



Sonoma County Operational Area Emergency Operations Plan Annex:

Pandemic Response

DEPARTMENT OF EMERGENCY MANAGEMENT



March 2020

TABLE OF CONTENTS

I. INTRODUCTION	1
Purpose.....	1
Scope.....	1
Preparing and Responding with the Whole Community Strategy	1
II. SITUATION OVERVIEW	2
The WHO Pandemic Phases and the HHS-CDC Pandemic Intervals Framework.....	4
III. PLANNING ASSUMPTIONS	7
Impact and potential consequences in Sonoma County	7
Response	8
IV. CONCEPT OF OPERATIONS	10
Direction, Control and Coordination	10
Proclamation of Local Emergency	11
Activation of the Operational Area EOC	11
Phased Response Approach	11
Sonoma County OA Critical Response Focus Areas	14
Surveillance	14
Triage and Treatment	14
Hospital Operations	15
Alternate Care Sites (ACS)	15
Non-Pharmaceutical Interventions (NPIs)	15
Mass Vaccine/Prophylaxis Acquisition, Distribution, and Use	17

Mass Care 18

Mass Fatality Management 18

Animal Care 19

Behavioral Health & Incident Stress Management 19

Communications and Public Education..... 19

Continuity of Operations 20

Recovery 20

V. Operational Area Stakeholder Roles and Responsibilities..... 21

Appendix 1: Acronyms 25

Appendix 2: Glossary 27

Appendix 3: OA EOC Pandemic Response Organization 30

Appendix 4: CDC Recommended NPIs for Influenza Pandemic 31

Appendix 5: Vaccination Tiers and Population Groups for High Pandemic Severity 32

I. INTRODUCTION

Purpose

This Annex outlines concepts, policies and procedures that will guide a collaborative response by local governments, special districts, and allied agencies in the Sonoma County Operational Area (Op Area) to the threat of, or actual outbreak of pandemic disease affecting the Sonoma County Operational Area (OA). This is a supporting annex to the Sonoma County Operational Area Emergency Operations Plan (EOP). This Annex accomplishes the following objectives:

- Serve as an update to the Sonoma County Department of Health's 2007 Pandemic Flu Plan
- Serve as an augmented operational structure to the Sonoma County Department of Health's (DHS) infectious disease plan
- Explain the pandemic threat and its potential to have a major impact in the community
- Define the various risk levels of a disease outbreak/pandemic and recommended actions
- Identify the OA partners involved and the critical operational response areas of coordination
- Limit the impact of a disease outbreak/pandemic in the community by:
 - reducing the potential morbidity and mortality rates
 - minimizing disruption of social and medical services
 - ensuring timely and appropriate information is disseminated to the public

Scope

This Annex will be activated as a functional component of the OA EOP based on the risk levels and epidemiological indicators identified through global, national and local disease surveillance systems. This Annex does not alter existing County department or other Operational Area jurisdiction emergency response standard operating procedures (SOPs), processes, or resources. Emergency response agencies (such as law enforcement, emergency medical services (EMS) and fire) will adhere to existing department SOPs in accordance with all legal requirements.

Preparing and Responding with the Whole Community Strategy

The County of Sonoma strives to incorporate the Whole Community¹ perspective in its emergency planning. By planning with the Whole Community, the County of Sonoma planning strategy incorporates the complexities in the diversity in Sonoma County.

¹ Whole Community is defined by FEMA as "a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities,

Sonoma County defines disabilities and those with access and/or functional needs as:

Populations whose members may have additional needs before, during, and after an incident in functional areas, including but not limited to: maintaining independence and the ability to perform the activities of daily living, communication, transportation, supervision, and medical care. Individuals in need of additional response assistance may include those who have disabilities; who live in institutionalized settings; who are elderly; who are children; who are from diverse cultures; who have limited English proficiency or are non-English speaking; or who are transportation disadvantaged.

