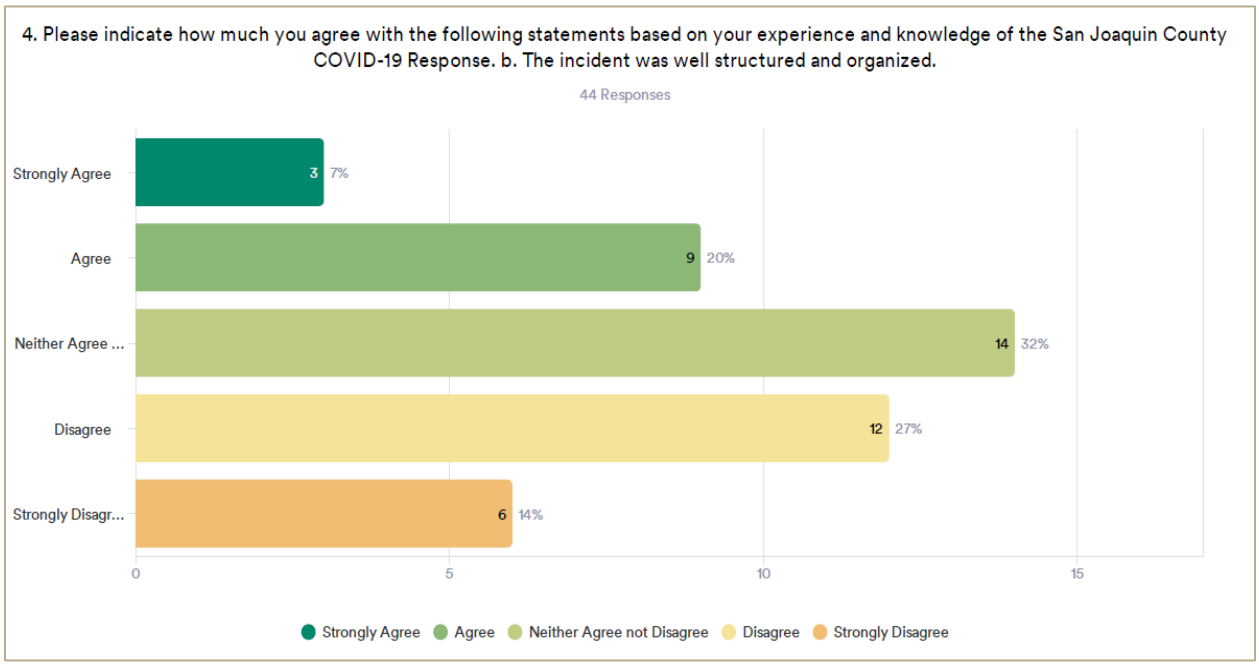



**Figure 12: Most participants did not agree that the COVID-19 response was structured and organized within San Joaquin County.**

c) The incident action objectives were being met.

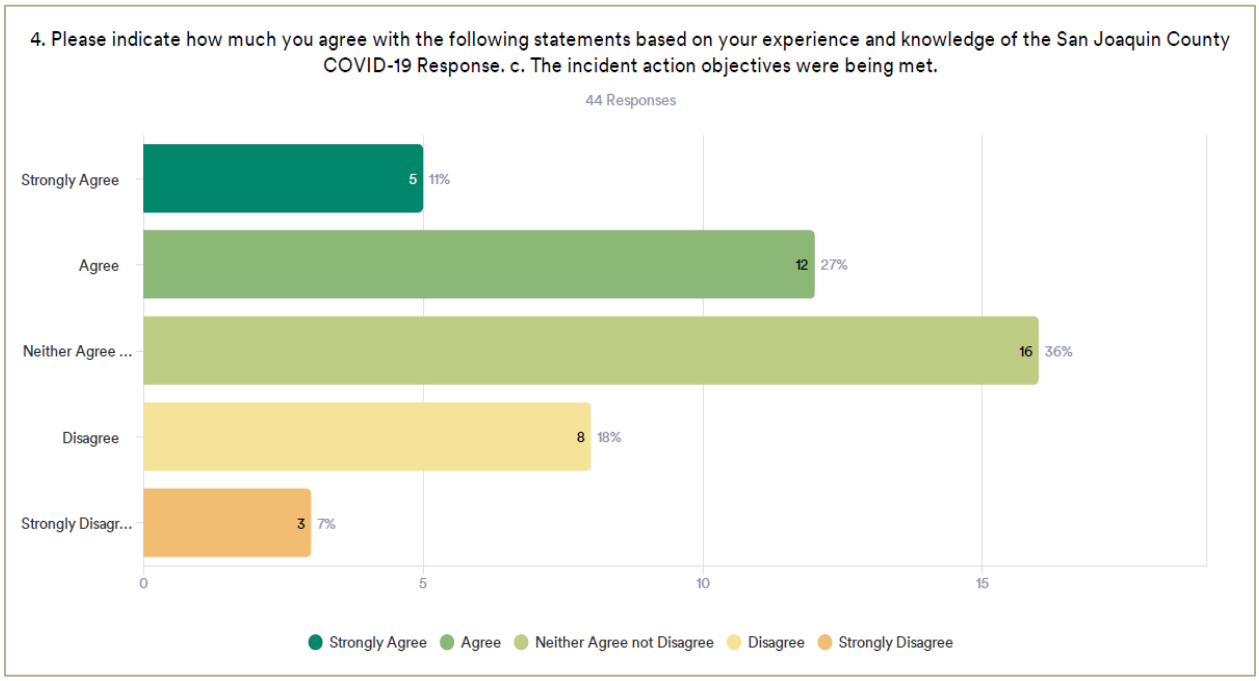



**Figure 13: Most participants did not agree that the incident action objectives were being met within San Joaquin County's COVID-19 response.**

d) Participants were fulfilling their roles.

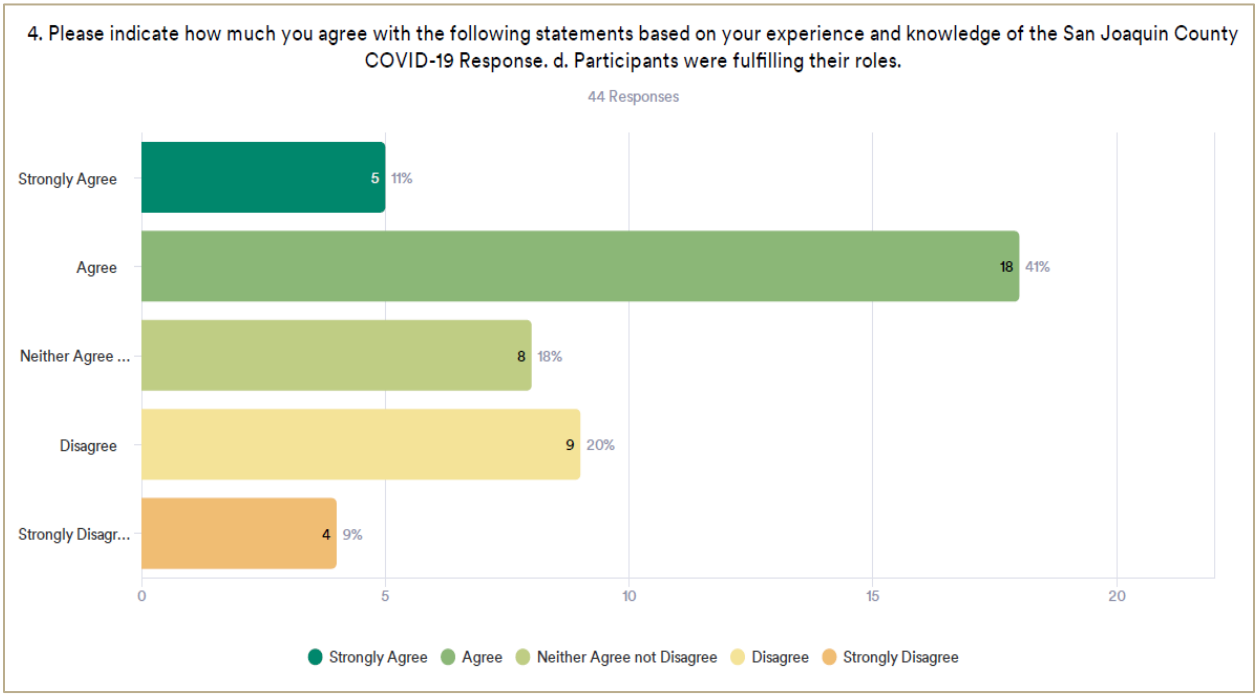



**Figure 14: Most participants agreed that individuals involved in San Joaquin County's COVID-19 response fulfilled their roles.**

e) Participants communicated effectively.

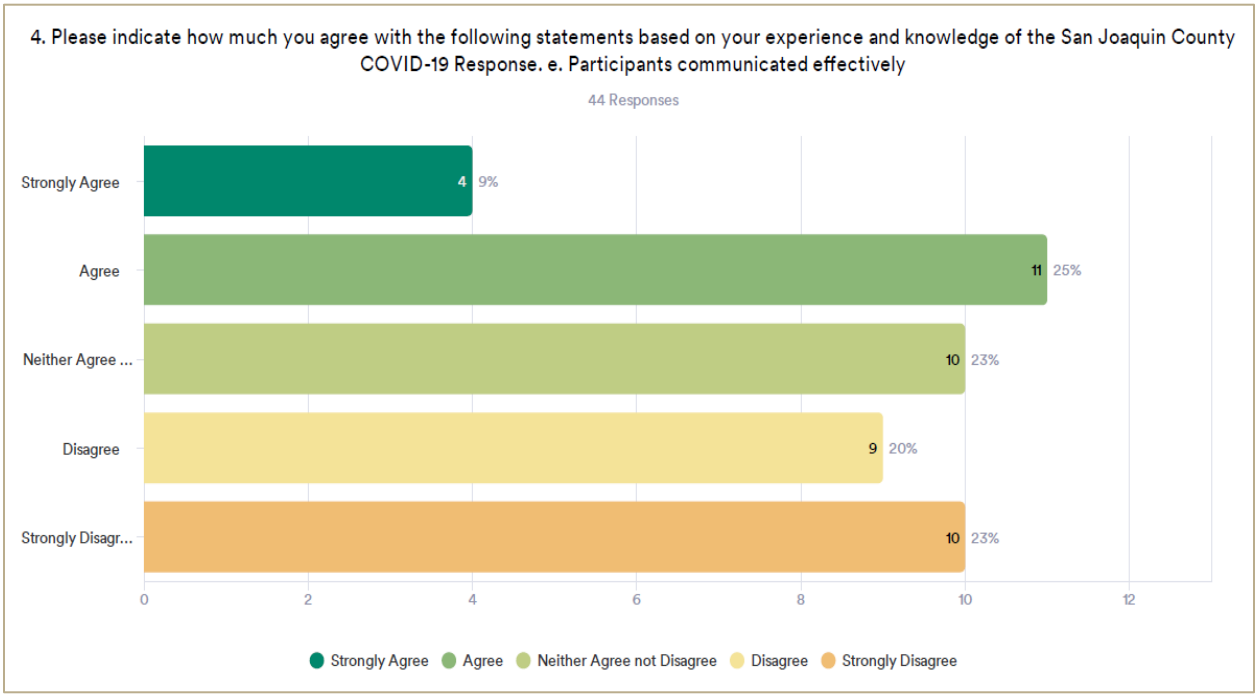



**Figure 15: Most participants did not agree that individuals involved in San Joaquin County's COVID-19 response communicated effectively.**

f) The meetings and calls were useful and informative.

