

COVID-19 PANDEMIC RESPONSE

After Action Report and Improvement Plan

November 2024





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Preface

The *Yolo County Coronavirus Disease 2019 (COVID-19) Pandemic Response After Action Report and Improvement Plan (AAR/IP)* was developed to analyze Yolo County's operational response to the COVID-19 pandemic. The AAR/IP focuses on the strengths to be maintained and built upon, identifies areas for improvement, and supports the enhancement of corrective actions.

The AAR/IP summarizes input provided by Yolo County staff, local and county response partners, private sector partners, and members of community-based organizations. It also incorporates data gathered through a documentation review, online survey process, and virtual teleconference interviews. The AAR/IP provides feedback on identified successes and offers recommendations to enhance the County's response capabilities for future pandemics and other public health emergencies.

The suggested actions in this AAR/IP should be viewed as recommendations only. In some cases, Yolo County leadership may determine that the benefits of implementation do not sufficiently outweigh the financial costs. Additionally, alternative solutions may be identified later that are more effective or cost-efficient. Each participating organization or agency should review the recommendations and determine the most appropriate action and resources needed (i.e., time, staff, funding, etc.) for implementation. Many recommendations were specifically suggested by stakeholders during interviews and may require a collaborative effort to implement.

ADMINISTRATIVE AND HANDLING INSTRUCTIONS

1. The title of this document is *Yolo County Coronavirus Disease 2019 (COVID-19) Pandemic Response After Action Report (AAR/IP)*.
3. For more information about the *Yolo County COVID-19 Pandemic Response AAR/IP*, please consult the following point of contact:

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Incident Name	Yolo County Coronavirus Disease 2019 (COVID-19) Pandemic After Action Report/Improvement Plan (AAR/IP)
Incident Dates	January 2020–April 2023
Scope	The AAR documents COVID-19 response operations and provides recommendations for Yolo County on elements of public health and emergency response that should be considered successes and sustained, as well as recommendations to improve plans, processes, and procedures.
Mission Area	Response Operations
Federal Emergency Management Agency (FEMA) Core Capabilities	<p>The FEMA Response Core Capabilities reflected in the AAR include:</p> <ul style="list-style-type: none"> • Environmental Response/Health and Safety • Logistics and Supply Chain Management • Operational Communication • Operational Coordination • Public Health, Healthcare, and Emergency Medical Services • Public Information and Warning • Situational Awareness
FEMA Emergency Support Functions	<p>The FEMA Emergency Support Functions (ESFs) reflected in the AAR include:</p> <ul style="list-style-type: none"> • ESF #5 – Emergency Management • ESF #8 – Public Health and Medical Services
Public Health Emergency Preparedness and Response Capabilities	<p>The Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness and Response Capabilities reflected in the AAR include:</p> <ul style="list-style-type: none"> • Capability #3: Emergency Operations Coordination • Capability #4: Emergency Public Information and Warning • Capability #6: Information Sharing • Capability #10: Medical Surge • Capability #11: Nonpharmaceutical Interventions • Capability #14: Responder Safety and Health
Threat or Hazard	Global pandemic
Organization	Yolo County
Point of Contact	<p>Kristin Weivoda Chief of Emergency Services Yolo County Office of Emergency Services 625 Court St Ste 202, Woodland, CA 95695 c: 530-341-9858 Kristin.weivoda@yolocounty.org</p>



I. Executive Summary

The *Yolo County COVID-19 Pandemic Response After Action Report/Improvement Plan (AAR/IP)* was developed to analyze the actions taken by Yolo County and select response partners during the response to the COVID-19 pandemic from January 2020 through April 2023.

The after action review process was conducted to gather information from response staff through (1) a documentation review, (2) virtual interviews with current and former Yolo County personnel and external stakeholders, and (3) participant survey results.

This AAR/IP accomplishes the following:

- Summarizes information gathered during the after-actin review process;
- Identifies strengths to be maintained and built upon as well as areas for improvement; and
- Provides feedback on identified successes and offers recommendations to enhance Yolo County's response capabilities. Although these recommendations were derived from the response to the COVID-19 pandemic, they may apply to subsequent COVID-19 surges and future novel public health emergencies.

The *Analysis, Findings, and Recommendations* section summarizes key findings and recommendations. *Annex D* includes the IP, which identifies post-incident actions that Yolo County could implement based on identified areas for improvement. 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).

A. Major Strengths

Numerous strengths were observed throughout the response:

- Staff demonstrated dedication and professionalism while focusing on mission objectives to protect lives, property, and the environment during response operations.
- The Public Health Officer was highly engaged in community conversations with a variety of organizations throughout response operations.
- *Healthy Yolo Together* is a strong example of a public health project partnership for community engagement in response operations.
- Communication with the community was considered successful because it addressed multiple public health concerns simultaneously in a variety of accessible formats.
- Yolo County's distribution of personal protective equipment (PPE) for its response staff and community members was both innovative and effective.
- Establishing and utilizing a COVID-19 data dashboard provided a realistic overview of the incident for stakeholders.
- Targeting mobile vaccination efforts toward farmworkers and medically vulnerable community members was an effective medical surge response operation.



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- The weekly Public Information Officer (PIO) call morphed into a community relations outreach campaign to address the information needs of the whole community.

B. Primary Areas for Improvement

Several areas identified below provide the opportunity for corrective actions:

- Risk and recovery information was not made equitably accessible in languages other than English.
- County leadership and staff's expectations for attention to stress reduction strategies, mental health resources, safety from threatening behavior, and work recognition were not aligned.
- While most response documents were well researched, designed, and written, the current document categorization and storage system inhibits institutional knowledge from this incident from being easily accessed for public inquiries or used for future planning, training, or exercises.
- Operational coordination between ESF #5 and ESF #8 was not as effective as necessary for a public health incident.
- The County Health and Human Services Agency (HHSA) did not have enough personnel and staff with sufficient training in responding to an incident and lacked trained staff to fill primary, secondary, and tertiary roles within its Department Operations Center (DOC), which impacted response operations.
- Training on emergency management and the Incident Command System (ICS) is poorly designed for general employees of the County who are required to engage in response operations.
- There were insufficient policies, procedures, and/or protocols for coordinating remote work for HHSA employees. HHSA Human Resources was challenged to provide training and workforce development to managers, supervisors, and employees when it shifted to remote work.
- Existing immunization teams did not effectively transition into COVID-19 vaccination response operations.



C. Methodology

For the process of organizing AAR efforts and methodology information and data was collected and analyzed in three different ways – by reviewing documents that were provided by the County, by conducting interviews of individuals who were involved in COVID_19 related response and/or recovery activities, and by conducting a survey also of individuals who were involved in related response and/or recovery activities. The County provided a list of individuals to be interviewed and surveyed and supplied the documents to be reviewed.

1. Response Capabilities-Based Analysis

The AAR is consistent with (1) the Federal Emergency Management Agency (FEMA) Core Capabilities and (2) the CDC Public Health Emergency Preparedness (PHEP) Capabilities: National Standards for State, Local, Tribal, and Territorial Public Health. These capability standards establish the framework for local governments and public health departments to organize and evaluate emergency responses and exercises and promote collaboration by establishing a common language among preparedness professionals.

The FEMA Response Core Capabilities, which are applicable to this AAR, are cross-walked with the PHEP Response Capabilities defined in Table 1 below.

Table 1. FEMA Response Core Capabilities Aligned with PHEP Capabilities

FEMA Response Core Capability	PHEP Capability and Definition
Operational Coordination	Capability 3: Emergency Operations Coordination Definition: Emergency operations coordination is the ability to coordinate with emergency management and to direct and support an incident or event with public health or healthcare 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).
Public Information and Warning	Capability 4: Emergency Public Information and Warning Definition: 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.
Operational Communications	Capability 6: Information Sharing Definition: Information sharing is 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.
Public Health, Healthcare, and	Capability 10: Medical Surge Definition: Medical surge is the ability to provide adequate medical evaluation



FEMA Response Core Capability	PHEP Capability and Definition
Emergency Medical Services	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.
Public Health, Healthcare, and Emergency Medical Services	<p>Capability 11: Nonpharmaceutical Interventions</p> <p>Definition: 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. Nonpharmaceutical interventions may include isolation, quarantine, restrictions on movement and travel advisories or warnings, social distancing, external decontamination, hygiene, and precautionary protective behaviors.</p>
Environmental Response/Health and Safety	<p>Capability 14: Responder Safety and Health</p> <p>Definition: Responder safety and health is the ability to protect public health and other emergency responders during pre-deployment, deployment, and post-deployment.</p>

2. Data-Gathering Activities

The data-gathering activities for this AAR/IP included three steps:

1. **Document Review.** The document review utilized the NIMS Communication and Information Management Standards and Formats as well as the FEMA Incident Action Planning Guide (IAPG) as foundational documents. The methodology involved the use of FEMA Response Core Capabilities, the PHEP and Response Capabilities, and the Tetra Tech Diversity, Equity, Inclusion, And Accessibility Tool for Emergency Management Programs. Assessing the strength of written documents provided for review involved both content and format. The findings from the document review can be found in *Appendix A*.
2. **Interviews.** The project team conducted focus groups and individual interviews with Yolo County response staff virtually via Microsoft Teams (MS Teams). Participants discussed the coordination of the COVID-19 response, identified best practices and lessons learned, and recommended future improvements.
3. **Surveys.** The project team distributed surveys to two groups: (1) Yolo County staff who participated as responders during COVID-19 (see *Appendix B*) and (2) external response partners who supported Yolo County during the COVID-19 response (see *Appendix C*).



II. Analysis, Findings, and Recommendations

This section identifies strengths, areas for improvement, and recommendations based on observations collected from data-finding activities. It is organized by the FEMA Response Core Capabilities and PHEP Capabilities defined in Table 1.

A. Environmental Response & Health and Safety/Responder Safety and Health

FEMA Response Core Capability – Environmental Response & Health and Safety: *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.*

PHEP Capability #14 – Responder Safety and Health: *The ability to protect public health and other emergency responders during pre-deployment, deployment, and post-deployment.*

Observation A.1 Strength: Staff demonstrated dedication and professionalism while focusing on mission objectives to protect lives, property, and the environment during response operations.

Analysis: Throughout the AAR interview process, participants expressed their admiration for the County's efforts. Even while identifying challenges, participants consistently commented about how people rose to the occasion, encouraged collaboration, and were flexible and innovative in problem-solving a unique incident. Participants routinely identified working 60–80-hour weeks at the onset because they set the needs of the community first. They noticed how leaders in the County who were deployed under ICS now reported to people who were their subordinates in day-to-day operations and did so with a focus on mission first. The level of commitment was notable at all operational levels.

Recommendation A.1.1: As part of the Emergency Operations Center (EOC) deactivation, County leadership should express their appreciation to all for their time and energy during an extenuating and exhausting incident.

Observation A.2 Area for Improvement: County leadership's expectations and staff's expectations for attention to stress reduction strategies, mental health resources, safety from threatening behavior, and work recognition were not aligned.

Analysis: For months, many staff worked seven days a week with no breaks. They were doing their daily job while simultaneously taking on a full-time role in the EOC. Most staff did not do a good job taking time off or even taking extended breaks during the workday as all actively focused on the response operation, including leadership and management. This resulted in EOC staff who were stressed and burned out. While County workers were assisting community members with issues like childcare access, they were dealing with similar stressors with no assistance. Some staff members received threats via social media, were yelled at by members of the public, and had home addresses of themselves and their loved ones publicized. After approximately 18 months of response operations, Office of Emergency Services (OES) leadership attempted to be more proactive in prioritizing mental health, time off, and



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significant work breaks for staff (e.g., bringing in food trucks, holding an online recognition ceremony, etc.).

Recommendation A.2.1: At the onset of response operations, County leadership should 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 A.2.2: After the first 30 days of County 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). County leadership should demonstrate support by modeling time-off requirements.

Recommendation A.2.3: In the EOC ICS chart, assign an Assistant Safety Officer for Resilience reporting to the Safety Officer, who will be responsible for developing, implementing, and enforcing guidelines for mental health and wellness of all response staff.

Recommendation A.2.4: The County should develop a work group including staff who responded to COVID, medical staff, HR representatives, mental health experts, and leadership to determine proactive steps to implement before future responses and to ensure a resilience plan exists for staff before, during, and after future responses.

Recommendation A.2.5: As result of this incident County departments should review, make recommendations, and/or update changes in continuity planning with consideration for emergency response.



B. Logistics and Supply Chain Management/Non-Nonpharmaceutical Interventions

FEMA Response Core Capability – Logistics and Supply Chain Management: *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.*

PHEP Capability #11 – Nonpharmaceutical Interventions: *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. Nonpharmaceutical interventions may include isolation, quarantine, restriction on movement and travel advisories or warnings, social distancing, external decontamination, hygiene, and precautionary protective behaviors.*

Observation B.1 Strength: Yolo County’s distribution of PPE for its response staff and community was innovative and effective.

Analysis: Response staff indicated they received a constant supply of needed materials, such as N-95 respirators, gloves, hand sanitizer, and cloth masks. For community members, there was a robust distribution process for antigen tests, PPE, and sanitizer. Everyone who requested free testing from the County received it. The County also installed outdoor vending machines for access to free testing supplies. This innovative approach uses a *go-to-them-model* that prioritizes ease of public access. There were no noted gaps in the supply chain of essential PPE for response operations, and the vending machines can be transitioned in the future to provide accessible supplies for other public health issues.

Recommendation B.1.1: Memorialize PPE distribution models used for COVID-19 response as a best practice for future response operations.

Recommendation B.1.2: Encourage innovative problem-solving that makes public health solutions easier for the impacted public to access.

Observation B.2 Strength: Establishing and using a COVID-19 data dashboard provided a realistic overview of the incident for stakeholders.

Analysis: Prior to COVID-19, Yolo County did not use many data dashboards nor did they County update them in real time for prior incidents like the flu or measles. Data was presented in formal reports posted online; in prior emergencies, there was limited public interest in or interaction with said data. Because there was so much demand from the public for information about COVID-19, the County created a public-facing dashboard. It was a labor-intensive project that was internally supported throughout the incident response by an outside GIS vendor. The dashboard allowed users to visualize waves of infection and the impact of occurrences of variants. External stakeholders who were interviewed identified it was well received and utilized by the community who could see the reality of the waves of infection and the impact of occurrences of variants.



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Recommendation B.2.1: Develop a standard operating procedure for incident data collection and dissemination for future public health emergencies including data dashboards.



C. Operational Communication/Information Sharing

FEMA Response Core Capability – Operational Communication: *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.*

PHEP Capability #6 – Information Sharing: *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 C.1 Strength: Using visual communication elements that supported written response operations materials helped the whole community understand the incident.

Analysis: Yolo County used its technological capabilities, including GIS and other mapping technologies, to supplement and enhance written documents. Visual communication tools helped convey information such as outbreaks in neighborhoods, which informed decision-making about vaccination clinic placement.

Recommendation C.1.1: Memorialize the use of visual communication for application to plans, training, and exercises.

Observation C.2 Strength: The Public Health Officer was highly engaged in community conversations with various organizations throughout response operations.

Analysis: The Public Health Officer made an effort to conduct public health in public with the public. As noted in *Section F: Public Information and Warning/Emergency Public Information and Warning*, the Public Health Officer was a featured speaker on a daily video posting. The Public Health Officer participated in the community outreach group formed by the Joint Information Center (JIC), which led to further exposure to CBOs and education providers. Private sector partners identified that the Public Health Officer's attendance at the Health Care Coalition meetings was a critical bridge between the two systems and identified it as a best practice. The Public Health Officer communicated well with the public schools, attending board meetings to discuss models and policies. Solid relationships were built that extended well beyond the incident. The Public Health Officer continues to have regular meetings with schools officials.

Recommendation C.2.1: Memorialize the information-sharing model used by the Public Health Officer as a best practice and apply its principles to planning, training, and exercises.

Observation C.3 Area for Improvement: There were delays in translating COVID-19 outreach and guidance materials into languages other than English.

Analysis: The population of Yolo County is diverse and includes community members who speak a variety of languages in addition to English (e.g., Farsi, Punjabi, Mandarin, Russian, and Spanish, among others). Because people are more likely to read and understand written materials in their native



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language, it was important for the County to provide risk communication about the incident in a variety of languages representing those community members. Yolo County was fortunate to have staff to translate written materials. However, there was a delay in publication and access to translated materials due to the reliance on individuals who had competing priorities during response operations. Additionally, there was limited bench depth on those resources.

Recommendation C.3.1: Yolo County should prioritize language access planning for major languages used by community members and commit resources to achieve community equity in written risk communication messaging. [64% speak English; 21% speak Spanish; 15% speak other languages] (World Population Review, 2024)

Observation C.4 Area for Improvement: As the incident progressed, there were gaps in information sharing about personal preparedness and resilience.

Analysis: Participants noted that although communication with large portions of the impacted public was generally good, there needed to be more engagement of some groups (e.g., aging populations and community members who use English as an additional language). Advocacy organizations were relied upon to provide information about preparedness to historically marginalized communities populations within the County. Equity was emerging as an issue, and there was a need to communicate more effectively and routinely reach more people throughout the County on a routine basis. As of July 1, 2023, 13.5% of the County's population was 65 years or older. (U.S. Census , 2023)

Recommendation C.4.1: Expand outreach, education, and communication programming in emergency management and public health topics to community members who use English as an additional language.

Recommendation C.4.2: Program coordinators in OES should intentionally structure their outreach and community engagement activities to reach historically marginalized communities and work to establish long-term, trusting relationships.



D. Operational Coordination/Emergency Operations Coordination

FEMA Response Core Capability – Operational Coordination: *Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of Core Capabilities.*

PHEP Capability #3 – Emergency Operations Coordination: *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).*

Observation D.1 Strength: ICS was an effective organizational format for COVID-19 response operations.

Analysis: County staff were trained in ICS and had various exercise and activation experience in applying ICS. The EOC has been regularly activated for smaller incidents, so multiple staff members had relevant experience. When the incident was declared, there were enough people to fill the required positions in the EOC and allow rotation of staff when required. The branch leaders were clearly identified to all staff and monitored for how they supported the mission of Incident Command (IC). There were occasions when those leaders needed to be replaced, and there were trained staff available who were capable of assuming these position. This was noted as a successful implementation of ICS.

Recommendation D.1.1: Continue a robust ICS training schedule for all County employees to ensure redundancy in EOC positions to achieve the mission of each activation.

Observation D.2 Strength: There was an excellent transition of duties between the retiring and incumbent Public Health Officer, resulting in uninterrupted continuity of operations.

Analysis: The role of the Public Health Officer is critical to response operations for a pandemic. When the Public Health Officer decided to leave the position, he intentionally worked within his professional network to publicize and recruit qualified candidates. In the time between his retirement and onboarding his replacement, the Assistant Health Officer and other HHSA leadership served as Acting Public Health Officer. When the new Public Health Officer was selected, the outgoing Public Health Officer supported onboarding, training, and introducing critical partners. The result was a seamless transition of functions and uninterrupted response operations.

Recommendation D.2.1: Maintain continuity of operations planning as an effective tool and strategy that can positively impact response operations.

Observation D.3 Strength: When Disaster Service Workers (DSW) were used in familiar roles or roles relevant to their backgrounds, they were effective force multipliers in response operations.

Analysis: As the incident evolved, there was a need to employ a surge capacity workforce. California State Office of Emergency Services (Cal OES) identified that all public employees in California are classified as DSWs. During a disaster declaration, the County may ask individuals to work outside the normal scope of their duties. In Yolo County, DSWs were utilized in the EOC and assigned other tasks associated with response operations. Individuals were placed in roles in which they had experience or



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previous relevant training. Those in need of additional training had access to it through the EOC. The only issue associated with DSWs was knowing when to demobilize them. With the many surges when COVID-19 variants emerged, it was difficult to anticipate the length of temporary staff deployment during peaks and valleys of response operations.

Recommendation D.3.1: Memorialize the use of DSWs in response plans for application to future incidents.

Observation D.4 Strength: Just-in-time training was effective in meeting the emerging needs of employees assigned to the EOC.

Analysis: Some Yolo County staff deployed to the EOC needed updated training. Branch managers conducted the training, and staff could rely on those around them to support them until they had stronger confidence in their capabilities. The just-in-time training was identified as a good measure to fill the knowledge gap.

Recommendation D.4.1: Memorialize just-in-time training in response plans as a best practice.

Recommendation D.4.2: Establish a team in the Operations Branch to conduct a training needs assessment at EOC activation and deliver just-in-time training for all employees.

Observation D.5 Strength: Remote workers used MS Teams to support EOC operations.

Analysis: MS Teams was identified as an innovative solution to supporting a hybrid workforce. Not all departments used MS Teams prior to the pandemic, so rapid training for some staff was required. After receiving initial training, staff used MS Teams to work remotely and accomplish essential functions that supported the mission. MS Teams is now a standard work tool across all County departments.

Recommendation D.5.1: Memorialize using MS Teams in response plans as a best practice.

Recommendation D.5.2: Leverage the expertise of the Logistics Branch to identify innovative technologies that may be applied to EOC operations.

Observation D.6 Strength: Yolo County stood up rapid response operations for COVID-19 and adapted to multiple incident changes

Analysis: The DOC activated quickly and expanded operations to the EOC as the incident became widespread in the County. There were many pivot points in response operations because so many directives were being issued by various partners: the CDC, the President, the Governor's Office, and the State Department of Public Health. Yolo County did a good job of interpreting the directives, communicating that to response partners, and providing them with a foundation upon which to react to a rapidly changing incident. Participants indicated that the guidance allowed them to make reasonable policy decisions.

Recommendation: D.6.1: Memorialize the process of early activation of a DOC as a best practice for COVID response operations in Yolo County.



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Observation D.7 Area for Improvement: Operational coordination between ESF #5 (Emergency Management) and ESF #8 (Public Health and Medical Services) was strained.

Analysis: Participants reported tension between OES (ESF #5) and HHS (ESF #8) regarding operational coordination. Emergency management experts were experienced in establishing response operations but lacked expertise in public health incidents. Conversely, public health experts were experienced in addressing public health incidents but lacked expertise in emergency response operations. All staff deployed in response operations did their best under the difficult and unique circumstances of a worldwide pandemic. However, the nature of the incident, limited experience working together, workplace structure, and length of the response combined to create a challenging environment resulting in strained coordination between ESF #8 and ESF #5.

There were a series of operational shifts across the workforce; the DOC was managed and staffed by ESF #8, the EOC was managed by OES and staffed with County employees, and the combined COVID Response Operations Center (CROC) was a blend of the two. Participants stated they were told these operational shifts were intended to stabilize the incident, but they reportedly had a different impact on the cohesiveness of the response.

The operational shift from an EOC to a DOC and then to a CROC is not part of the formal ICS structure, causing confusion among staff and impacting response operations.

Recommendation D.7.1: If a similar incident should occur and response operation are being coordinated at the County DOC level and as the incident expands, operational coordination should be upgraded and incorporated into the EOC Operations Section. A senior HHS official could serve as a liaison or subject matter expert to EOC Management.

Recommendation D.7.2: ESF #5 and ESF #8 should have routine exercises to practice a transition from a DOC to an EOC during response operations.

Observation D.8 Area for Improvement: HHS did not have enough staff with sufficient training in responding to an incident and lacked trained staff to fill primary, secondary, and tertiary roles within the DOC, impacting response operations.

Analysis: Participants indicated that there was a lack of emergency management training for HHS staff. This was flagged as one of the reasons that incident coordination flipped between the HHS DOC to the EOC and then to a hybrid CROC. Emergency management staff (had ICS training but limited public health incident experience. HHS staff had public health experience but not enough understanding of ICS to be effective in the lead coordination role. HHS staff were rotated through positions and worked hard to address issues they were responsible for without access to standard operating procedures for the positions. However, they felt lost and lacked the breadth and depth of understanding of incident response operations and management to be as effective as was required for such a long-term deployment. Participants stated that HHS staff should have received ICS training before this incident.

Recommendation D.8.1: HHS should invest resources in a robust ICS training and exercise program for all employees so multiple people can assume positions in the DOC or EOC.



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Recommendation D.8.2: HHSa should establish three DOC teams (e.g., Red Team, White Team, Blue Team) and train them quarterly in response operations.

Recommendation D.8.3: HHSa should develop standard operating procedures for each major function in its DOC and all the functions its personnel will occupy in the EOC.

Recommendation D.8.4: HHSa senior leadership should establish a DOC training schedule, maintain records of attendance, and clearly link attendance to employee yearly performance measures.

Observation D.9 Area for Improvement: Emergency management/ICS training is designed for professional emergency managers, not the general employees of the County who were required to engage in COVID-19 response operations.

Analysis: Participants noted that emergency management and ICS training can be challenging for individuals who are not in the emergency management field to comprehend. Training should be designed to teach staff how to apply their knowledge to a disaster setting (e.g., finance in day-to-day operations morphing into finance for disaster operations). The participants expressed a willingness to serve in the EOC and a desire for training that would help them apply their skill base most effectively during response operations.

Recommendation D.9.1: Redesign the existing ICS courses to be tailored to Yolo County while meeting the National Response Framework requirements.

Recommendation D.9.2: Provide emergency management training routinely throughout the year so employees are regularly exposed to the goals and objectives of ICS and can align their expertise to support response operations when required.

Observation D.10 Area for Improvement: There were insufficient policies, procedures, and/or protocols for coordinating remote work for HHSa employees. HHSa Human Resources was challenged to provide training and workforce development to managers, supervisors, and employees when it shifted to remote work.

Analysis: When some of the workforce at the HHSa had the opportunity to work fully remotely or have a hybrid work schedule, managers and supervisors were exposed to a new form of leading their staff. On a positive note, this was a good option for some individuals with positions where minimum supervision was needed and their work product was easily quantified. Additionally, it provided some flexibility for workers with children at home because of childcare closures and remote schooling. They were able to do work at different times of the day. The challenges that managers and supervisors expressed were that they and staff coworkers were often blind to what people were doing via remote work. Some types of work require more effort to quantify. There were perceived issues with equity and inconsistency with performance measurement. Supervisors and managers indicated that they would have benefited from training and development on effectively managing a remote or hybrid workforce.