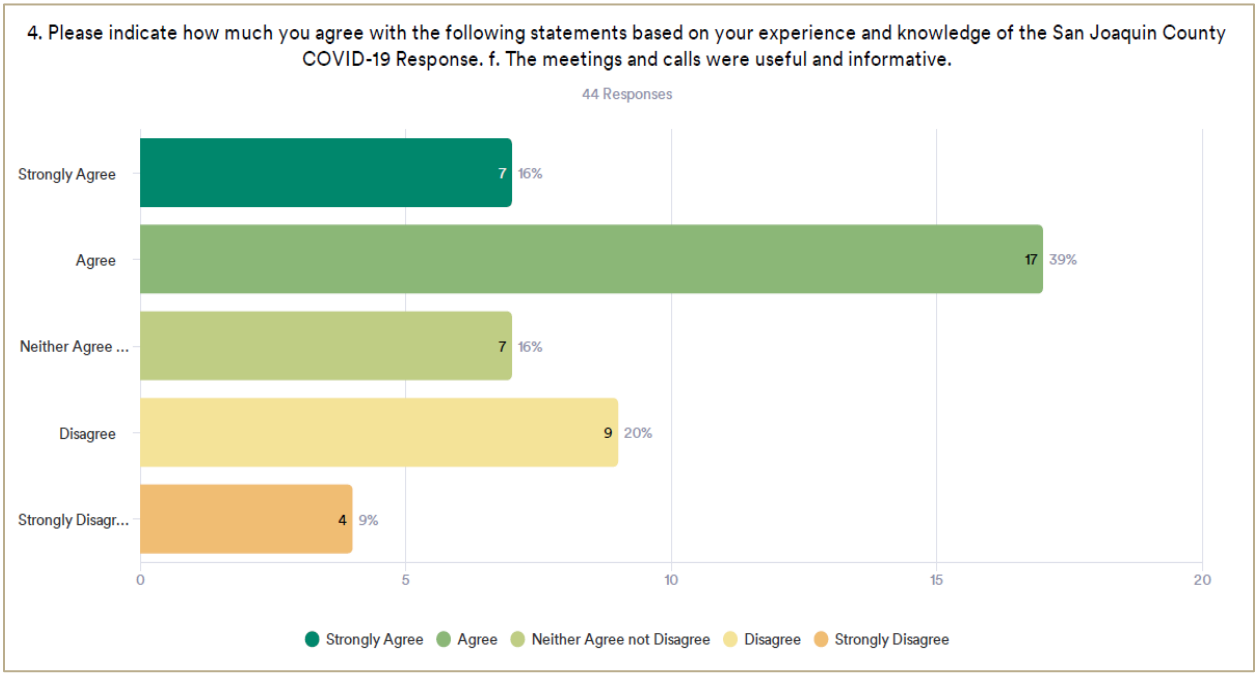



**Figure 16: Most participants agreed that meetings and calls were useful and informative during San Joaquin County's COVID-19 response.**

## Question 5: Please indicate if the following were major contributors to challenges in operational coordination for the COVID-19 pandemic.

a) Number of entities involved across public and private sectors.

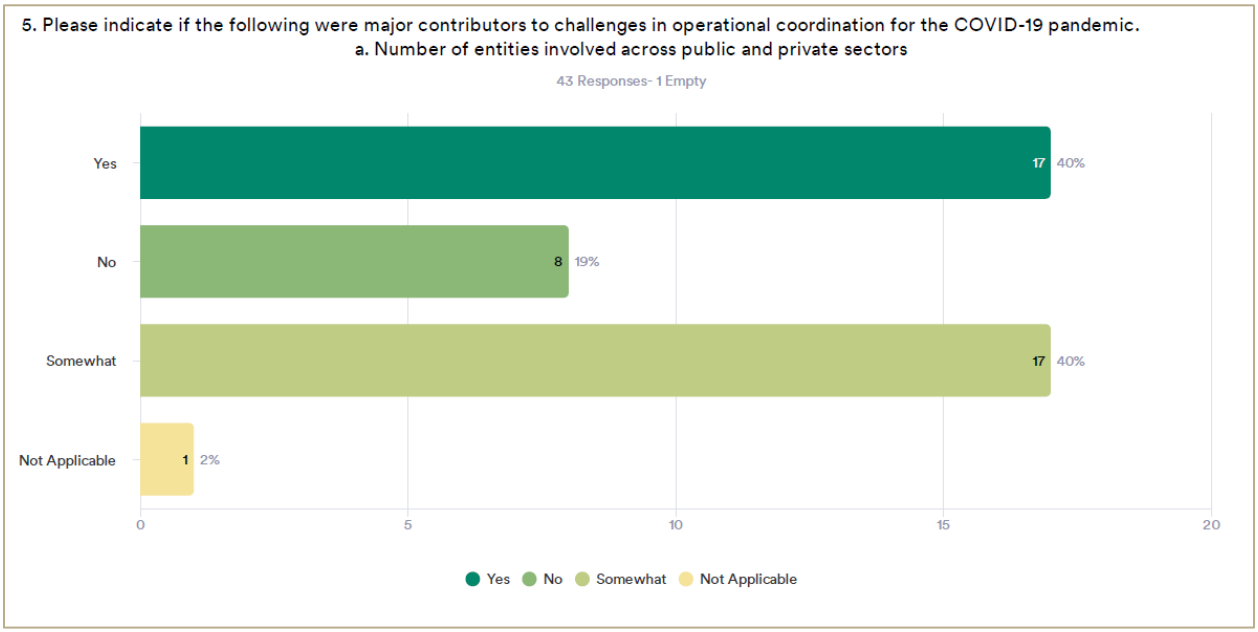



**Figure 17: Most participants thought that the number of entities involved in the response across public and private sectors was a contributor to challenges in operational coordination.**

b) Lack of familiarity by organization in responding to public health disasters.

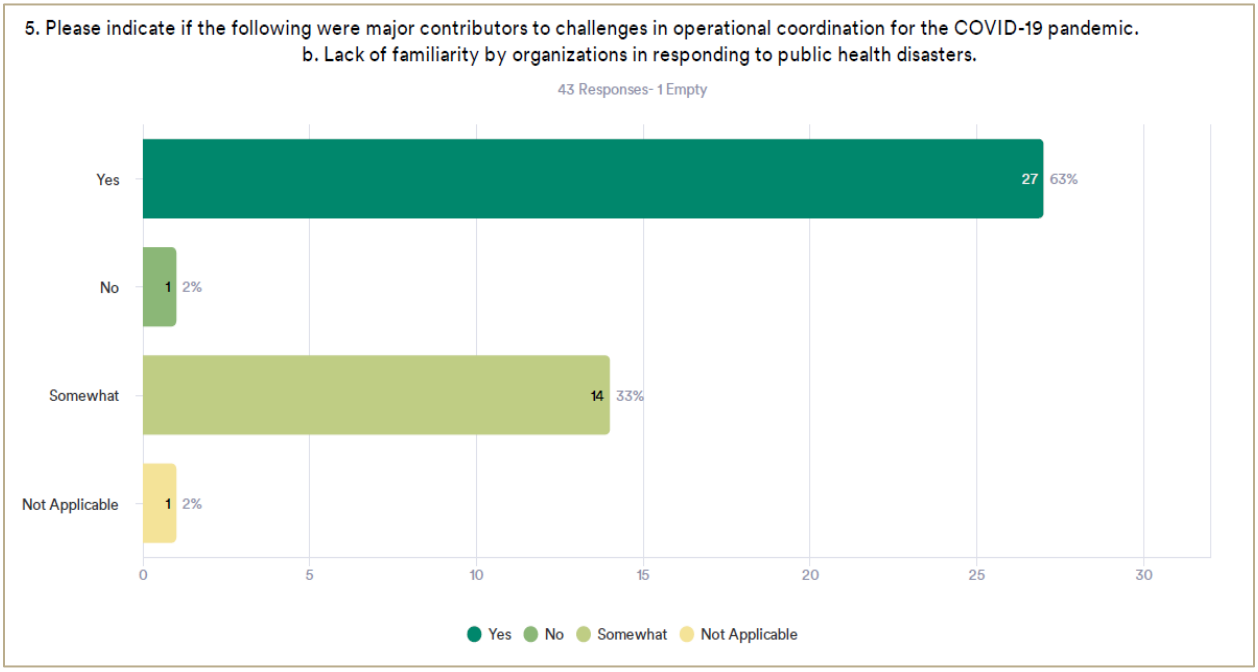



**Figure 18: Most participants felt that lack of familiarity by organizations in responding to public health disasters was a major contributor to challenges in operational coordination.**

c) Lack of clarity regarding roles and responsibilities.

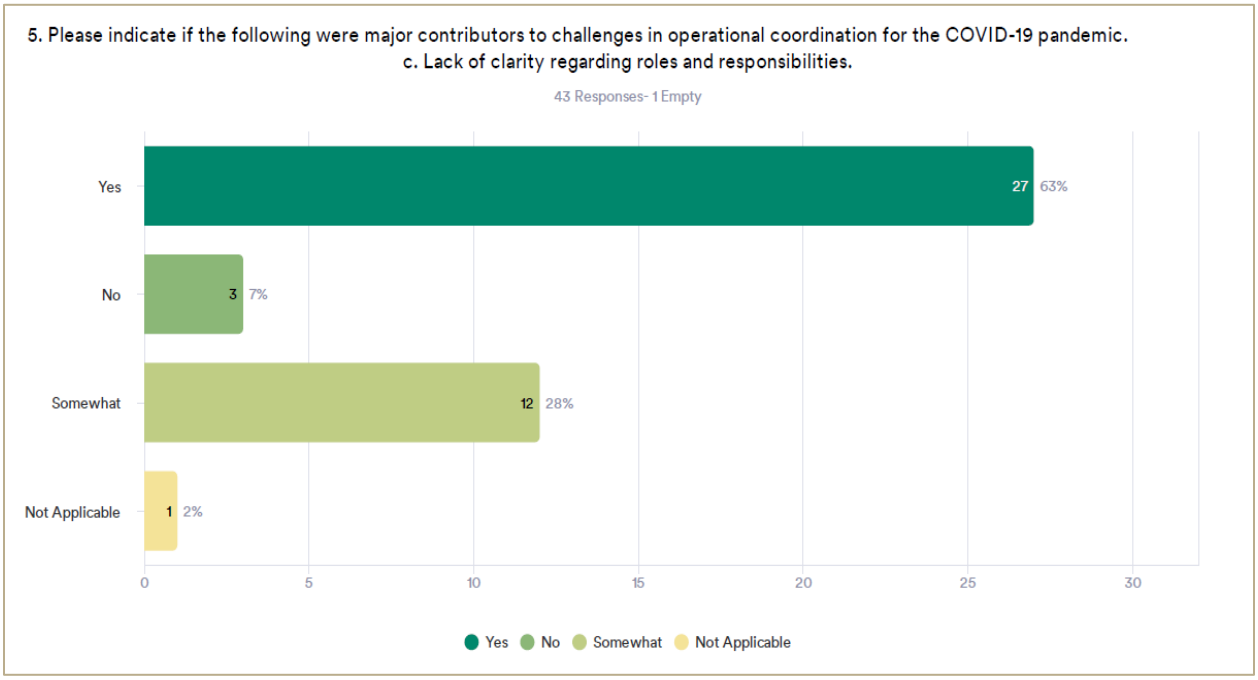



**Figure 19: Most participants felt that lack of clarity regarding roles and responsibilities was a major contributor to challenges in operational coordination.**

d) Lack of pre-existing relationships among responding organizations.

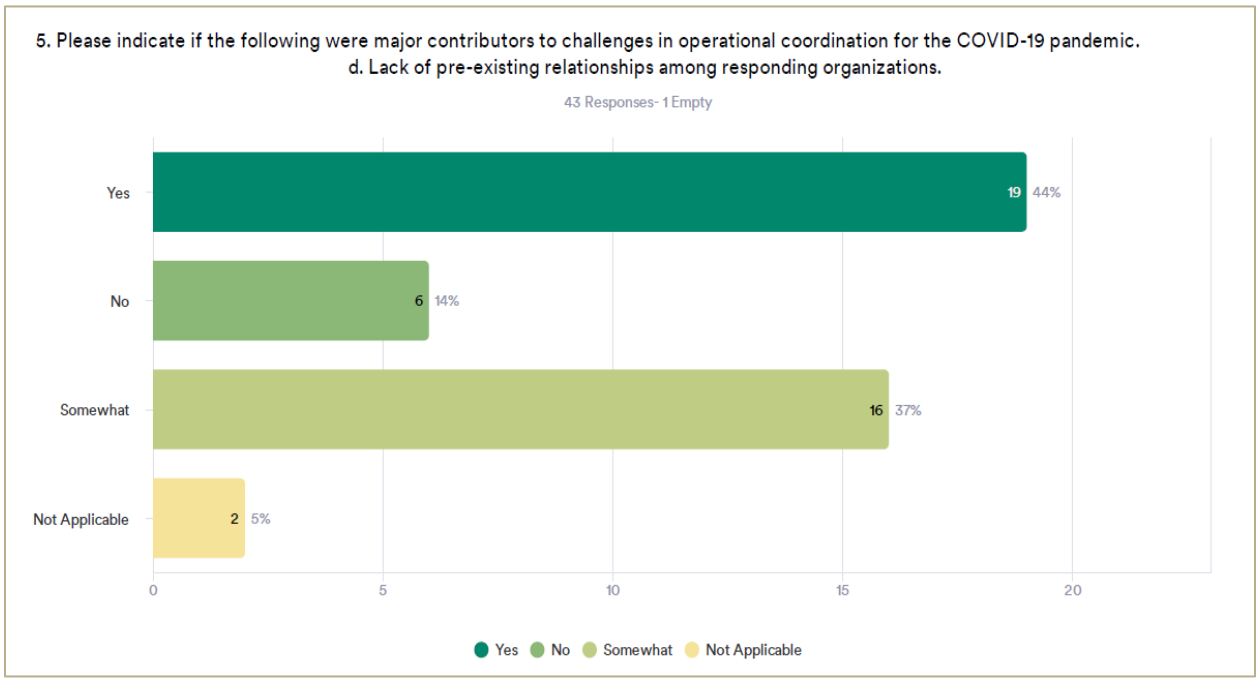



**Figure 20: Most participants felt that lack of pre-existing relationships among responding organizations was a major contributor to challenges in operational coordination.**

e) Conducting coordination activities in a virtual environment.