Recommendation D.10.1: HHSa HR should develop a practices and procedures for providing just-in-time training for employees (managers, supervisors, and general employees) when new policies or programs are introduced during response operations.



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Observation D.11 Area for Improvement: There is a need for increased governmental coordination at the regional level.

Analysis: Participants noted the need for increased coordination among governments across the region, including coordination among cities within counties and coordination between counties. There was a lack of coordination on issues like business closures, leading to situations where one jurisdiction would close a certain type of business while nearby jurisdictions kept similar businesses open. This made COVID-19 restrictions less effective, as people would travel to the least restrictive jurisdiction. Participants indicated that this incident exposed the need for stronger coordination among local governments in policy and programming. Developing diverse areas of expertise in particular hazards or response operations and engaging with each other more in planning, training, and exercises is long overdue.

Recommendation D.11.1: Improve coordination and consistent jurisdictional practices at the regional level of government.

Observation D.12 Area for Improvement: The Board of Supervisors needs more training on their role in response and recovery operations.

Analysis: IEOC Management (EOC Director) is required to provide situational awareness to policy makers at routine times during response and recovery operations. COVID-19 was a novel incident with many changes. There were occasions when the Board of Supervisors at Yolo County requested data to make informed decisions but found it was not available or they found contradictory data being shared by different agencies at different levels of government. This created tensions. Providing these policy makers with the best situational awareness was challenging for the EOC, and there were occasions where the requests were not within the scope of the IC. The Board did not always seem to understand the scope of its role in the incident. There were many changing recommendations and contradictions that made incident briefings for the Board hard to navigate and may have had impacts on policy decisions. Some of these tensions may be related to the lack of formal NIMS training for the Board of Supervisors, which could help them better understand their roles in response and recovery operations.

Recommendation D.12.1: A NIMS overview for senior officials should be presented to the Board of Supervisors on a routine basis.

Recommendation D.12.2: The Board of Supervisors should be provided with briefing books on NIMS and ICS that are updated annually.

E. Public Health, Healthcare, and Emergency Medical Services/Medical Surge

FEMA Response Core Capability – Public Health, Healthcare, and Emergency Medical Services: Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.



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PHEP Capability #10 – Medical Surge: *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 E.1 Strength: *Healthy Yolo Together*, a public health project of UC Davis, was an example of effective partnership for response operations.

Analysis: Yolo County collaborated with the University of California-Davis (UC-Davis). The interaction between all partners is a good example of effective public/private partnership and community engagement in response operations. There was private sector funding, innovation from the scholars at UC-Davis regarding COVID-19 testing techniques, supportive partnership from the government through the use of student interns, and engagement and information sharing from advocacy groups and community/faith-based organizations. This collaboration was mindful of equity issues in the community by expanding from its origin as *Healthy Davis Together* in a more privileged city to incorporate the whole county as *Healthy Yolo Together*.

Recommendation E.1.1: Memorialize the effective collaboration between UC-Davis and Yolo County in all plans, training, and exercises.

Recommendation E.1.2: Maintain the partnership by including UC-Davis in community engagement exercises related to response operations.

Observation E.2 Strength: Delivering vaccines to community members with greater vulnerability to COVID-19 was a best practice.

Analysis: Yolo County delivered vaccines to medically fragile individuals at their homes and in care facilities. This *go-to-them model* of public health prioritizes the relationship of community members and partners who serve those who are at the greatest risk from COVID-19.

Recommendation E.2.1: Utilize the *go-to-them model* of community healthcare whenever the resources and capabilities are available to provide essential services to vulnerable populations in Yolo County.

Observation E.3 Strength: Targeting vaccination toward farmworkers (agricultural community) was an effective strategy for the delivery of COVID-19 vaccinations.

Analysis: The collaboration with the agricultural industry was a successful strategy for delivering COVID-19 vaccinations (mobile vaccinations) to farmworkers, who were identified as essential workers in the County. County staff leveraged their pre-incident contacts to establish communication and strengthen relationships with large farming organizations in the County. During interactions with representatives from the agricultural industry and farmworkers on-site, written information about COVID-19 and vaccinations was provided in both English and Spanish, with native Spanish-speaking staff delivering information in Spanish. The County and agricultural industry representatives worked together to assess the vaccine supply needed for the workforce. Once the vaccine was available, the County deployed a team to vaccinate farmworkers.



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Recommendation E.3.1: Memorialize the effective response partnership between the agricultural industry and Yolo County in future plans, training, and exercises.

Recommendation E.3.2: Establish a structure in HHSa and OES to maintain a long-term relationship with the agricultural industry in the County regarding public health and all-hazards preparedness, response, and recovery programs that replicates the format of medical surge operations.

Observation E.4 Area for Improvement: The public health immunization team and the EOC vaccine team did not coordinate COVID-19 vaccination distribution and administration effectively.

Analysis: HHSa's standing immunization program, which typically conducts Yolo County's vaccination clinics (e.g., flu, measles) experienced difficulties when pivoting to COVID-19 vaccination distribution. This led ENTITY (who made the decision?) to deploy a separate vaccination team.

The EOC vaccination team adapted the Public Health Emergency Preparedness Point of Dispensing Plan, worked with private sector partners for vaccine distribution, and expanded into the go-to-them model, delivering vaccinations to individual residences.

However, as the incident progressed, confusion arose due to two teams—the HHSa immunization team and the EOC team—conducting the same mission but not coordinating effectively. This resulted in issues with equipment and vaccine availability, resource allocation, and staffing.

Recommendation E.4.1: Leadership should prioritize coordinated MPOD and POD planning, training, and exercises with the HHSa immunization and EOC teams together. Should a similar incident occur again, determining a lead could alleviate confusion and coordination that has previously occurred.

Recommendation E.4.2: Section Chiefs in the EOC should conduct transition briefings with their DOC counterparts immediately at the onset of the EOC activation to share how each is conducting response operations to support the mission priorities and to avoid duplication of efforts. This briefing should be added to transition practices

Observation E.5 Area for Improvement: The process for collecting data at vaccine clinics was inconsistent.

Analysis: A consistent and organized process for tracking data is important for record-keeping, case and contact investigation, and sharing with response partners. Participants reported that the process for collecting data from individuals who attended the vaccination clinics was inconsistent. Initially, data was collected on sheets of paper and uploaded manually. The time that took resulted in backlogs, with some of the intake sheets being stored in cabinets and not entered until months later. Later in the incident, when funds were available to purchase technology to support operations at the clinics, data management improved. Additionally, participants indicated that Yolo County did not collect all the information required by the state and federal partners (e.g., street addresses, city, zip codes, cell phone, email). The lack of consistent data sets impacted interoperability.

Recommendation E.5.1: Ensure that Yolo County has a process that can support the data collection, management required for response operations to a large-scale public health incident.



F. Public Information and Warning/Emergency Public Information and Warning

FEMA Core Capability – Public Information and Warning: *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.*

PHEP Capability #4 – Emergency Public Information and Warning: *The ability to develop, coordinate, and disseminate information, alerts, warnings, and notifications to the public and incident management personnel.*

Observation F.1 Strength: Daily video briefings from the PIO provided accurate information focused on Yolo County and helped foster a sense of community during COVID-19 response operations.

Analysis: Over the course of two years (2021 - 2022), 600+ briefings that were specific to the Yolo County community aired daily at 10 a.m. The briefings included a range of topics, such as explaining the reasoning behind Dr. Sisson's decision to change a health order, explaining health orders, or announcing vaccine clinic locations. The PIO made the briefings more engaging by including personal touches, such as wishing the audience a Happy Mother's Day or saying things like, "It's my birthday, and COVID is still present." The goal was to make the videos feel more interactive and to build connections with the community. Community members routinely approached the PIO and mentioned watching the videos, some for a sense of calmness, others for the knowledge that the County was working on the problem, and some just to appreciate the effort of connecting with them.

Recommendation F.1.1: Include the daily PIO video briefings as a best practice in plans, training, and exercises for application to future incidents.

Observation F.2 Strength: Communication was successful because it addressed multiple issues simultaneously over multiple modalities.

Analysis: On the County website, there were 7 – 8 COVID-19 pages up at a time. Some addressed policies and explained the implications of each. Some were directed at businesses, closures, and phases of reopening safety. Others explained topics such as health orders, testing sites, PPE, and vaccines. The daily videos provided depth for topics and multiple off-shoot programs for all community languages. Written information provided to the agricultural community was in Spanish and English. Health outreach workers who targeted farmworkers were native Spanish-speaking County staff. This breadth and depth of public communication targeted at Yolo County provided consistent messaging about COVID-19 response operations in multiple formats.

Recommendation F.2.1: Identify the practice of using multiple modes of communication as a best practice and capture it for plans, training, and exercises for application to future incidents.

Observation F.3 Strength: The staff of the JIC had trained primary, secondary, and tertiary personnel to assume the role of the PIO for incident response.



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Analysis: The JIC staff had attended EOC training and workshops for years before COVID-19 and had a list three-deep of who would cover the PIO role (the County PIO, a Management Analyst, or a staff member with experience in graphics). As the COVID-19 incident escalated, the former County Emergency Manager had developed an organization chart that allowed for additional JIC personnel and roles based upon the incident including staff from Child Support Services, who had received PIO training. The emergency management structure, training, and exercise experience prepared the JIC staff for response operations on day one of the incident and enabled them to adapt and expand as required. The JIC staff were so well trained that they could adapt their ICS structure to deal with two distinct operations simultaneously (COVID-19 and wildfire EOC activations).

Recommendation F.3.1: Yolo County should use the training and exercise model employed by the JIC staff as a best practice and mandate that each Command and General Staff position in the EOC have three personnel fully qualified to assume each role when activated.

Observation F.4 Strength: The weekly PIO call morphed into a community outreach campaign to address the information needs of the whole community.

Analysis: The JIC initiated a weekly call with other PIOs throughout the County, who asked to include representatives from other organizations that could benefit from the discussions, such as public school districts, UC-Davis, and local colleges. At its peak, the call included attendees from 60 different organizations representing a diverse range of groups, including youth, seniors, and community-based organizations. The JIC then created sub-groups that included farmworker advocacy groups, education and childcare providers, small businesses, and faith-based organizations. The Public Health Officer was there to address issues and answer questions. The weekly call served as a consistent source of information, where organizations from the whole community heard the same thing simultaneously. The organizations then worked as force multipliers to distribute that information to the groups they represented. The weekly call built trust and reinforced transparency.

Recommendation F.4.1: Memorialize the establishment of a community outreach efforts by the PIO as a best practice in Yolo County's response operations.

Observation F.5 Area for Improvement: Access to translation services for critical risk communication was limited.

Analysis: There is a diverse population in Yolo County, and many community members speak languages other than English as their primary language. County staff identified translation services as a critical need. Due to limited resources, JIC staff used a variety of means to fulfill those needs and pieced together translation services. The PIO used funds from the American Rescue Plan Act (ARPA) to hire a bilingual staff member part-time as an analyst. More than one person on staff spoke Spanish, so there were backups for immediate translations. Over time, a Russian translator was located, and until then, County staff filled in. A contract was established for Chinese translation. Occasionally, CBO members assisted, and those pre-existing relationships with CBOs were helpful to call on. The JIC posted 180 videos on Facebook, and the PIO close-captioned each of them to be compliant with the Americans with Disabilities Act (ADA).



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Recommendation F.5.1: Yolo County should commit resources to language access capabilities and utilize language services for response and recovery operations to provide equitable risk messages in multiple languages.



G. Situational Assessment/Information Sharing

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

PHEP Capability #6 – Information Sharing: *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 G.1 Strength: The County reached out to mayors and city managers to establish a regular briefing session for each, which encouraged a unified response.

Analysis: Before the county went into shutdown, the County Administrative Officer (CAO) proactively contacted mayors and city managers. This advanced notice allowed time to coordinate public messaging, understand cascading implications, and strategize the response. There were two groups: one for mayors and one for city managers. The city managers had bimonthly meetings among the cities and county. The mayors were briefed by their respective city managers when there were significant incident developments or response rollouts. Participants identified that participation rates were high because of solid professional relationship-building pre-incident.

Recommendation G.1.1: Memorialize that strong relationships and regular communications encouraged unified response; this was a best practice in COVID response operations.

Observation G.2 Strength: The County actively participated in State and regional health meetings for leaders.

Analysis: At the onset of the pandemic, the California Department of Public Health and a regional group from the greater Sacramento area convened to discuss issues associated with the incident. The meetings were more frequent at first and allowed collaboration on policies and procedures. Participants helped each other navigate the politics affecting the situation and inform each other's decisions. The frequency decreased as the incident demobilized, but a Regional Health Officers' standing group and meeting emerged from it and continues.

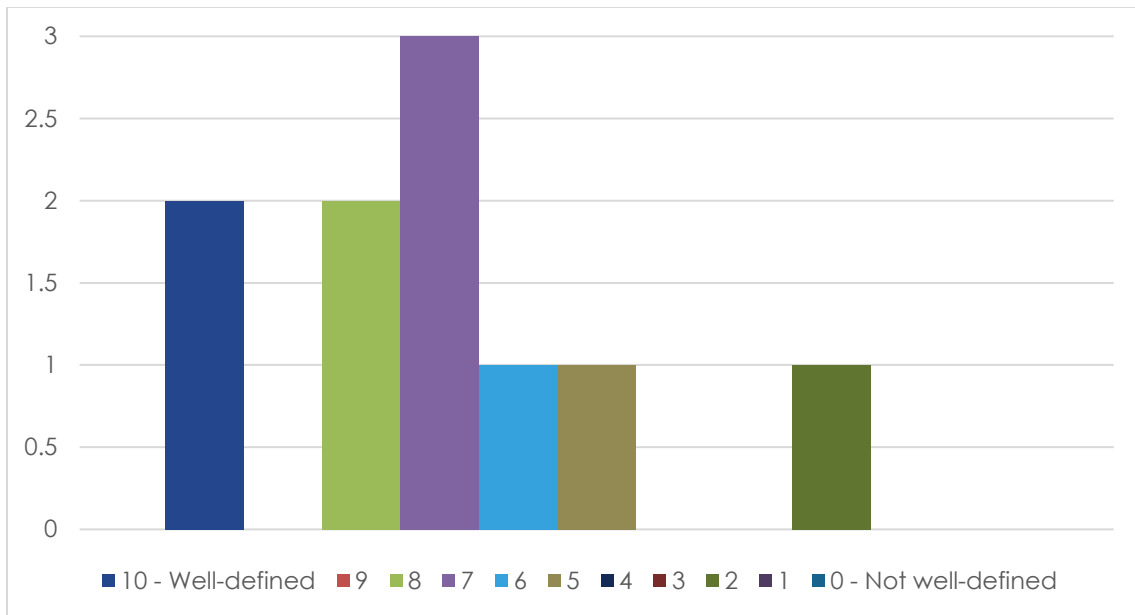
Recommendation G.2.1: Memorialize strong professional relationship-building and regular communications as a best practice by making space for its development and maintenance in staff workplans.



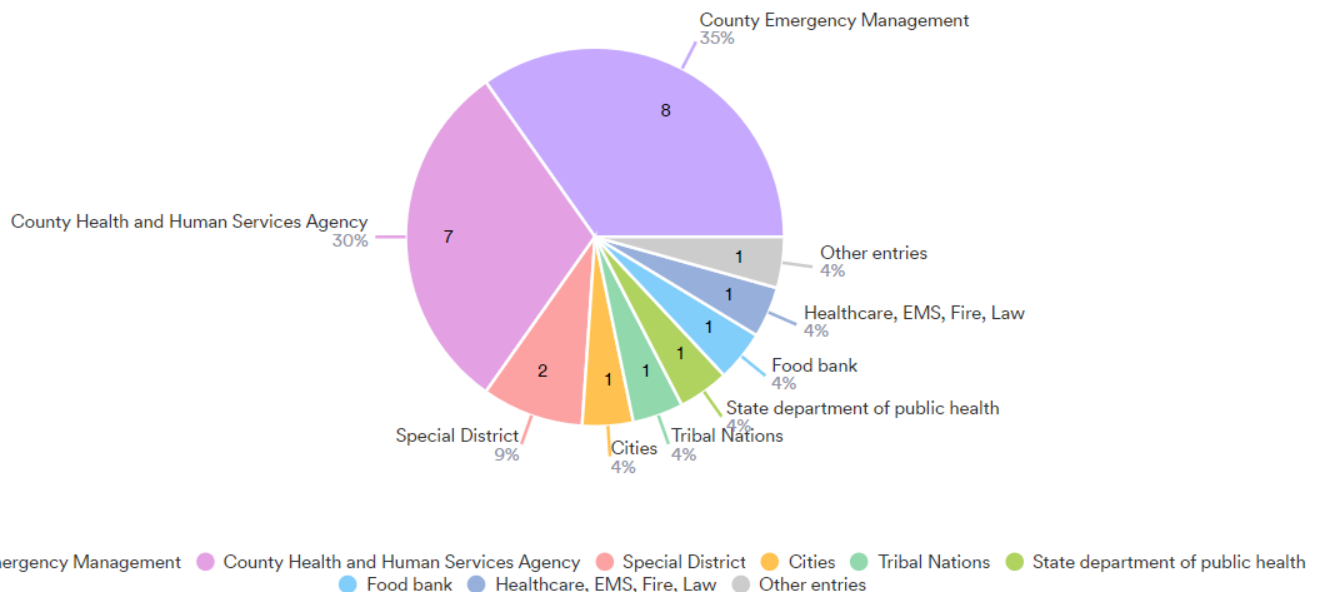
Appendix A – Yolo County Staff Survey Results

A survey was distributed to select Yolo County staff deployed to a DOC, EOC, or CROC. It included 11 closed-ended questions and two open-ended questions on response operations. The results are presented in this section. Data collected below is unedited from the respondents. Names, affiliations, titles, and email addresses have been redacted from the report.

1. Were incident management roles and responsibilities for response operations to COVID-19 well defined?



2. Which of the following response partners did you work with regularly during the COVID-19 incident?



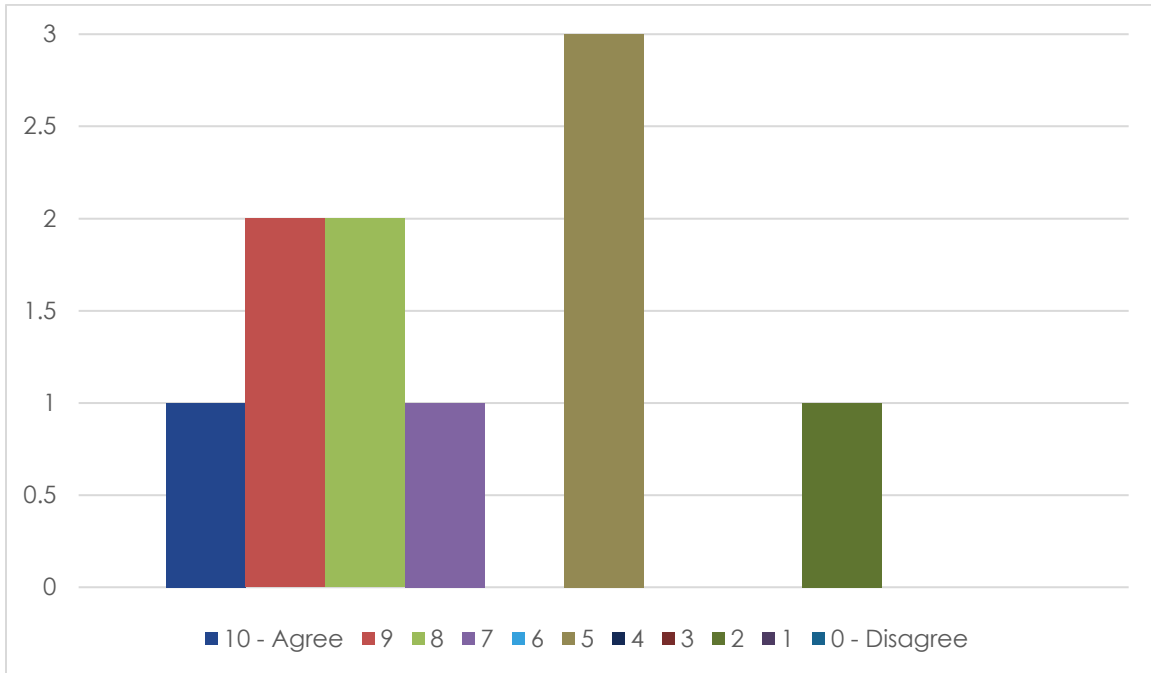


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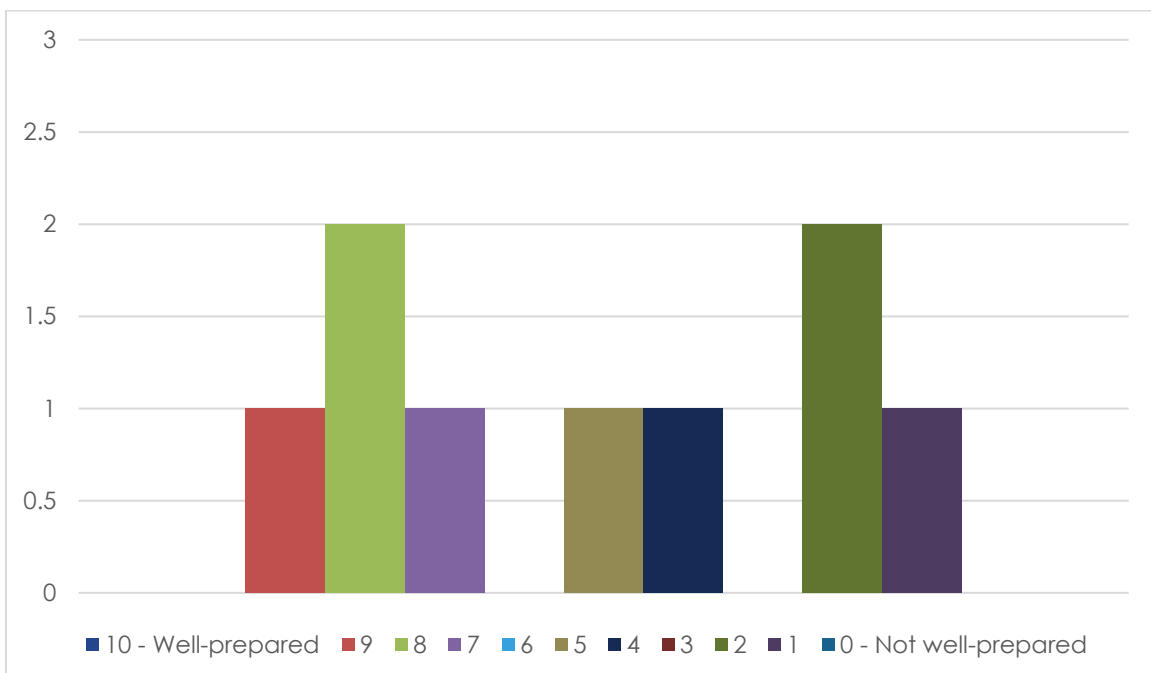
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3. How would you rate the inter-department and inter-agency coordination during the COVID-19 response?



4. How prepared did you feel to assume the position you were assigned in the DOC or EOC for COVID-19 response operations?