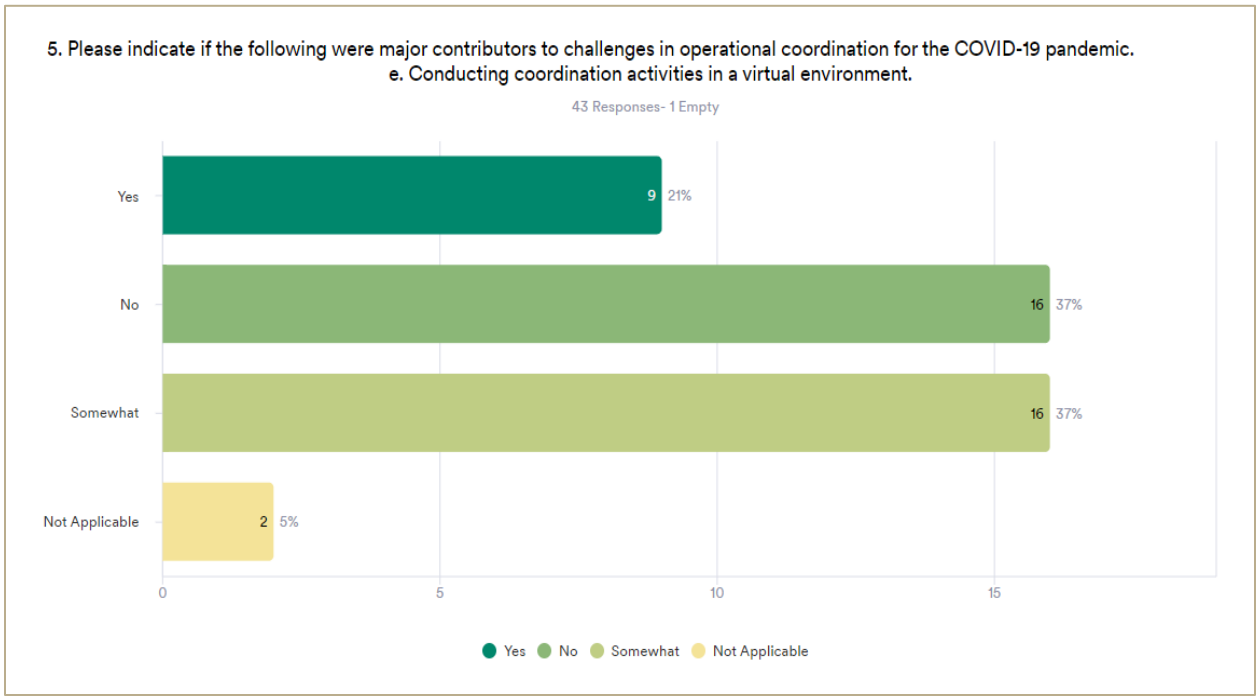



**Figure 21: Most participants responded that conducting coordination activities in a virtual environment was either not a major contributor to challenges to operational coordination or was "somewhat" a contributor to challenges to operational coordination.**

f) Establishing unified command in a timely fashion.

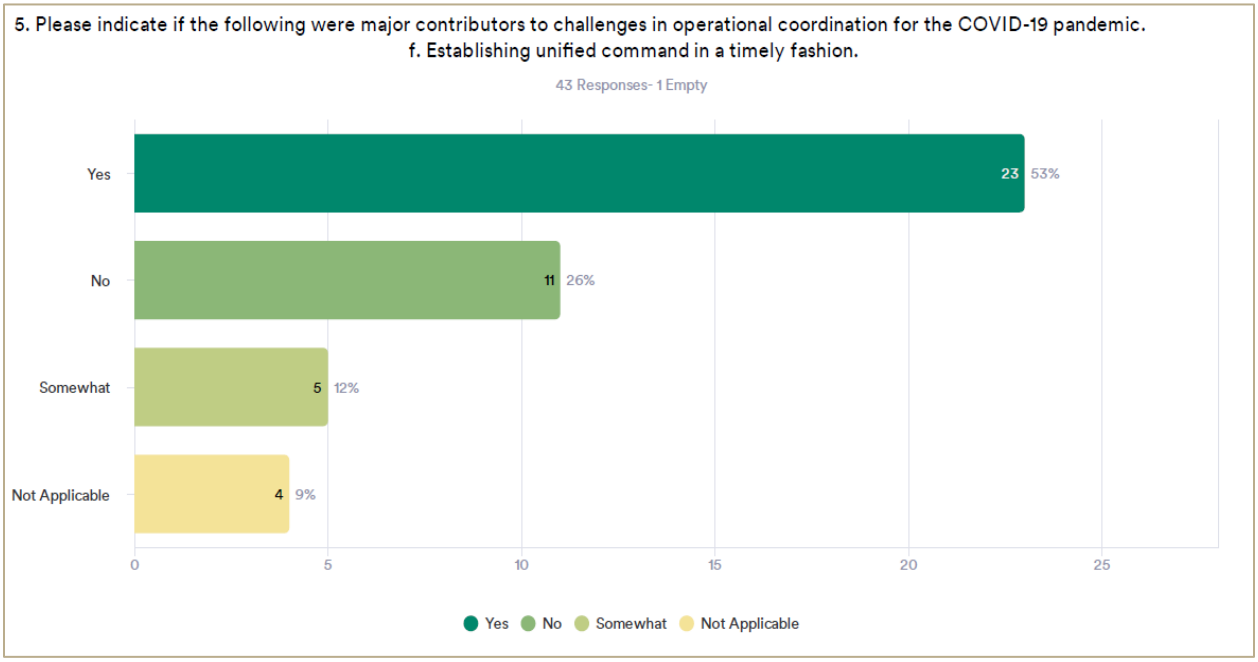



**Figure 22: Most participants felt that establishing unified command in a timely fashion was a major contributor to challenges in operational coordination.**

g) By-passing existing plans and preparations for managing a public health disaster.

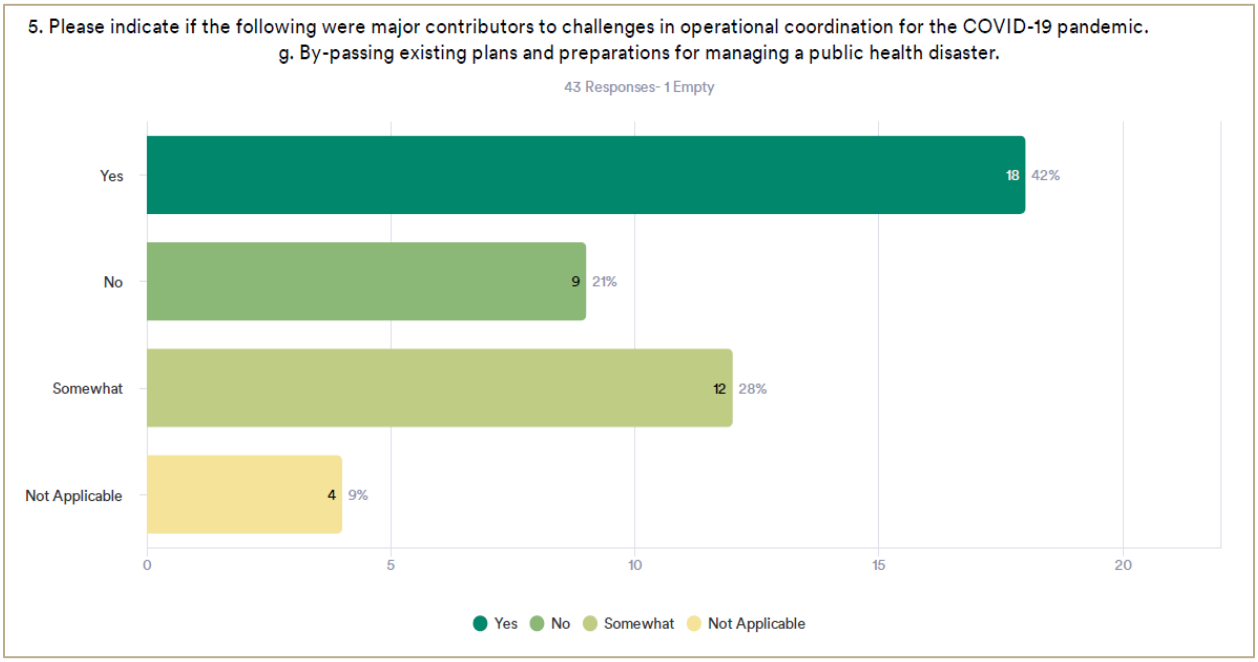



**Figure 23: Most participants felt that bypassing existing plans and preparations for managing a public health disaster was a major contributor to challenges in operational coordination.**

h) Balancing the respective roles of emergency management and public health and day-to-day responsibilities.

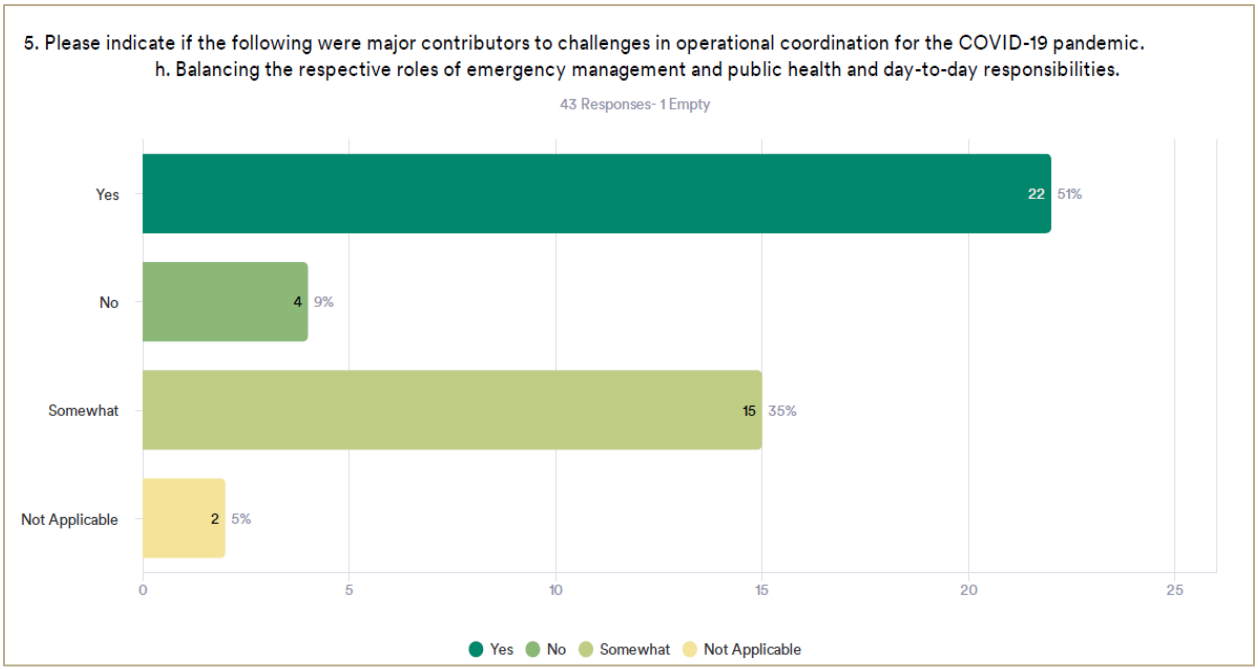



**Figure 24: Most participants felt that balancing the respective roles of emergency management and public health day-to-day responsibilities was a major contributor to challenges in operational coordination.**

i) Consistently changing priorities and messaging from appointed and elected officials.