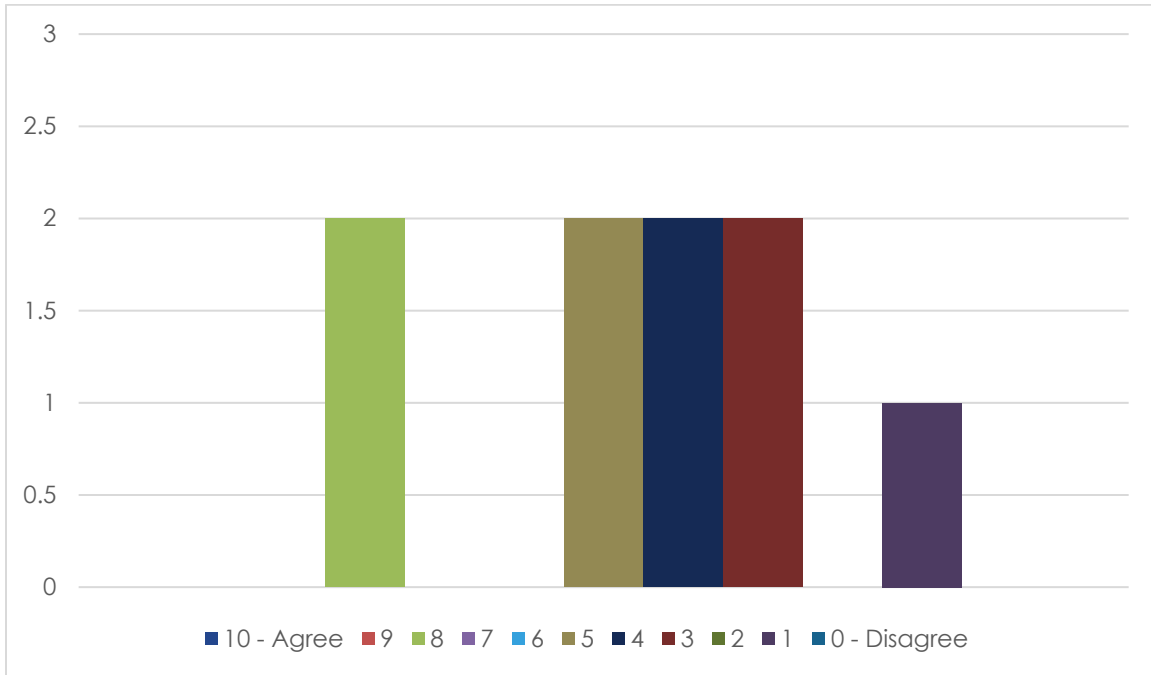


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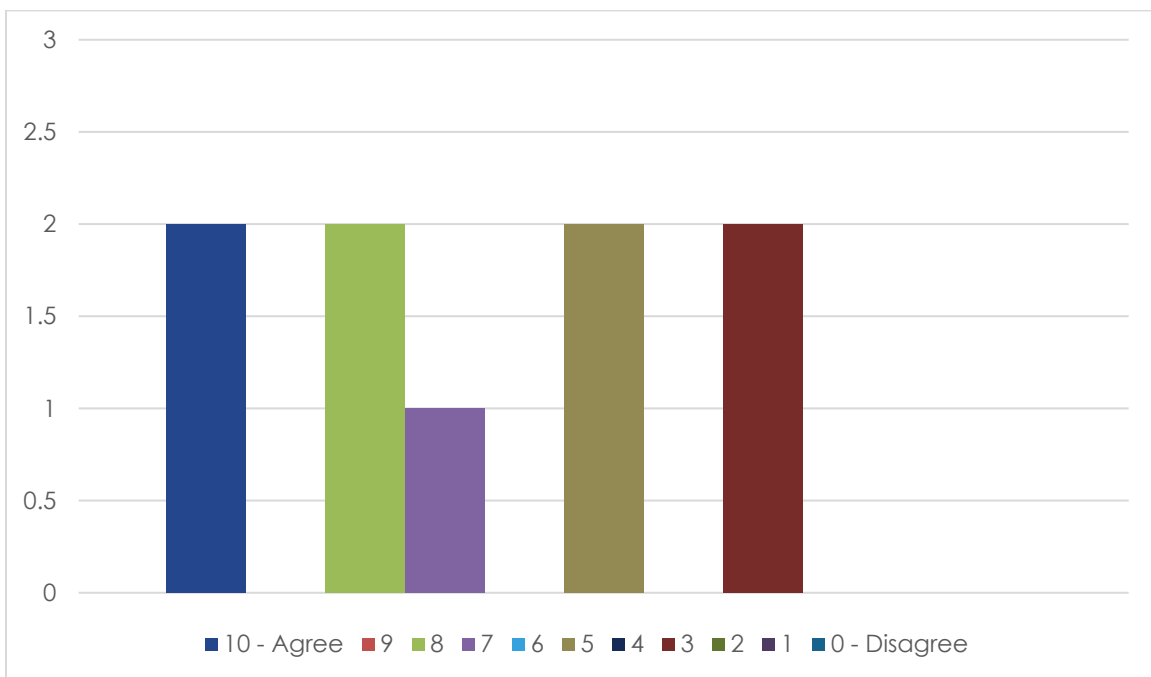
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5. Yolo County's on-the-job training for Command General Staff positions were implemented in a way that allowed me to better understand the roles and responsibilities and to be able to fulfill that role in response to COVID-19, as well as better prepared me for future disasters/incidents.



6. The use of the Emergency Operations Center Operational Briefings was effective in supporting my section/branch/unit/department.

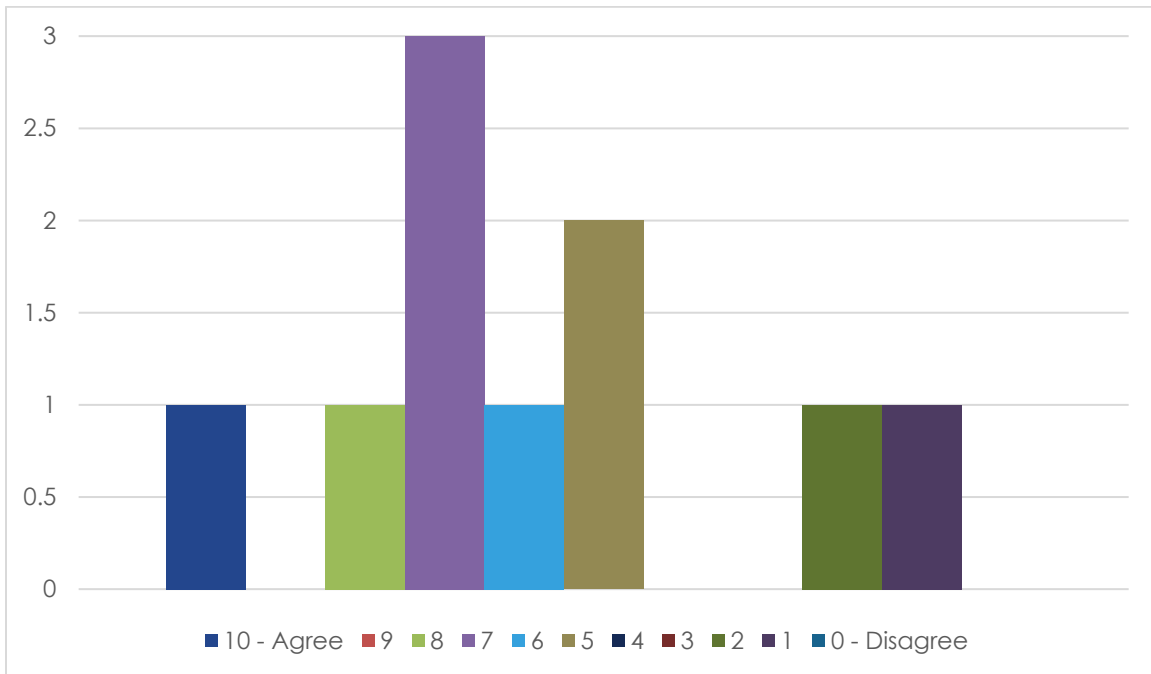




7. How can Yolo County Emergency Management improve messaging to the public?

Public I think having one main source of information is the best way to inform the public. With so many local, state, and federal recommendations it sure seemed like it was very hard for all of you to be on the same page.
The County needed to be a little more nimble in messaging in a timely manner. That being said, they were much better with the public than they were with employees.
CA.
Messaging to the public was fine as far as I could tell.
More social media. TV & radio.
We need to be able to text the public.
More, in partnership with jurisdiction PIO, Healthcare agencies, etc.
California.
Use community groups, with the same level of emphasis they do with social media.

8. Staffing was adjusted to be able to respond to long-term COVID-19 response operations and simultaneous incidents (e.g., COVID-19 and wildfire and civil unrest, etc.)



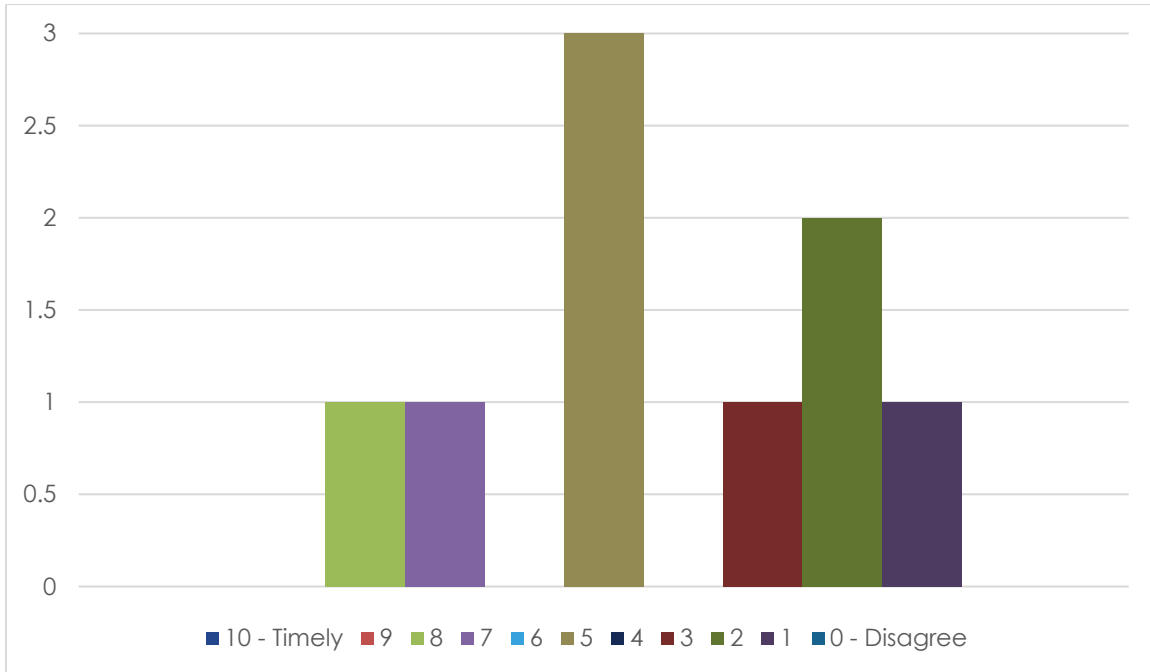


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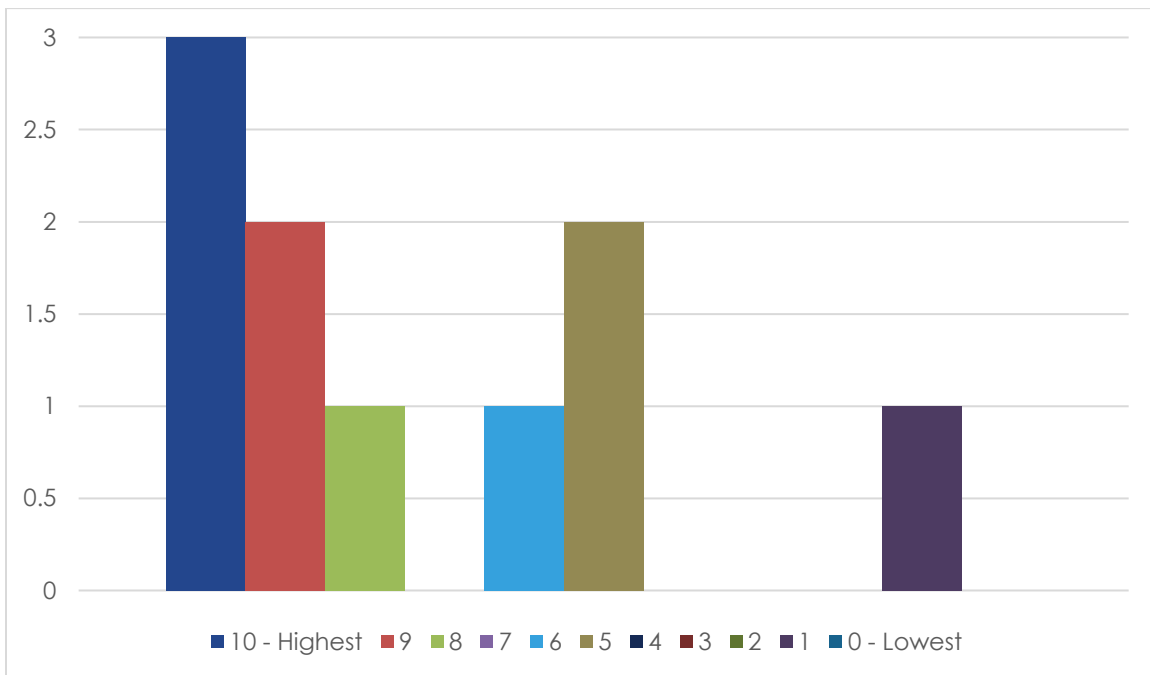
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9. Please rate the timeliness and information contained with human resource policy directives that were periodically issued with guidance on maintaining workplace health, telework, travel, and sick time policy.



10. How would you rate overall coordination between your department and Emergency Management?



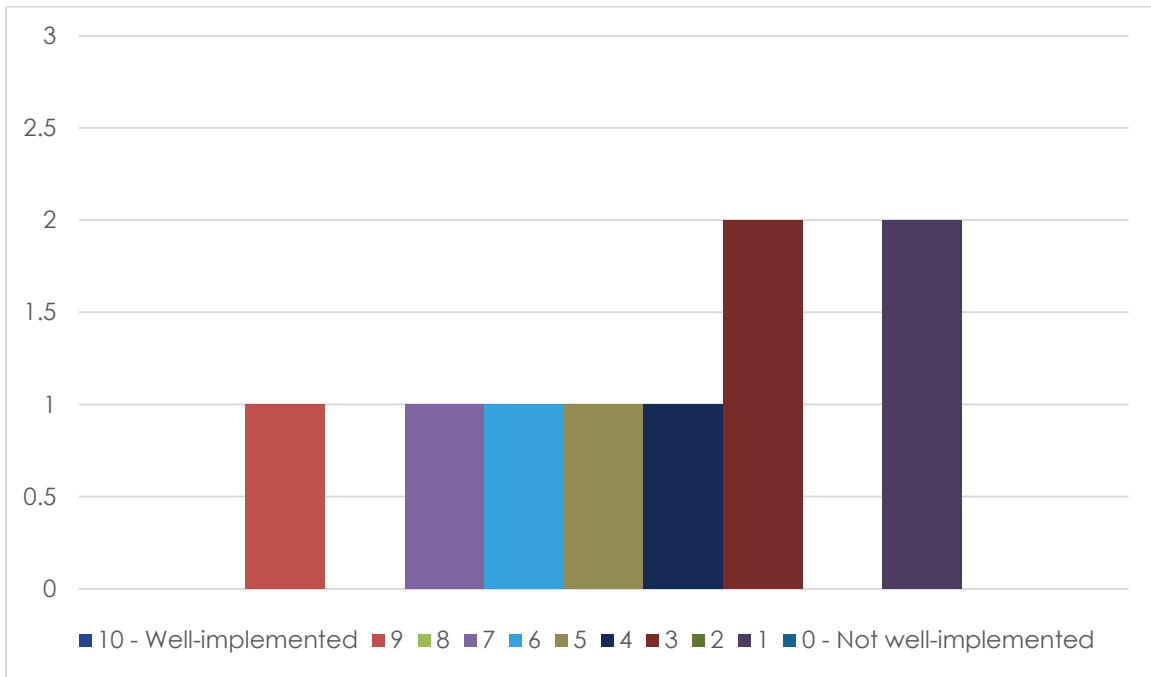


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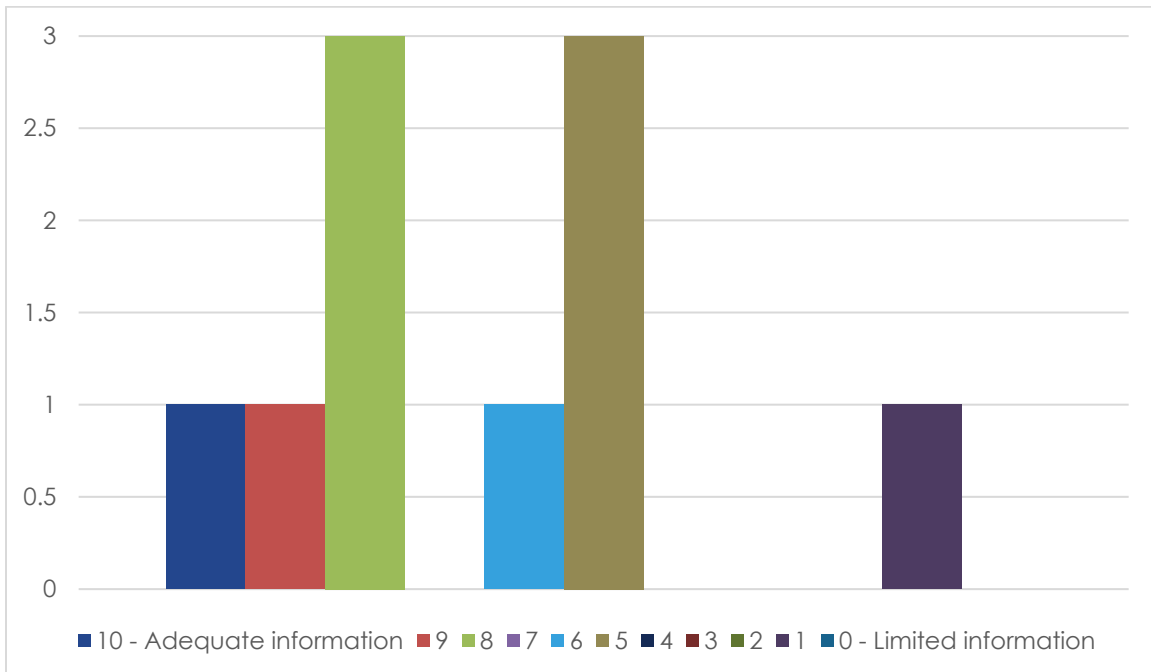
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11. How do you feel telework was implemented during the COVID-19 pandemic for your department?



12. Did you have enough information and communication from others to understand how your position impacted the overarching mission of the county to protect the whole community regarding the COVID-19 incident?





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13. Additional Feedback: If you'd like to share any feedback or highlight particular strengths and/or areas for improvement, please share them below.

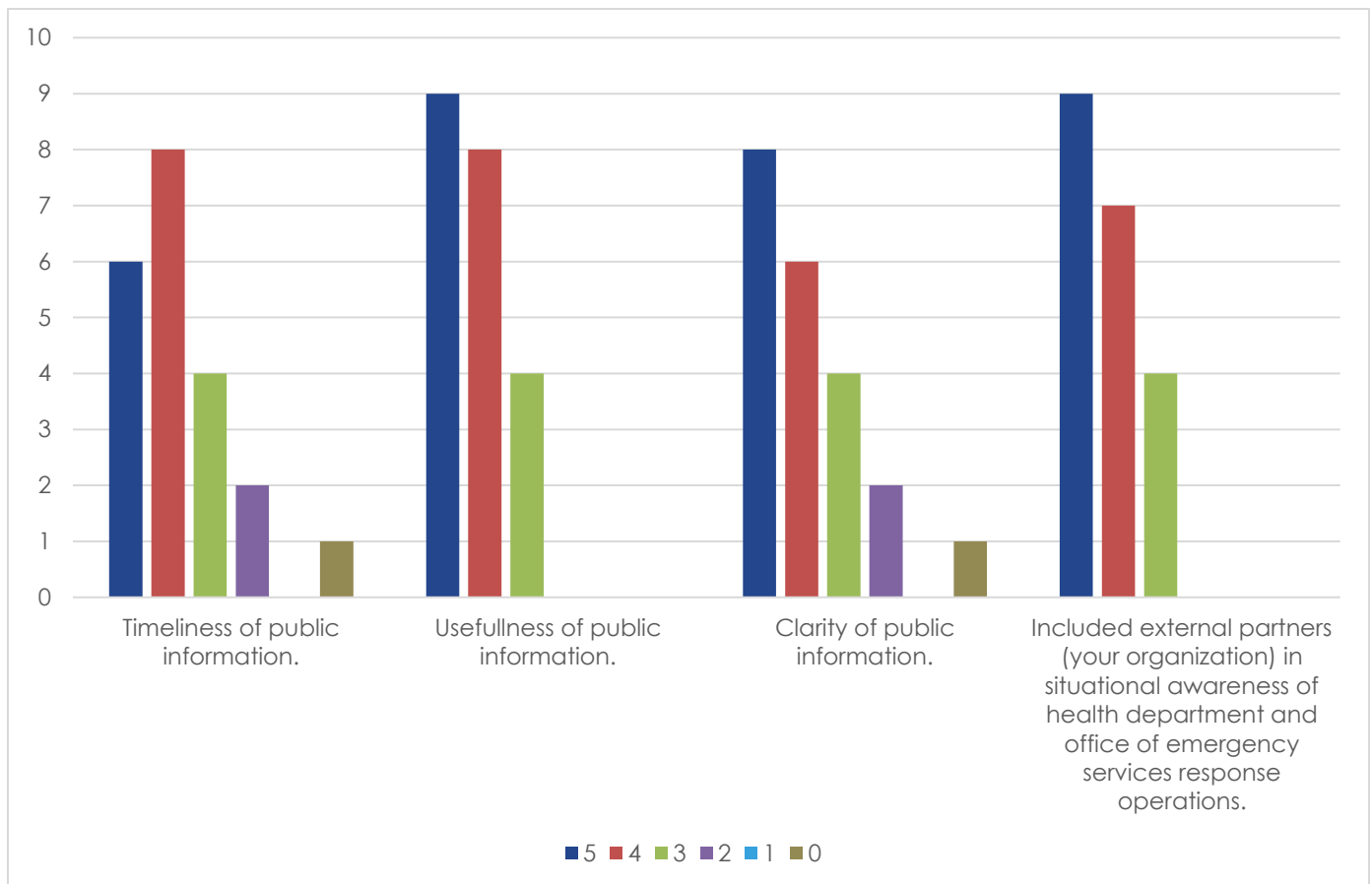
<p>I thought that throughout covid information from state, fed and local was mediocre at best.</p>
<p>I gave low ratings to questions 5 and 6 as I didn't receive either. I thought the County did an exceptional job of responding to COVID as it related to their residents, business, schools, etc. Internally, HR and legal were slow to respond making continuity of operations difficult and adding extra levels of difficulty that were removed for the public long before the County operation. County guidance to employees was not only delayed but sometimes conflicted which was challenging for department leadership trying to do the right thing.</p>
<p>Internal communication between teams and knowing what was required and the specifications for that requirement were lacking. Conflicting information from State and HHS/DOC in terms of what was needed/desired. Some decisions made by "default" (no decision) instead of discussing and implementing a plan. In general, IT resources and/or requirements were not thought through and/or implemented properly. There were massive amounts of data, but no one knew what to do with it and in some cases, the data was insufficient for what was actually needed. Data was also wrong/incorrect and in some cases (i.e., the Stat's records) had been wrong/incorrect for a long time including prior to the pandemic. There were no processes in place to correct it and attempts to correct it were met with resistance from certain parties both internal and external.</p>
<p>Telework was a problem to roll out as very few staff at the time were doing it, and we did not have the equipment, policies, or resources to implement effectively and securely. For EOC staff, we were trained on events such as fires and floods, not pandemics. Still, the EOC worked very well together and were able to provide valuable services. I was only activated in the EOC for the first 4 months of COVID-19, so I can't comment on activity after that.</p>
<p>I was not activated for the DOC/EOC, but provided office support for the CAO office, which was heavily involved in activation. My EOC role managing volunteers did not begin until vaccine clinics were staged.</p>



Appendix B – External Response Partners Survey Results

A survey was distributed to response partners from the private sector and volunteer and community-based organizations that were engaged in response operations with Yolo County. It included 14 closed-ended questions, two open-ended questions, and one general open comment opportunity related to response operations. The results are presented in this appendix. Data collected below is unedited from the respondents. Names, affiliations, titles, and email addresses have been redacted from the report.

Please rate how satisfied you were with the following efforts of Yolo County during the COVID-19 response on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.



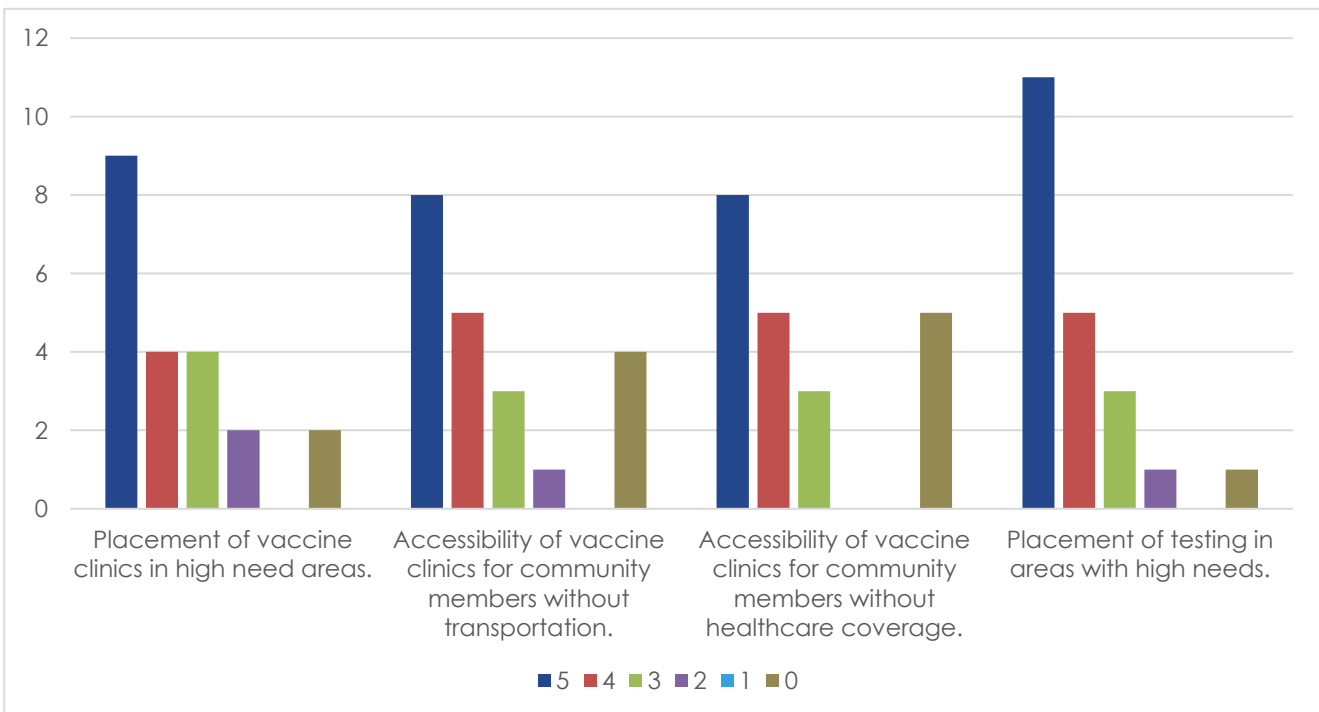
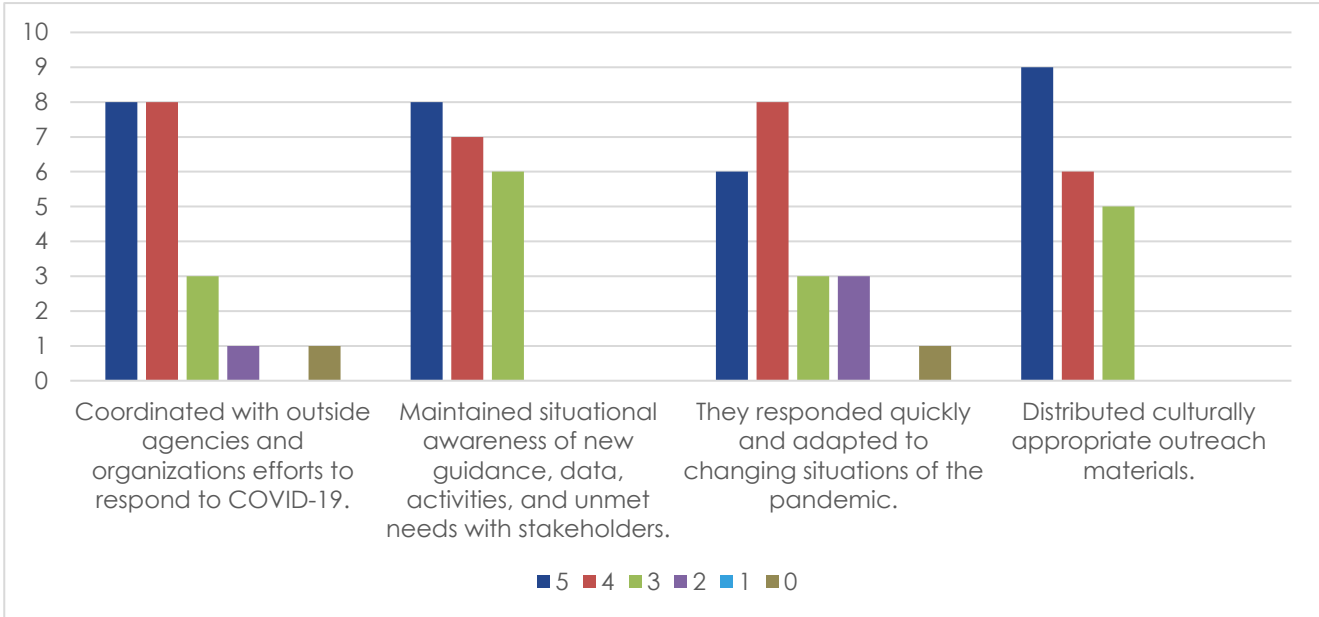


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Please rate how satisfied you were with the following efforts of Yolo County during the COVID-19 response on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.