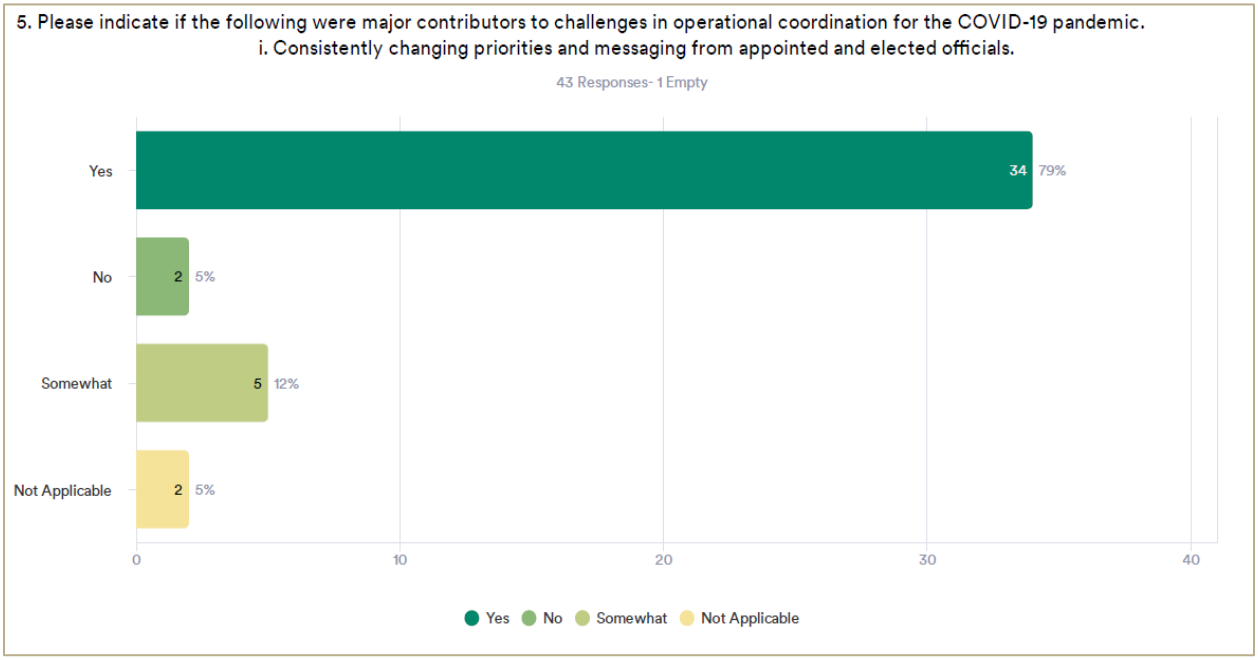



**Figure 25: Most participants felt that consistently changing priorities and messaging from appointed and elected officials was a major contributor to challenges in operational coordination.**

j) Not following existing national emergency management standards.

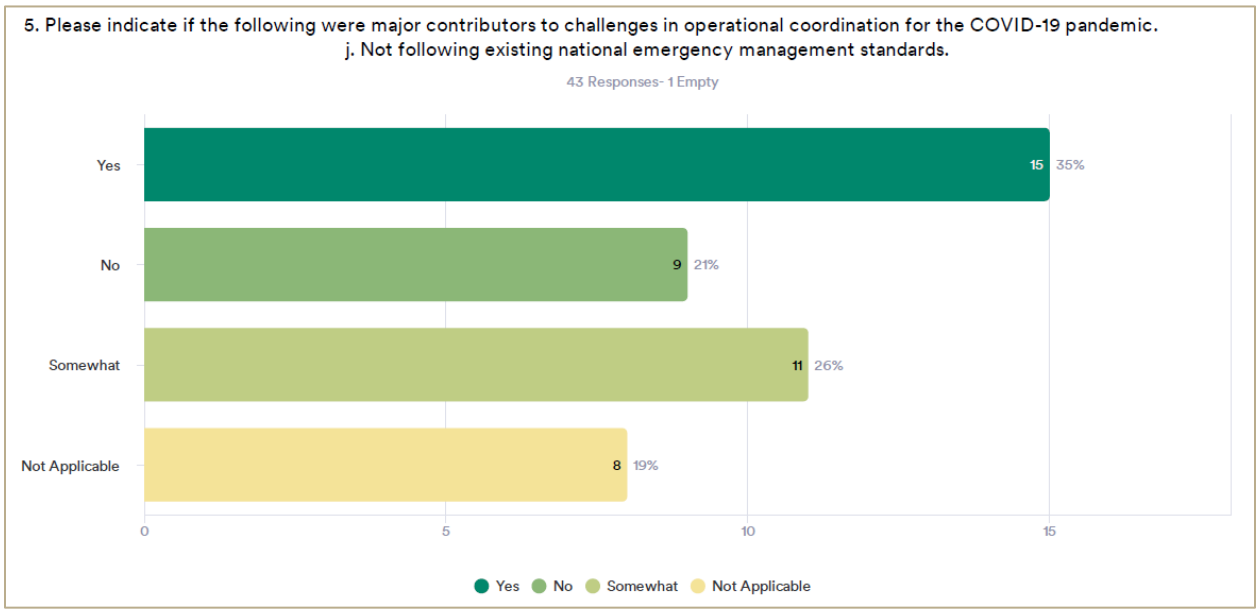



**Figure 26: Most participants felt that not following existing national emergency management standards was a major contributor to challenges in operational coordination.**

## Question 6: Considering all of San Joaquin County's public information and messaging, please check all that apply.

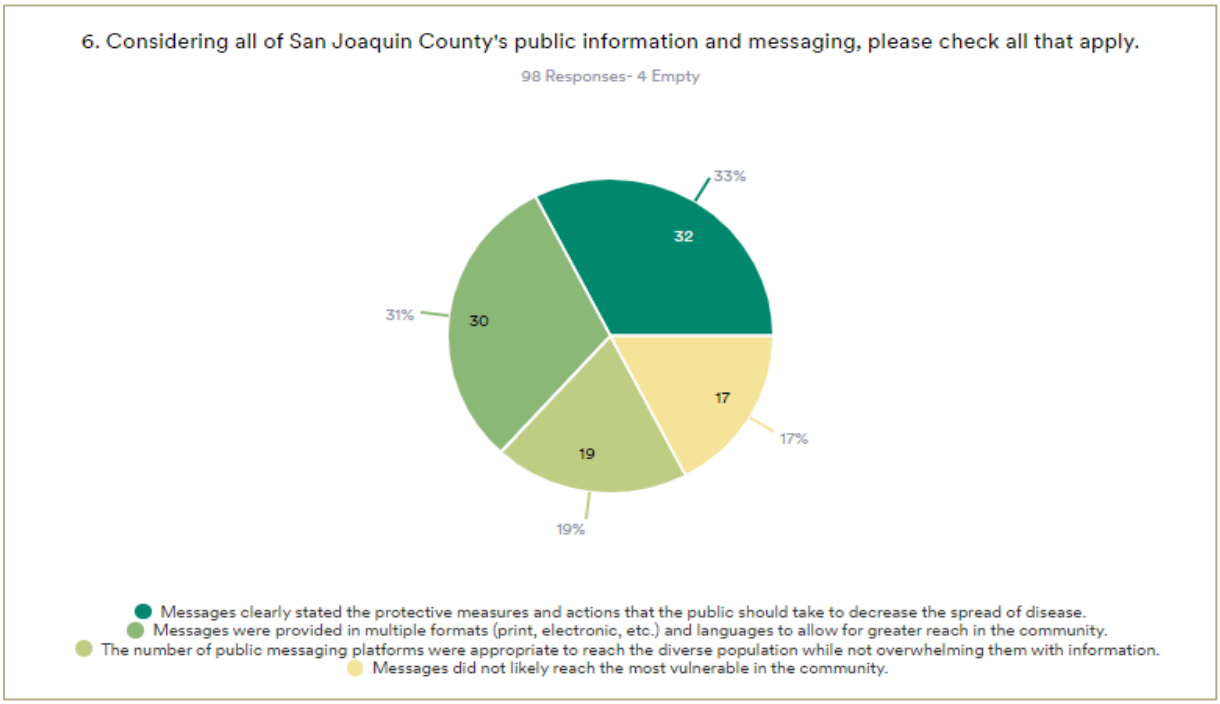



**Figure 27: Most participants felt that San Joaquin County's public information and messaging were clearly stated and messages were provided in multiple formats and languages. However, a significant number of participants felt the number of public messaging platforms was not appropriate to reach the diverse population and messages were not likely to reach the most vulnerable.**

## Question 7: Please check all boxes that apply below regarding the San Joaquin County COVID-19 Response communication and information sharing efforts?

### San Joaquin County EMS Agency Website

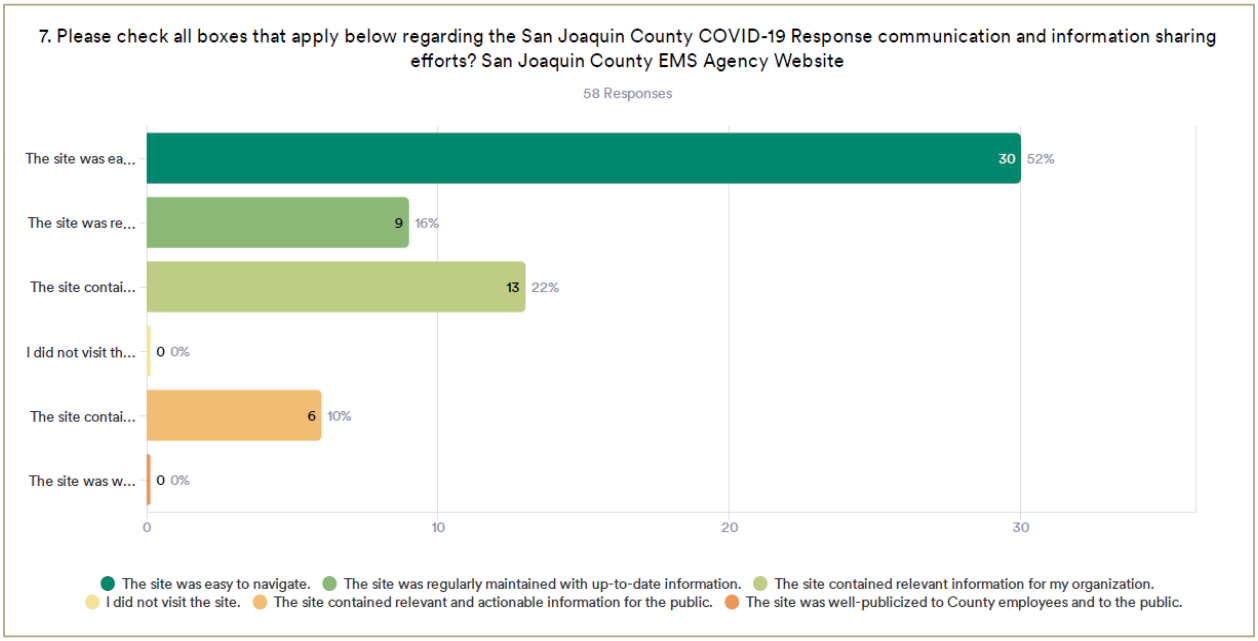



**Figure 28: For San Joaquin County's EMS Agency's website, participants mainly felt the website was easy to navigate, and the site contained relevant information for EMS as an organization.**

### San Joaquin County Public Health Website

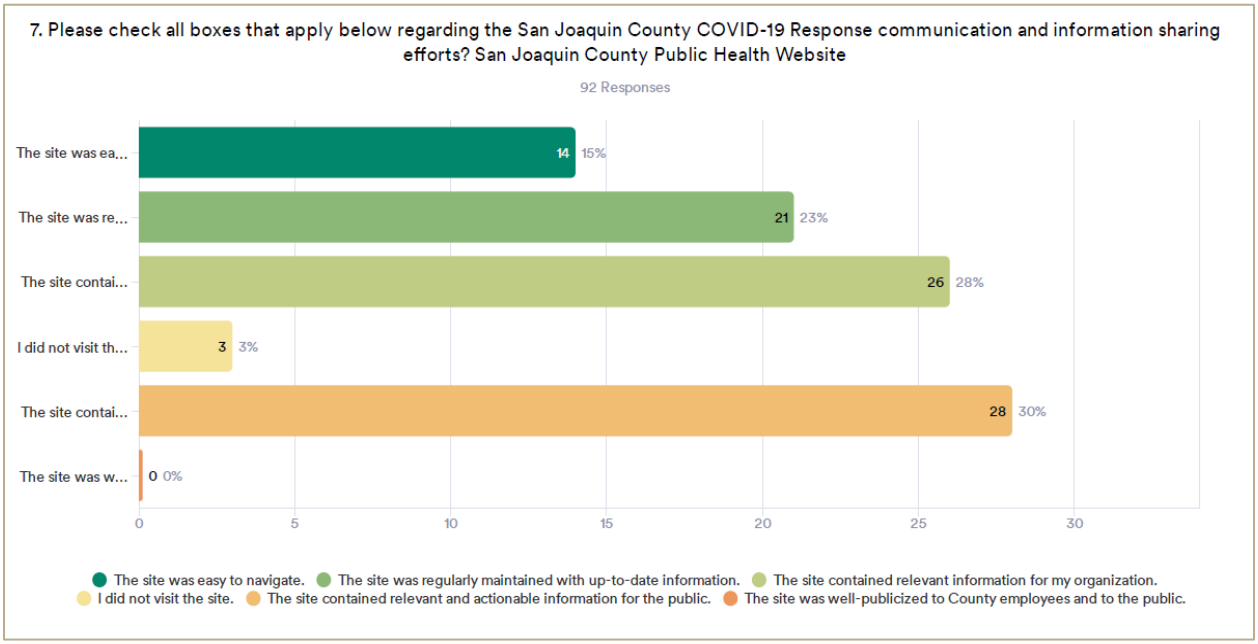



**Figure 29: For San Joaquin County Public Health's website, participants mainly felt the site contained relevant information for PHS as an organization as well as relevant and actionable information for the public.**