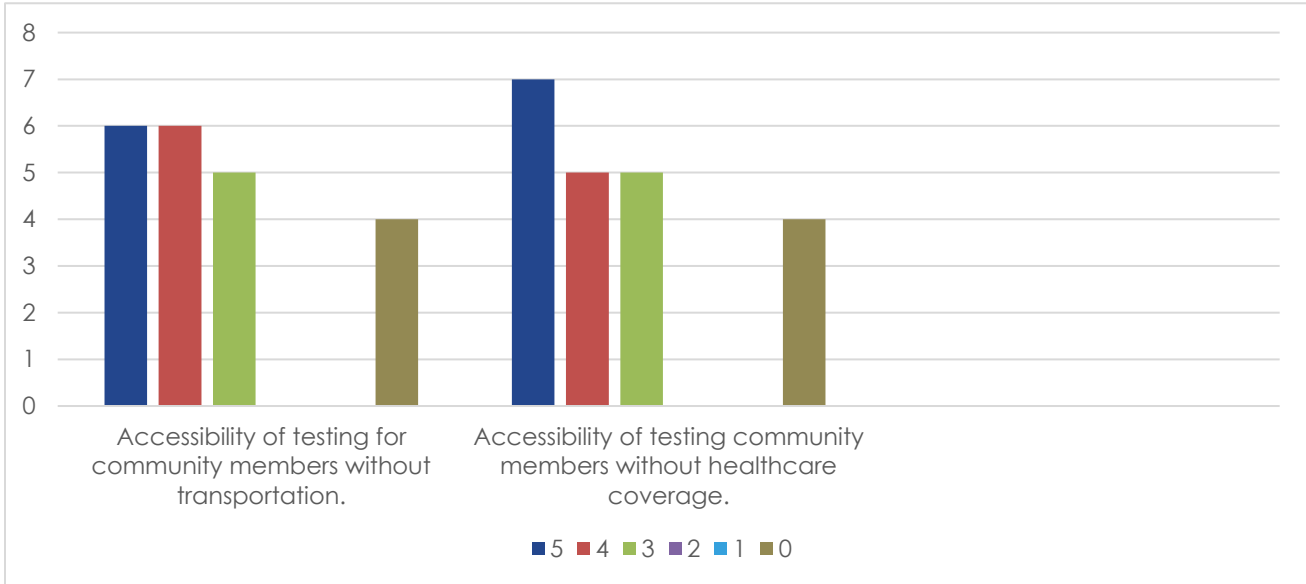


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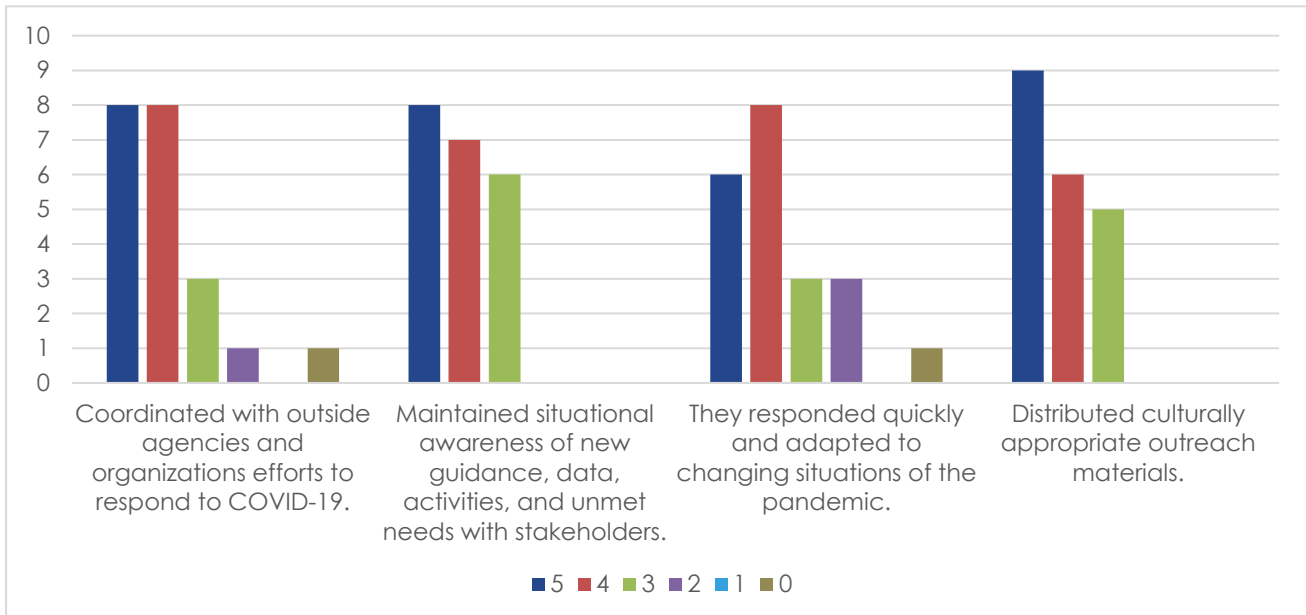
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Please rate how satisfied you were with the following efforts of Yolo County during the COVID-19 response on a scale of 1 to 5, with 1 being very dissatisfied and 5 being very satisfied.



What would you identify as a BEST PRACTICE that Yolo County did during response operations to COVID-19 (e.g., something that should be continued because of its impact or effectiveness)?





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The weekly updates were extremely helpful. The ability to ask questions and get timely responses helped us to get that information out to our staff promptly.
Home vaccination program.
Data that was collected and given to the public
Partnering with long-term care to set up vaccination clinics (MPODS). Long-term care walk-through's to meet county and help guide infection prevention.
Coordinated with multiple agencies and UC Davis to reach as many people as possible.
Jenny Tan's updates were very helpful, and easy to understand. The Yolo County drive through vaccination events were the best. Well organized, although it was difficult for people without internet to sign up. Calling the County Health department usually linked us with a very helpful person.
Work with some external organizations. Our organization for older adults, Yolo Healthy Aging Alliance, was very involved almost from the very beginning. Having regular meetings with current data and policy guidance was very helpful. Not all sectors of the population or at least the most at risk were regularly represented. Great work with older adults, farmworkers, grocery workers. Communication was great when Jenny Tan was the PIO. She was a superstar with information. When she left it was less reliable. The website took quite some time to get the information needed but eventually got there. LOVED and so proud of the home vaccine program. It started early and lasted all the way to this month. It was key to get some of the harder to reach people and SO convenient. Also love the test kit distribution.
Early Planning of onsite vaccination in coordination with the elderly residential facilities like Eldervilla. Our residents got their first dose in Dec 2020 maybe we were one of the first to get vaccinated.
The communication and delivery of vaccines to our clinic were fabulous. The team we worked with regarding the vaccines were very helpful and easy to work with.
At the time, Dana Carey was the OES Manager for Yolo County and provided great guidance and support to the City of West Sacramento's EOC and staff.
Communication was one of the best practices. Effecting and quick communication.
Had a strong emergency manager.

What would you identify as a LESSON LEARNED during Yolo County's response operations to COVID-19 (e.g., something that was ineffective or missing)?

In the beginning of the pandemic, it was difficult to get a hold of someone at Yolo County. We had several clients that were positive for COVID-19. Response times were 48-96 hours. After 2 weeks of reporting the positive COVID cases and multiple deaths, MHOAC was interacting with us. Since then, the team was extremely responsive and helpful.
I think the county did a great during the periods of ever-changing guidelines that were difficult to keep up with.
Getting information out to us faster. Better Testing for the community.
Took way too long on year two of covid to set up flu and covid vaccine for our residents.
We are a state licensed Adult Day Program. Sometimes it was VERY difficult to determine what guidelines to follow. State? County? City? We basically followed Yolo County guidelines because the website was the easiest to use.
Where were the Public Health Nurses? This pandemic should have seen them in major leadership along with the Public Health Officer. They could have provided more assistance with education of the



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<p>public, outreach plans, utilizing existing information channels, etc.</p> <p>I am so glad the name has been changed to Public Health Department. It was confusing to the public to not have one during a pandemic. I know functions were in parts of Community Health, but a known and prepared Public Health Department was missing.</p>
<p>We can do better on PPE management, but the problem was unseen at that time and supply line interruptions/problems made it worse.</p>
<p>The fire chiefs struggled to find common ground with Kristin Weivoda, who was the EMS Administrator for Yolo County at the time. She was not very collaborative, and disregarded input from the Yolo County Fire Chiefs.</p>
<p>I believe the County could have partnered better in the early phases of the pandemic with other community resources. At times, it felt as if the County held back efforts being made by other entities.</p>
<p>All public health personnel need routine and sustained ICS training.</p>

Additional Feedback: If you'd like to share any feedback or highlight other areas of the response, please share them below.

<p>We cannot thank Yolo County enough for all the information and help that was given to us during this trying time. As a result of your team's dedication, our staff and clients were able to live in a safer and healthier environment. Thank you to all your staff!!!!</p>
<p>I think the county and all partners involved in the pandemic response did a fantastic job!</p>
<p>Our drive through clinics were amazing! Especially the earlier ones. Again, a moment of Yolo pride. Also, great that when a clinic was requested in senior living communities it was arranged. I had thought I was to be interviewed and would still like that opportunity. Please contact me: Sheila Allen, Yolo Healthy Aging Alliance,</p>
<p>County and first responders are heavily tasked in such times and the individuals and facility administrators should step up and stay ahead of the critical moments. Waiting for others to do their job before taking care of own responsibilities will result in a lag that will slow down the community performance. Everybody should be more responsible in such an unfortunate breakout.</p>
<p>In the Healthcare industry many of us were very stressed. The COVID vaccine brought ton challenges however the Yolo County teams that were assigned the task of organizing the delivery and the monitoring of the first COVID vaccines delivered to our clinic were the best! Explaining all the steps along the way, and they were very responsive to phone calls and emails. Shout out to them!</p>
<p>Overall, I feel Yolo County did well with its overall response to COVID 19. However, we did experience issues with regards to EMS policies / procedures throughout the emergency response.</p>
<p>Thank you.</p>



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Appendix C – Improvement Plan

This Improvement Plan (IP) has been developed specifically for Yolo County resulting from the 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 Yolo County AAR/IP Review Team should determine priority rankings for these recommendations, such as high, medium, and low. It should be noted that some of these actions may have already begun prior to or during the development of the AAR/IP. Each is dependent on conditions at the County and is based on its available resources, capabilities, and organizational priorities.

Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
<p>Observation A.1 Strength: Staff demonstrated dedication and professionalism while focusing on mission objectives to protect lives, property, and the environment during response operations.</p>	<p>Recommendation A.1.1: As part of the Emergency Operations Center (EOC) deactivation, County leadership should express their appreciation to all for their time and energy during an extenuating and exhausting incident.</p>			
<p>Observation A.2 Area for Improvement: County leadership's expectations and staff's expectations for attention to stress reduction strategies, mental health resources, safety from threatening behavior, and work recognition were not aligned.</p>	<p>Recommendation A.2.1: At the onset of response operations, County leadership should 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.</p> <p>Recommendation A.2.2: After the first 30 days of County 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).</p>			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
	<p>County leadership should demonstrate support by modeling time-off requirements.</p> <p>Recommendation A.2.3: In the EOC ICS chart, assign an Assistant Safety Officer for Resilience, reporting to the Safety Officer, who will be responsible for developing, implementing, and enforcing guidelines for mental health and wellness of all response staff.</p> <p>Recommendation A.2.4: The County should develop a work group including staff who responded to COVID-19, medical staff, HR representatives, mental health experts, and leadership to determine proactive steps to implement before future responses and to ensure a resilience plan exists for staff before, during, and after future responses.</p> <p>Recommendation A.2.5: As result of this incident County departments should review, make recommendations, and/or update changes in continuity planning with consideration for emergency response.</p>			
<p>Observation B.1 Strength: Yolo County's distribution of personal</p>	<p>Recommendation B.1.1: Memorialize PPE distribution models for COVID-19 as</p>			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
protective equipment (PPE) for its response staff and community was innovative and effective.	<p>a best practice for future planning, training, and exercises.</p> <p>Recommendation B.1.2: Encourage innovative problem-solving that makes public health solutions easier for the impacted public to access.</p>			
Observation B.2 Strength: Establishing and utilizing a COVID data dashboard provided a realistic overview of the incident for stakeholders.	Recommendation B.2.1: Codify the data collection and sharing as a standard operating procedure for future public health emergencies.			
Observation C.1 Strength: Using visual communication elements that supported written response operations materials helped the whole community understand the incident.	Recommendation C.1.1: Memorialize the use of visual communication in this incident for application to plans, training, and exercises.			
Observation C.2 Strength: The Public Health Officer was highly engaged in community conversations with various organizations throughout response operations.	Recommendation C2.1: Memorialize the information-sharing model used by the Public Health Officer as a best practice and apply its principles to planning, training, and exercises.			
Observation C.3 Area for Improvement: There were delays in translations of COVID outreach and guidance materials into languages other than English.	Recommendation C.3.1: Yolo County should prioritize language access planning for major languages used by community members and commit resources to achieve community equity			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
	in written risk communication messaging. [64% speak English; 21% speak Spanish; 15% speak other languages] (World Population Review, 2024)			
<p>Observation C.4 Area for Improvement: It was evident throughout the incident that there was a historic gap in information sharing about personal preparedness and resilience building throughout the County.</p>	<p>Recommendation C.4.1: Expand outreach, education, and communication programming in emergency management and public health topics to residents of the County who use English as an additional language.</p> <p>Recommendation C.4.2: Program coordinators in OES should intentionally structure their outreach and community engagement activities at historically marginalized communities and work to establish long-term trusting relationships.</p>			
<p>Observation D.1 Strength: The Incident Command System (ICS) was an effective organizational format for COVID response operations.</p>	<p>Recommendation D.1.1: Continue a robust ICS training schedule for all County employees to ensure redundancy in EOC positions to achieve the mission of each activation.</p>			
<p>Observation D.2 Strength: There was an excellent transition of duties between the retiring and replacement Public Health Officer resulting in uninterrupted continuity</p>	<p>Recommendation D.2.1: Memorialize that continuity of operations planning is an effective strategy that positively impacts response operations in all plans, training, and exercises.</p>			



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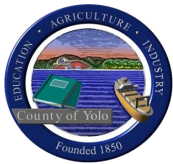
Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
of operations.				
Observation D.3 Strength: When Disaster Service Workers (DSW) were used in familiar roles or roles relevant to their backgrounds, they were effective force multipliers in response operations.	Recommendation D.3.1: Memorialize the use of DSWs in response plans for application to future incidents.			
Observation D.4 Strength: Just-in-time training was effective in meeting the emerging needs of employees assigned to the EOC.	Recommendation D.4.1: Memorialize just-in-time-training in response plans as a best practice. Recommendation D.4.2: Establish a team in the Operations Branch to conduct a training needs assessment at the onset of EOC activation and establish a just-in-time training plan for all employees to attend.			
Observation D.5 Strength: Remote workers utilized rapid training and application of MS Teams platform to support EOC operations.	Recommendation D.5.1: Memorialize using Teams in response plans as a best practice. Recommendation D.5.2: Leverage the expertise of the Logistics Branch to identify innovative technologies that may be applied to EOC operations.			
Observation D.6 Strength: Yolo County stood up rapid response operations for COVID-19 and adapted to multiple incident	Recommendation: D.6.1: Memorialize the process of early activation of a DOC as a best practice for COVID-19 response			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
changes.	operations in Yolo County.			
<p>Observation D.7 Area for Improvement: Operational coordination between ESF #5 (Emergency Management) and ESF #8 (Public Health and Medical Services) was not as effective as required for a Public Health incident.</p>	<p>Recommendation D.7.1: If a similar incident should occur and response operation are being coordinated at the County DOC level and as the incident expands, operational coordination should be upgraded and incorporated into the EOC Operations Section. A senior HHSa official could serve as a liaison or subject matter expert to EOC Management.</p> <p>Recommendation D.7.2: ESF #5 and ESF #8 should have routine exercises to practice a transition in response operations from a DOC to an EOC.</p>			
<p>Observation D.8 Area for Improvement: County HHSa did not have enough personnel and staff with sufficient training in responding to an incident and lacked trained staff to fill primary, secondary, and tertiary roles within the DOC, impacting response operations.</p>	<p>Recommendation D.8.1: HHSa should invest resources into a robust training and exercise program that emphasizes ICS training for all employees so multiple people can assume positions in the DOC or EOC upon activation.</p> <p>Recommendation D.8.2: HHSa should establish three DOC teams and train them quarterly in response operations (e.g., Red Team, White Team, Blue Team).</p>			



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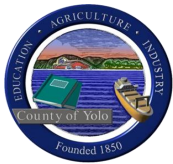
Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
	<p>Recommendation D.8.3: HHSA should develop standard operating procedures for each major function in its DOC and all the functions its personnel will occupy in the EOC.</p> <p>Recommendation D.8.4: HHSA senior leadership should establish a DOC training schedule, maintain records of attendance, and clearly link attendance to employee yearly performance measures.</p>			
<p>Observation D.9 Area for Improvement: Training for emergency management and the ICS is poorly designed for general employees of the County required to engage in response operations.</p>	<p>Recommendation D.9.1: Redesign the existing ICS courses to be tailored to Yolo County and simultaneously address national response framework requirements.</p> <p>Recommendation D.9.2: Provide emergency management training routinely throughout the year so employees are regularly exposed to the goals and objectives of ICS and can align their expertise to support response operations when required.</p>			
<p>Observation D.10 Area for Improvement: HHSA Human Resources missed an opportunity for training and workforce development for managers, supervisors, and</p>	<p>Recommendation D.10.1: HHSA HR should create a standard operating procedure to deliver just-in-time training for managers, supervisors, and general employees for any new policies</p>			



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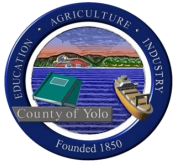
Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
employees when it shifted to remote work.	or programs it institutes during response operations.			
Observation D.11 Area for Improvement: There is a need for increased governmental coordination at the regional level.	Recommendation D.11.1: Improve coordination and consistent jurisdictional practices at the regional level of government.			
Observation D.12 Area for Improvement: There is an opportunity to provide training to the Board of Supervisors on the process of their role in response and recovery operations.	<p>Recommendation D.12.1: A NIMS overview for senior officials should be presented to the Board of Supervisors on a routine basis.</p> <p>Recommendation D.12.2: The Board of Supervisors should be provided with briefing books on NIMS and ICS that are updated annually.</p>			
Observation E.1 Strength: <i>Healthy Yolo Together</i> was an example of effective public/private partnership for response operations.	<p>Recommendation E.1.1: Memorialize the effective collaboration between the UC-Davis and Yolo County in all plans, training, and exercises.</p> <p>Recommendation E.1.2: Maintain the partnership by including UC-Davis in community engagement exercises related to response operations.</p>			
Observation E.2 Strength: Delivering vaccines to community members with greater vulnerability to COVID-19 is a best practice.	Recommendation E.2.1: Utilize the <i>go-to-them model</i> of community healthcare whenever the resources and capabilities are available to provide essential services to vulnerable populations in Yolo County.			



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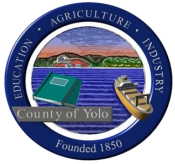
Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
<p>Observation E.3 Strength: Targeting vaccination toward farmworkers was an effective strategy for the delivery of COVID-19 vaccinations.</p>	<p>Recommendation E.3.1: Memorialize the effective response partnership between the agricultural industry and Yolo County in all future plans, training, and exercises.</p> <p>Recommendation E.3.2: Establish a structure in HHS and OES to maintain a long-term relationship with the agricultural industry in the County regarding public health and all-hazards preparedness, response, and recovery programs that replicates the format of medical surge operations.</p>			
<p>Observation E.4 Area for Improvement: Existing immunization teams did not effectively transition into COVID vaccination response operations.</p>	<p>Recommendation E.4.1: Leadership should prioritize coordinated MPOD and POD planning, training, and exercises with the HHS immunization and EOC teams simultaneously.</p> <p>Recommendation E.4.2: Section Chiefs in the EOC should conduct transition briefings with their DOC counterparts immediately at the onset of the EOC activation to share how each is conducting response operations and to support the mission priorities, and to avoid duplication of efforts.</p>			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
<p>Observation E.5 Area for Improvement: Information at Vaccine Clinics in Yolo County was inconsistently collected and managed.</p>	<p>Recommendation E.5.1: Ensure that Yolo County has a system that can support the data collection, management required for response operations to a large-scale public health incident.</p>			
<p>Observation F.1 Strength: Daily video briefings from the public information officer (PIO) provided accurate information focused on Yolo County and helped foster a sense of community during COVID-19 response operations.</p>	<p>Recommendation F.1.1: Identify the daily PIO video briefings as a best practice and capture it for plans, training, and exercises for application to future incidents.</p>			
<p>Observation F.2 Strength: Communication output was successful because it addressed multiple issues simultaneously over multiple modalities.</p>	<p>Recommendation F.2.1: Identify the practice of using multiple modes of communication as a best practice and capture it for plans, training, and exercises for application to future incidents.</p>			
<p>Observation F.3 Strength: The staff of the Joint Information Center (JIC) had trained primary, secondary, and tertiary personnel to assume the role of the PIO for incident response.</p>	<p>Recommendation F.3.1: Yolo County should use the training and exercise model employed by the JIC staff as a best practice and mandate that each Command and General Staff position in the EOC have three personnel fully qualified to assume each role when activated.</p>			
<p>Observation F.4 Strength: The</p>	<p>Recommendation F.4.1: Memorialize</p>			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
weekly PIO call morphed into a community relations outreach campaign to address information needs of the whole community.	the establishment of a community outreach campaign by the PIO as a best practice in Yolo County's response operations.			
Observation F.5 Area for Improvement: Because of limited resources and competing priorities, the County staff had to piece together translation services for critical risk communication.	Recommendation F.5.1: Yolo County should commit resources that prioritize language access capabilities and utilize them for response and recovery operations when required to provide equitable risk messages in multiple languages.			
Observation F.6 Area for Improvement: The Public Information Office at Yolo County has one professional PIO and was supplemented by community volunteers in order to provide essential communication services.	Recommendation F.6.1: Public information and warning is a core capability expected of all counties during response operations. As such, Yolo County should commit resources to support the essential needs of its Public Information Office, so it is capable of surge response operations during an incident.			
Observation G.1 Strength: The County reached out to Mayors and City Managers to establish a regular briefing session for each, which encouraged a unified response.	Recommendation G.1.1: Memorialize that strong relationships encouraged unified response; this was a best practice in COVID response operations.			
Observation G.2 Strength: The County actively participated in State and regional health forums for leaders.	Recommendation G.2.1: Memorialize strong professional relationship-building as a best practice by making space for its development and maintenance in			



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Observation	Recommendation	Responsible Person(s) or Department	Priority	Completion Goal
	staff workplans.			
END				



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Appendix D – Acronyms

AAR	After Action Report
ADA	Americans with Disabilities Act
AOP	Advance Operational Plan
ARPA	American Rescue Plan Act
BOS	Board of Supervisors
Cal OES	California Governor’s Office of Emergency Services
CAO	County Administrative Officer
CARES	Coronavirus Aid, Relief, and Economic Security Act
CBO	Community-Based Organization
CDC	Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
COOP	Continuity of Operations Plans
CROC	COVID Response Operations Center (Yolo County)
COVID-19	Coronavirus Disease 2019
DEIA	Diversity Equity Inclusion Accessibility
DOC	Department Operations Center
DRR	Document Review Report
DSW	Disaster Service Worker
EI	Essential Elements of Information
EOC	Emergency Operations Center
ESF	Emergency Support Function
FBO	Faith-Based Organization
FEMA	Federal Emergency Management Agency
FOUO	For Official Use Only
HHSA	Health and Human Services Agency
HR	Human Resources
ICS	Incident Command System
IMAT	Incident Management Action Team
IP	Improvement Plan
IT	Information Technology
JIC	Joint Information Center
MAC	Multi-Agency Collaboration
MPODS	Medical Points of Dispensing
NIMS	National Incident Management System



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OES	Office of Emergency Services
PH	Public Health
PHO	Public Health Officer
PIO	Public Information Officer
POD	Point of Distribution
PPE	Personal Protective Equipment
RFI	Request for Information
SA/COP	Situational Assessment and Common Operating Picture
SEMS	Standardized Emergency Management System
SitRep	Situation Report
UC-Davis	University of California-Davis