### San Joaquin County Website

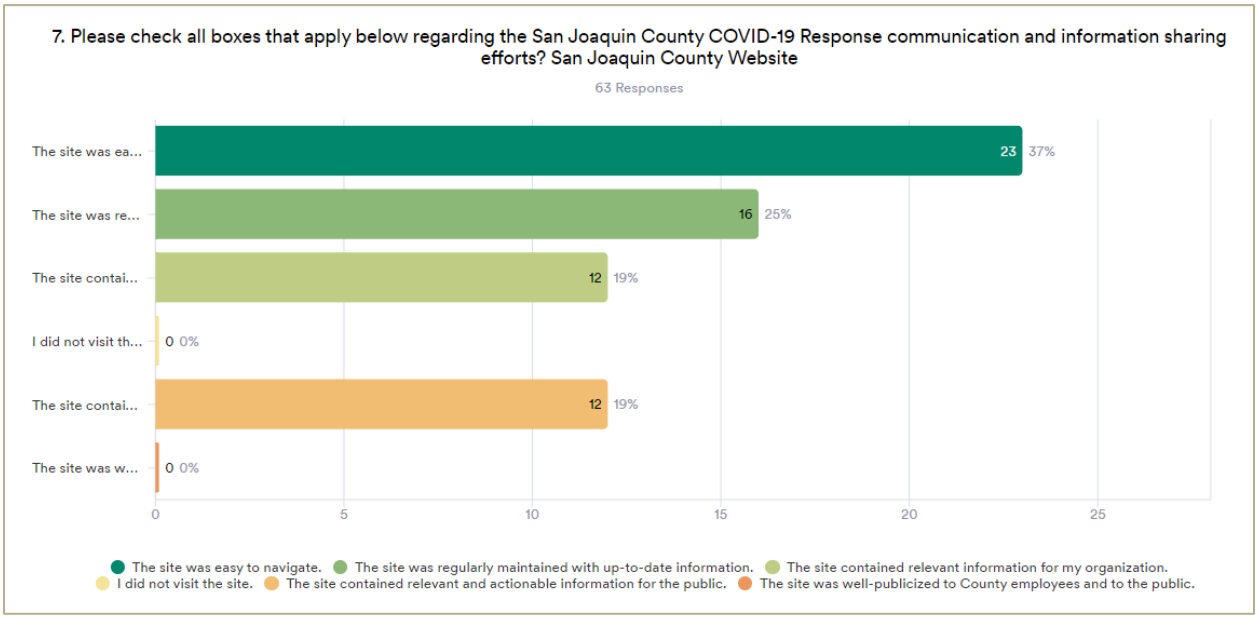



**Figure 30: For the San Joaquin County website, participants mainly felt the site contained relevant information for PHS as an organization as well as relevant and actionable information for the public.**

### SJReady.org

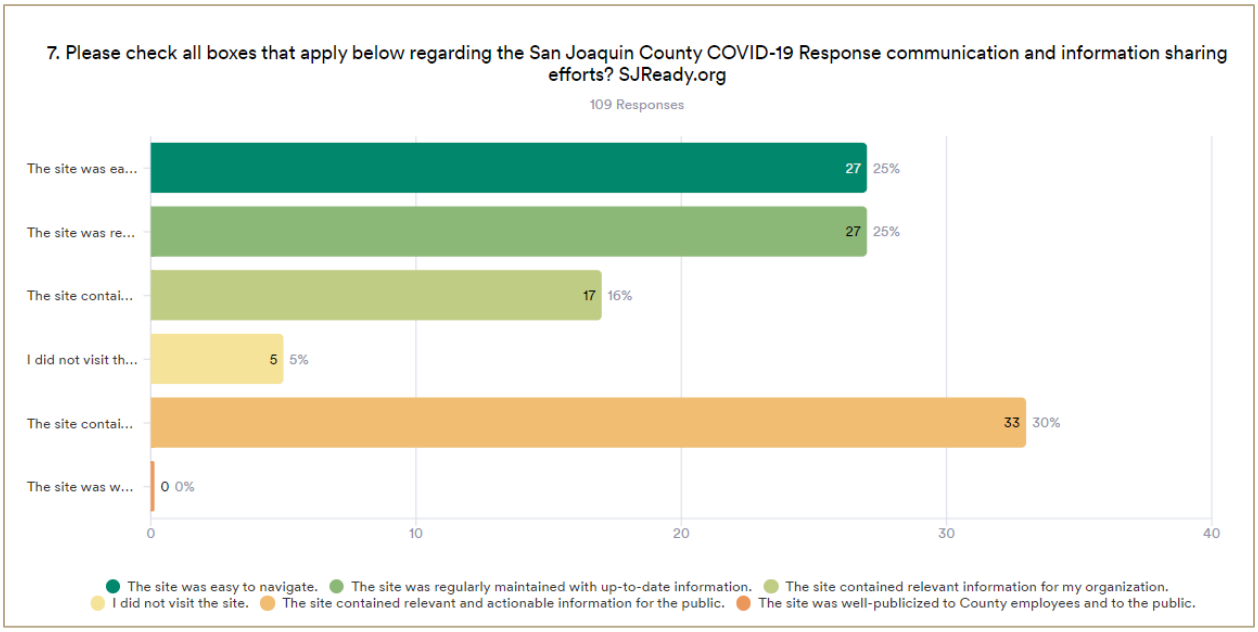



**Figure 31: For SJReady.org, participants mainly felt the site contained relevant and actionable information for the public.**

## Question 8: How successful was the San Joaquin County COVID-19 Response in ensuring consistency of messaging among the various agencies and departments?

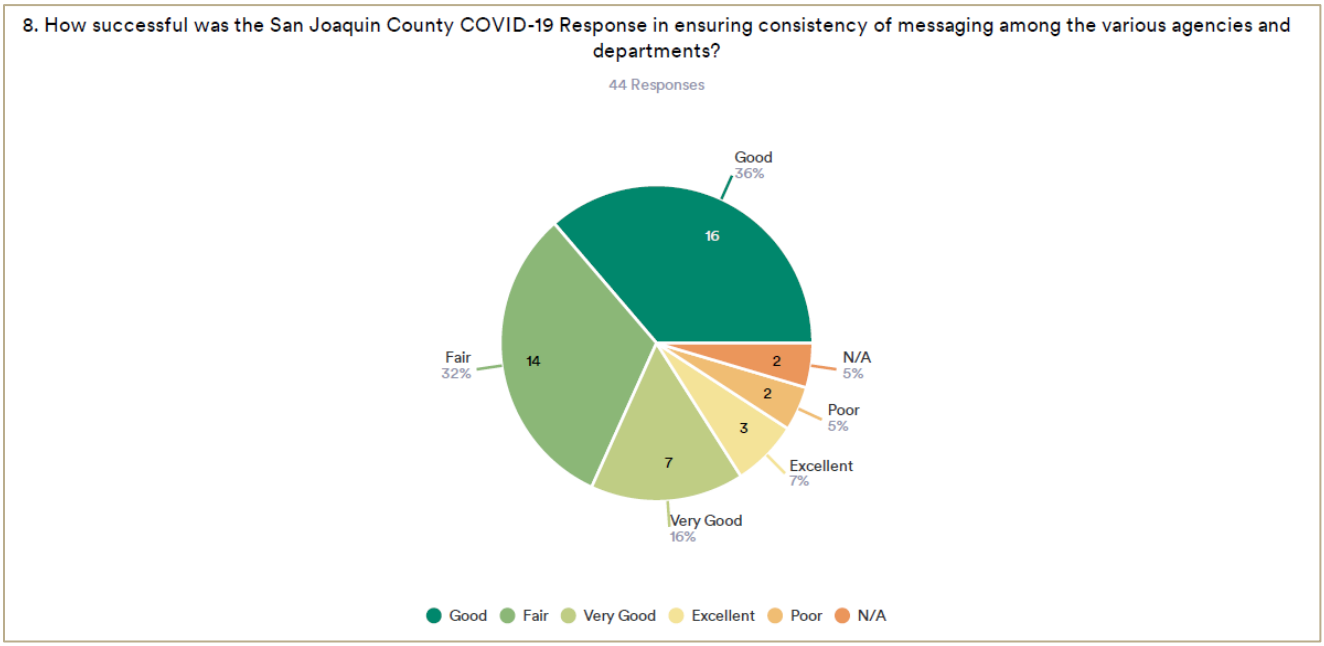



**Figure 32: Most participants rated San Joaquin County as "Good" or "Fair" at ensuring consistency of COVID-19 messaging among the various agencies and departments.**

## Question 9: How would you rate overall coordination between your organization and the following San Joaquin County Agency?

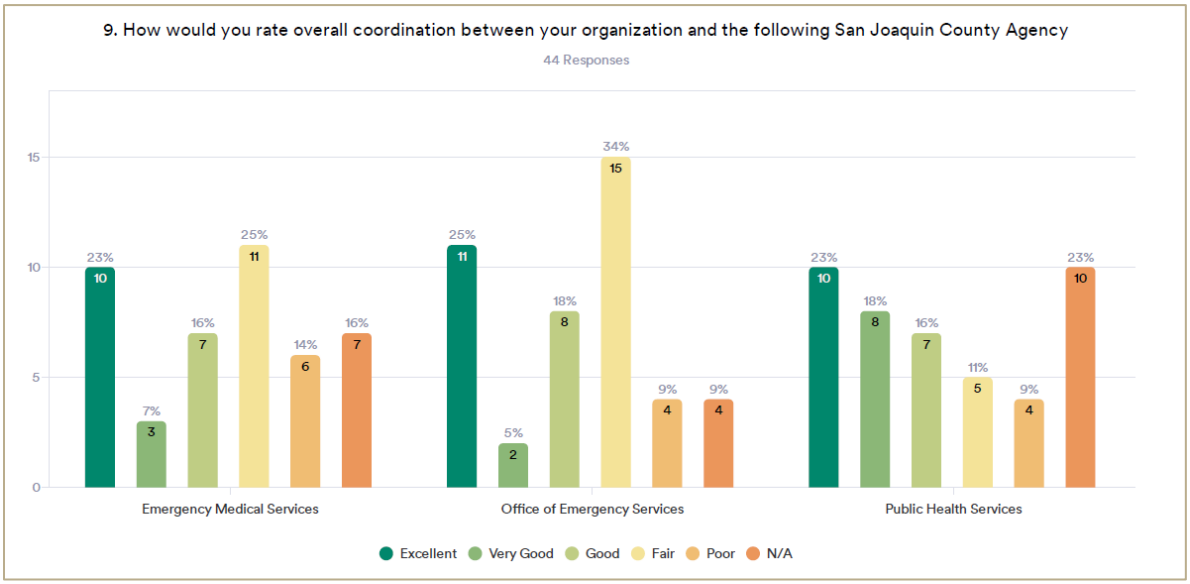
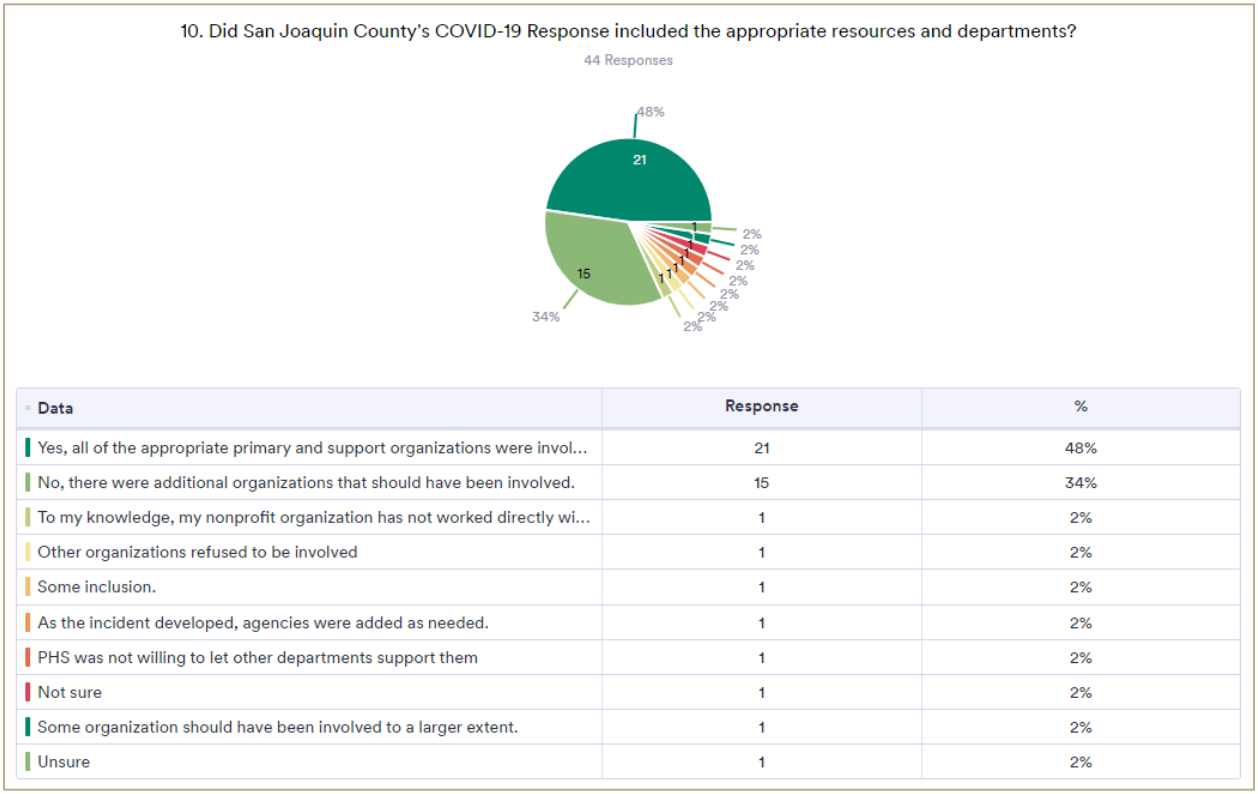



**Figure 33: Participants from their respective agencies (EMS, OES, and PHS) rated their overall coordination with the other two agencies.**

## Question 10: Did San Joaquin County's COVID-19 Response include the appropriate resources and departments?




| Data | Response | % |
|---|---|---|
| Yes, all of the appropriate primary and support organizations were invol... | 21 | 48% |
| No, there were additional organizations that should have been involved. | 15 | 34% |
| To my knowledge, my nonprofit organization has not worked directly wi... | 1 | 2% |
| Other organizations refused to be involved | 1 | 2% |
| Some inclusion. | 1 | 2% |
| As the incident developed, agencies were added as needed. | 1 | 2% |
| PHS was not willing to let other departments support them | 1 | 2% |
| Not sure | 1 | 2% |
| Some organization should have been involved to a larger extent. | 1 | 2% |
| Unsure | 1 | 2% |

**Figure 32: While 48 % percent of participants felt that all of the appropriate organizations were involved, 52% felt there was some inclusion, did not feel there was inclusion or were unsure.**

## Question 11: Please select all that apply regarding the San Joaquin County COVID-19 resource requesting process.

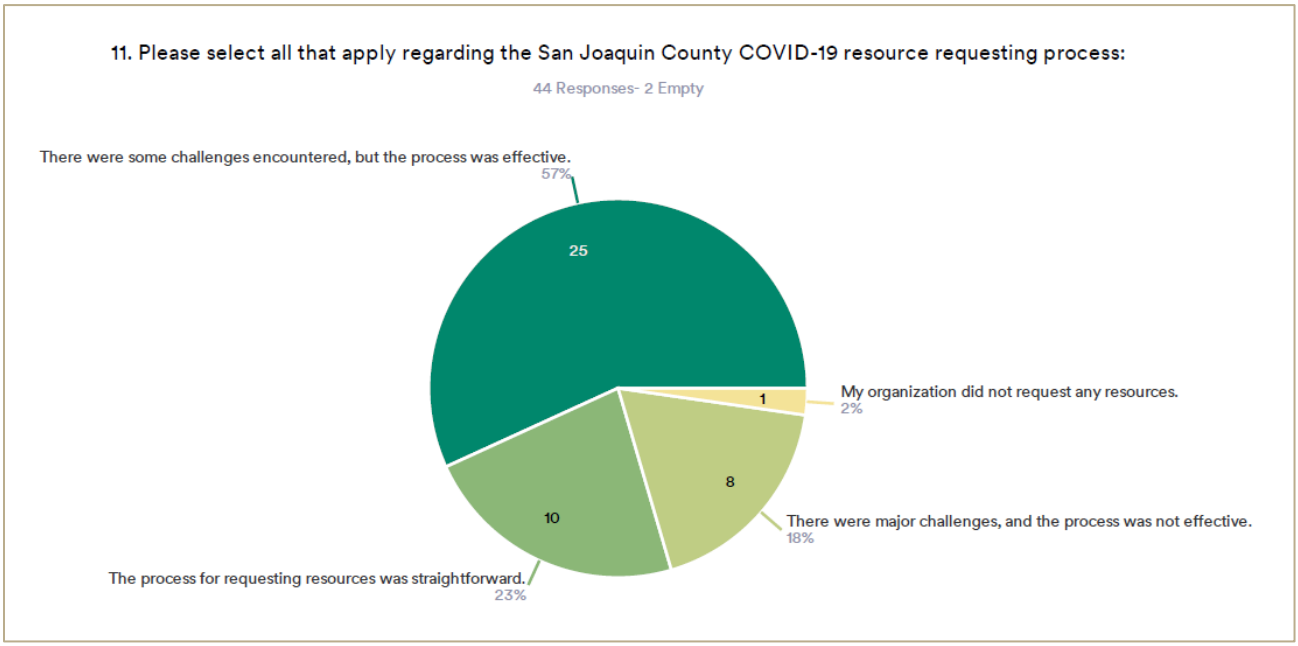



**Figure 33: Most participants felt there were some challenges encountered with San Joaquin County's resource requesting process, but the process was effective.**

## Question 12: Did telework, or remote work affect operations of the San Joaquin County's COVID-19 Response?

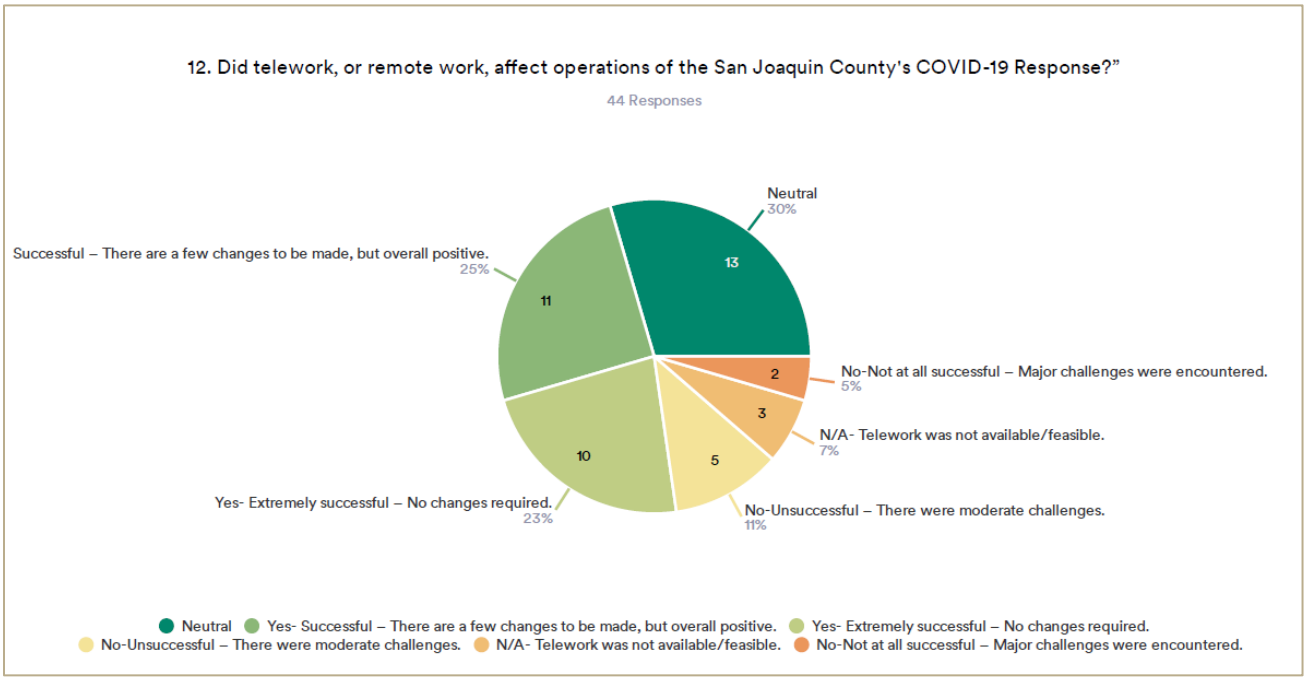



**Figure 3: Most participants either felt that telework was successful with a few changes that could be made or were neutral on the process.**

**Question 12.b. Please use this space to provide any additional comments about telework or remote work for the duration of the San Joaquin County COVID-19 Response.**

**Question 13: Did your organization have a Continuity of Operations (COOP) plan that was utilized in response to the COVID-19 Pandemic?**

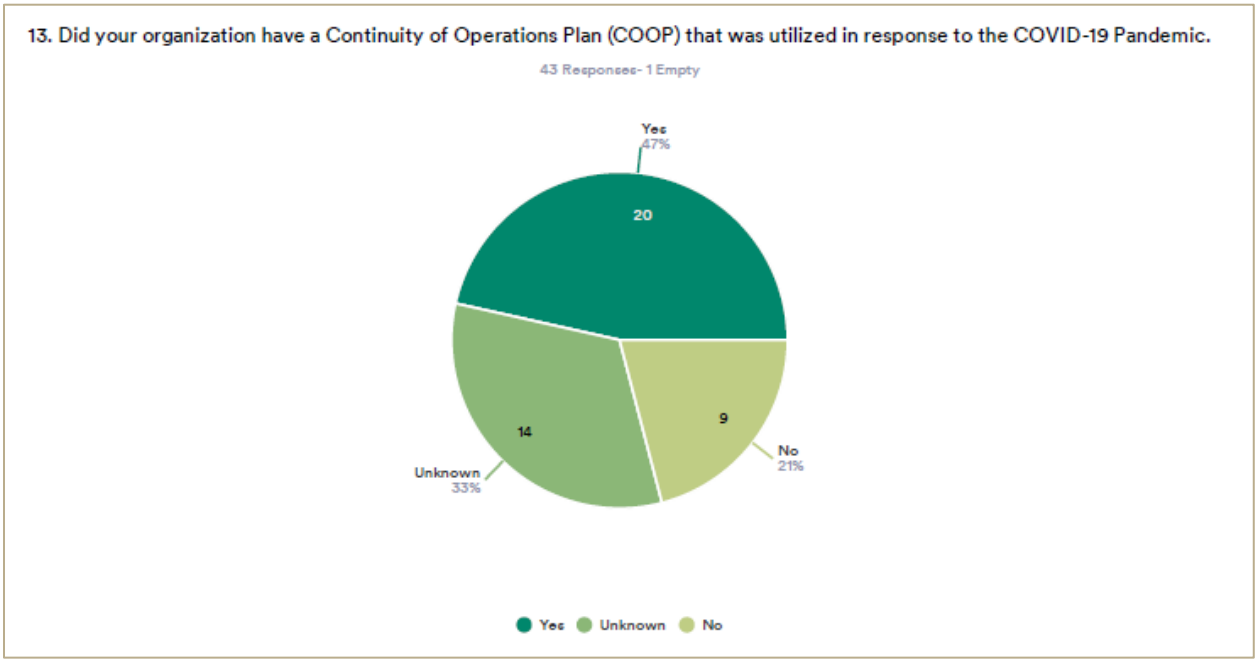



**Figure 35: Less than half of participants said their organization's Continuity of Operations Plan (COOP) was utilized in response to the COVID-19 pandemic.**

### Question 14: Please rate the County's response to the COVID-19 pandemic.

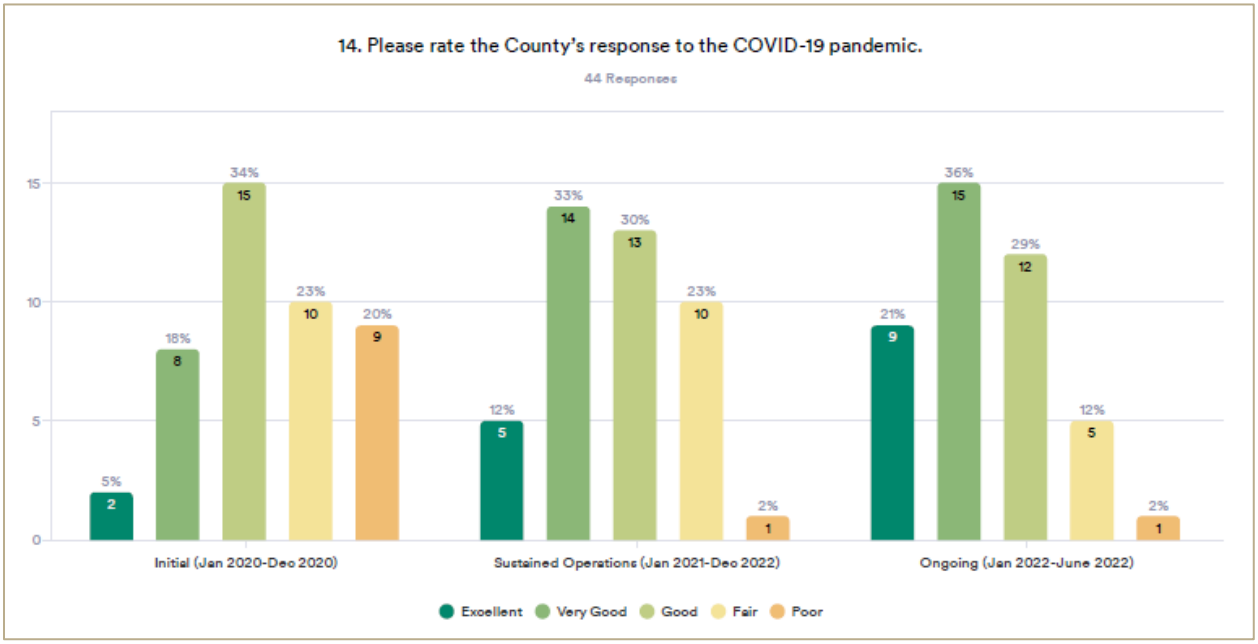
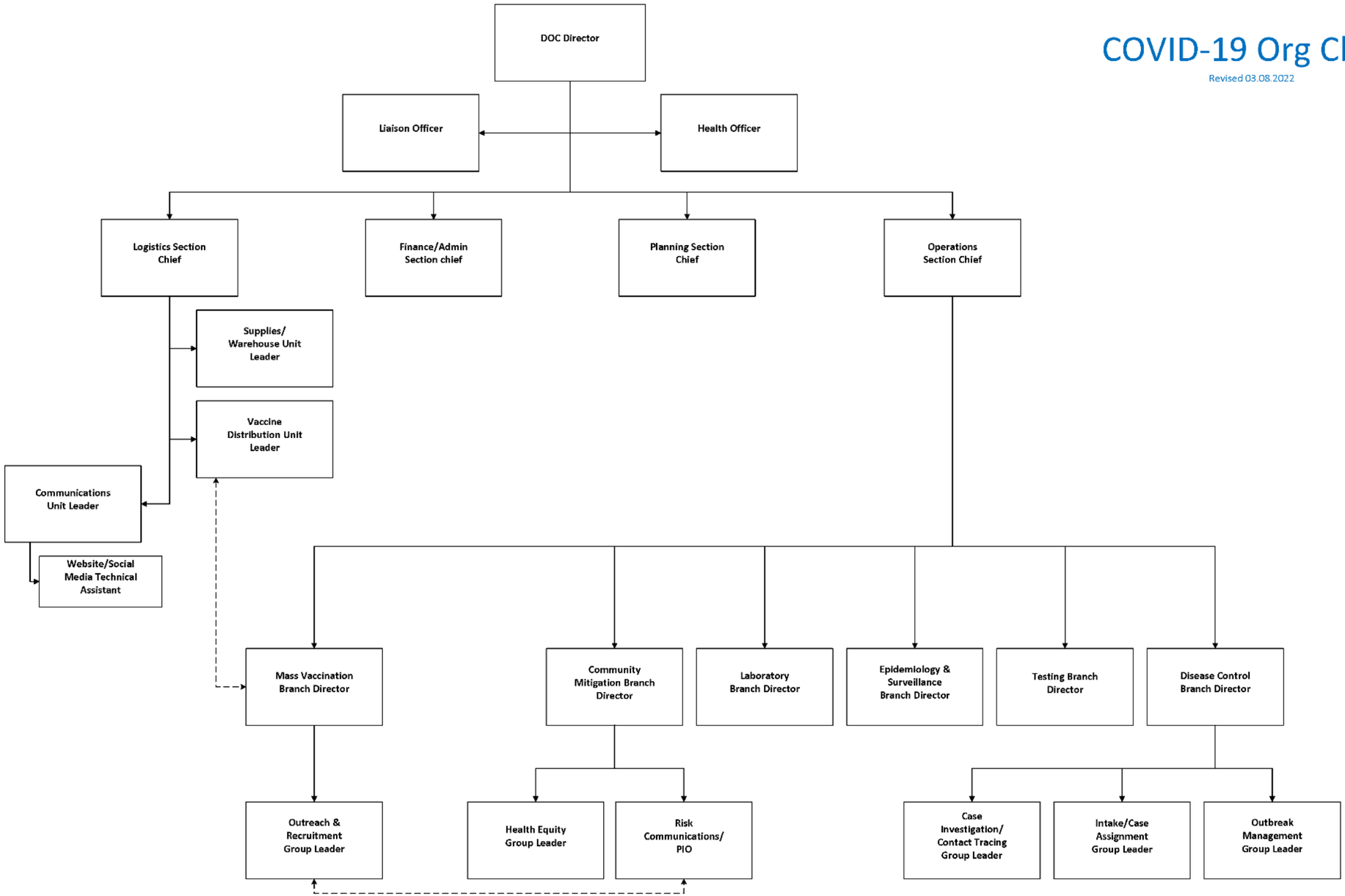



**Figure 36: Participants rated each phase of San Joaquin County's response to the COVID-19 pandemic ("Initial," "Sustained Operations," and "Ongoing"), and most participants felt the response improved over time.**

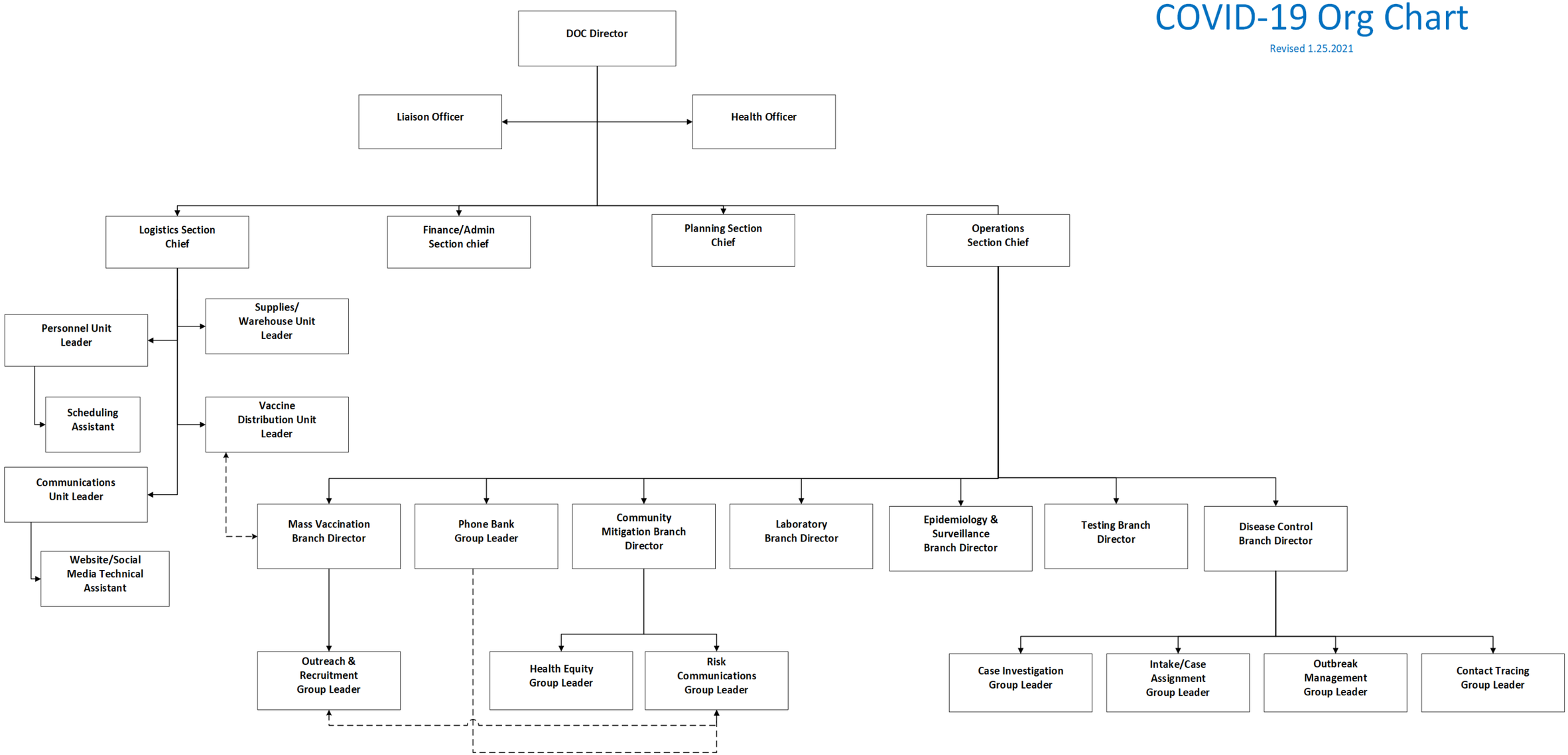
### Question 15: If you'd like to share any feedback, highlight particular strengths and/or areas for improvements, or provide additional information, please share below.

# Appendix D: Response Operations Organization Charts



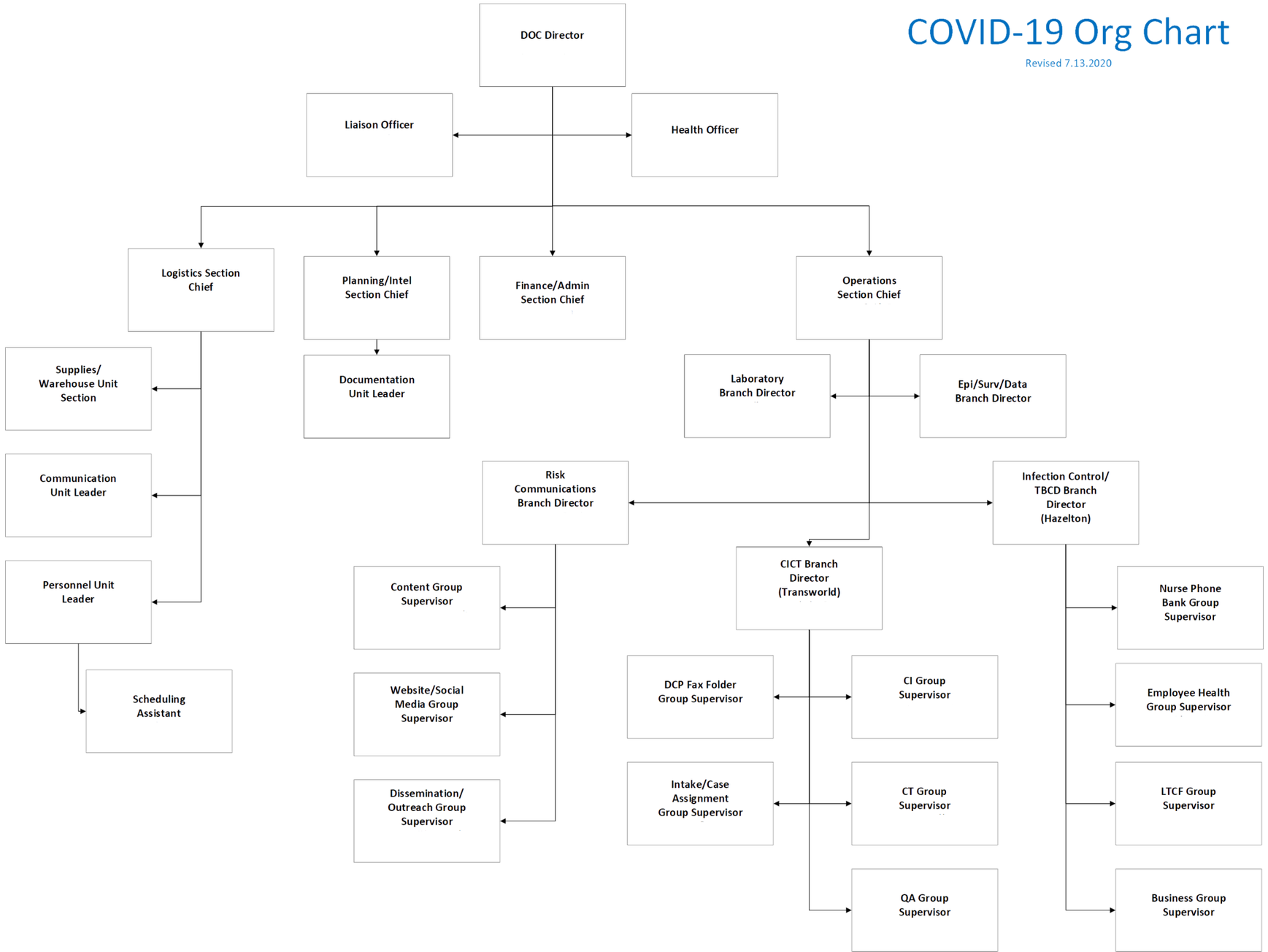
# COVID-19 Org Chart

Revised 1.25.2021

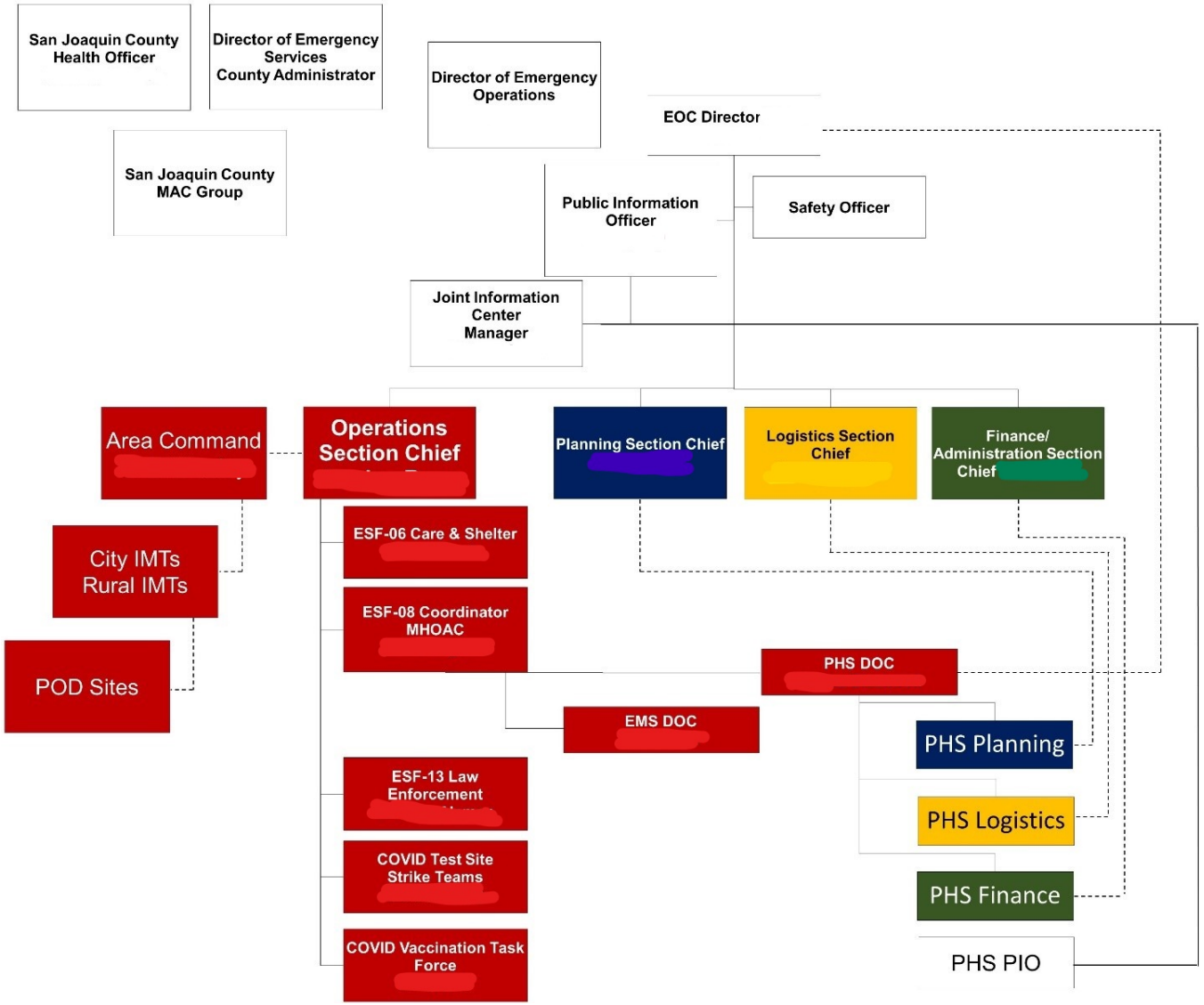


# COVID-19 Org Chart

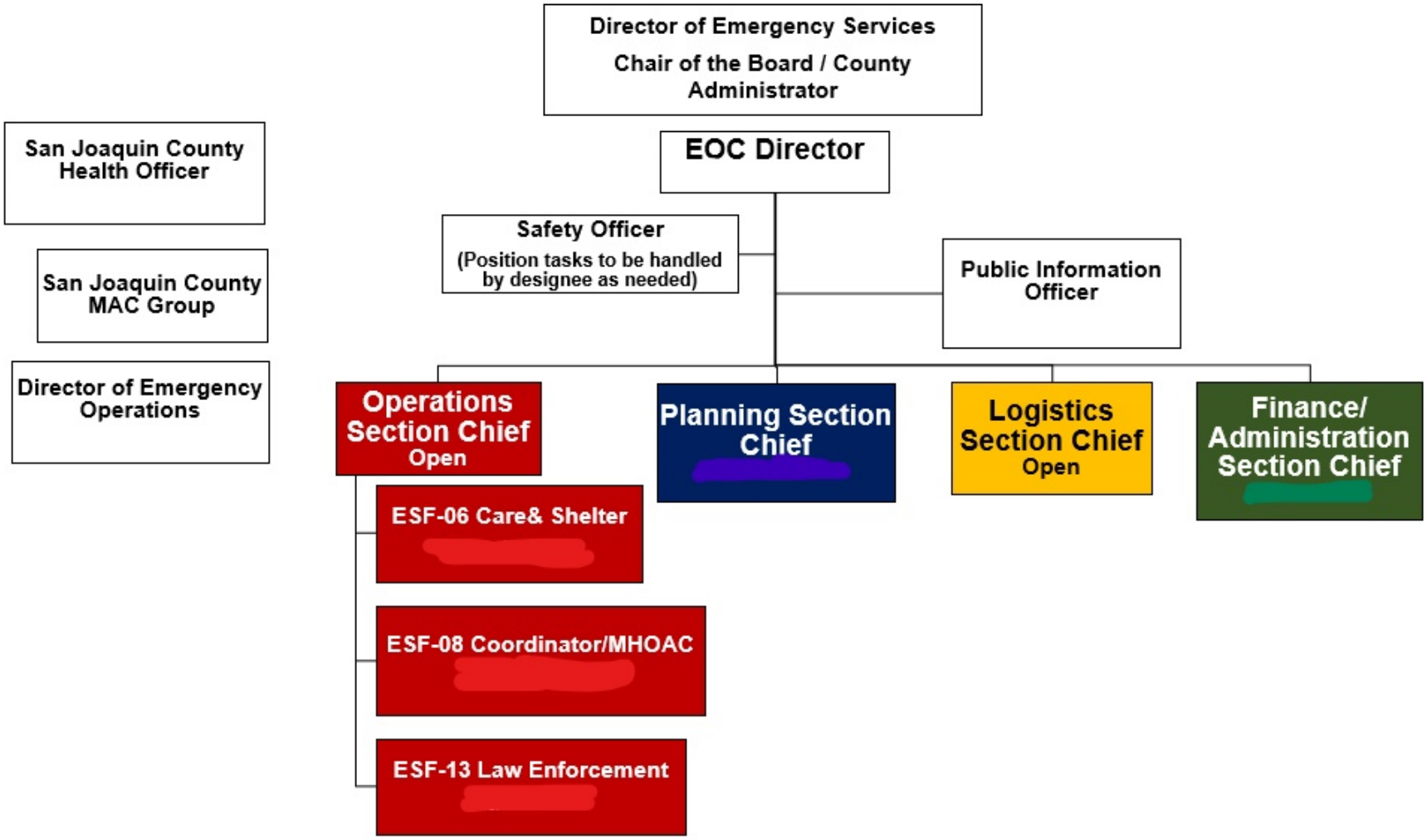
Revised 7.13.2020

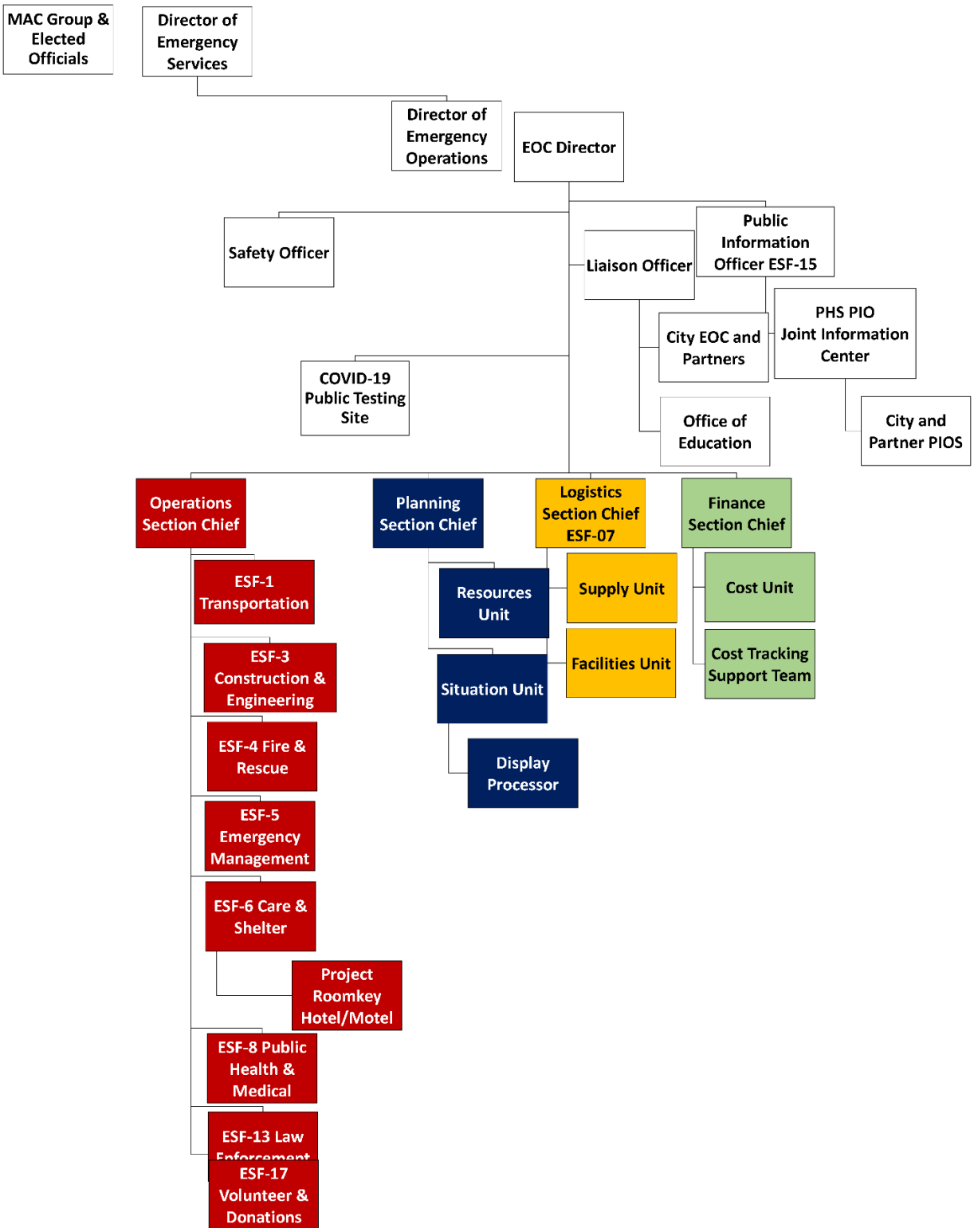


## Operation Area Organizational Structure – 03/01/2021



## Operation Area EOC Organizational Structure – 08/02/2021




MAC Group & Elected Officials
Director of Emergency Services
Director of Emergency Operations
EOC Director
Safety Officer
Liaison Officer
Public Information Officer ESF-15
City EOC and Partners
PHS PIO Joint Information Center
City and Partner PIOS
Office of Education
COVID-19 Public Testing Site
Operations Section Chief
Planning Section Chief
Logistics Section Chief ESF-07
Finance Section Chief
ESF-1 Transportation
ESF-3 Construction & Engineering
ESF-4 Fire & Rescue
ESF-5 Emergency Management
ESF-6 Care & Shelter
Project Roomkey Hotel/Motel
ESF-8 Public Health & Medical
ESF-13 Law Enforcement
ESF-17 Volunteer & Donations
Resources Unit
Situation Unit
Display Processor
Supply Unit
Facilities Unit
Cost Unit
Cost Tracking Support Team

EMS Agency Department Operations Center