The County and affiliated OA stakeholders are committed to maximizing compliance with the Americans with Disabilities Act and providing the best service to Sonoma County residents and visitors. As such, the County adheres to the guidelines outlined below:

- County services and facilities are equally accessible and available to all persons.
- All the benefits offered by the County are accessible and available to persons with disabilities and others with access and functional needs.
- The County will accommodate people with disabilities and those with access and/or functional needs in the most integrated setting possible.
- During all phases of disaster response, the County will make reasonable modifications to policies, practices and procedures, if necessary, to ensure programmatic and architectural access to all.
- The County will ensure that its shelters are accessible, both physically and programmatically, to afford people with disabilities and others with access and functional needs the opportunity to remain with family and friends in the most integrated setting possible.

II. SITUATION OVERVIEW

Despite a relatively modest population number compared to other major surrounding counties and jurisdictions in the North Bay Area, Sonoma County is not immune to a major disease outbreak or pandemic. Conversely, the economic base of the County - which includes a world-renown viticulture industry that draws thousands of visitors each year - creates a perfect system of rapid human-to-human disease transmission that requires timely and efficient precautionary measures and containment actions to be established early on.

and interests.” FEMA, A Whole Community Approach to Emergency Management, 2011. Accessed at https://www.fema.gov/media-library-data/20130726-1813-25045-0649/whole_community_dec2011_2_.pdf

Prior pandemic planning efforts have noted the broad potential for significant population impacts and projected the following based upon a Sonoma County population of 473,000:

Number of symptomatic (Range 73,000 – 171,000)	Outpatient Visits	Number of hospitalized	Number of deaths
122,000	65,000	1,400	330

Based on the above, any virus or disease, whether already known or with a newly identified strain, has the potential to spread quickly and cause major disruptions across the County.

As defined by the World Health Organization (WHO), a pandemic is the worldwide spread of a new disease². Pandemics have been typically known to be associated with influenza (flu) viruses such as the 1918 H1N1 (Spanish flu) and the 2009 H1N1 (swine flu), however, it may also stem from other agents such as coronaviruses (i.e. SARS-CoV, COVID-19). In past human infection occurrence, both have also registered significant numbers in terms of case fatality ratio (CFR).

However, each viral threat presents unique rates of transmission, morbidity, and fatalities. The following summarizes similarities and differences between the regular seasonal flu and the Coronavirus (COVID-19) as it presented in March 2020:

Influenza (flu) vs. Coronavirus (COVID-19)³	
Similarities	Differences
<ul style="list-style-type: none"> • spread by respiration • originated in animals • causes fever and cough • can cause death by respiratory failure • spread via respiratory droplets • can be prevented with good hygiene and limited contact with those infected • can be contagious before the onset of symptoms • will appear in multiple waves over time 	<ul style="list-style-type: none"> • CFR – influenza: 0.1%; COVID-19: 1 to 3.4%* • effective antiviral medicine and vaccines exist for the influenza but not yet for COVID-19 • influenza incubation period is ~2 days (range 1-4 days); COVID-19 incubation period is ~5 days (range 2-14 days)* • Previous exposures to influenza provides some indirect population immunity; there is no previous exposure to the coronavirus • influenza rates peak annually; unknown for coronavirus

*preliminary estimates

² https://www.who.int/csr/disease/swineflu/frequently_asked_questions/pandemic/en/

³ <https://www.hopkinsmedicine.org/health/conditions-and-diseases/coronavirus/coronavirus-disease-2019-vs-the-flu>

The CFRs noted above are for known strains. Communities could be faced with a much higher CFR should a new (novel) strain that is unknown to human infection become present, thus raising concerns of a potential pandemic.

In modern times, four influenza pandemics have occurred with significant health implications. They have also served as the basis for epidemiological and clinical data analysis, enhanced surveillance, planning and coordination for preparedness and response activities for recurring or potential new threats⁴:

Pandemic name and year of emergence	Area of origin	Influenza A virus subtype	Estimated reproductive number (Ro)	Estimated CFR	Estimated attributed deaths globally	Age groups most affected
1918 "Spanish flu"	Unclear	H1N1 (unknown)	1.2-3.0	2-3%	20-50 million	Young adults
1957-1958 "Asian flu"	Southern China	H2N2 (avian)	1.5	<0.2%	1-4 million	All age groups
1968-1969 "Hong Kong flu"	Southern China	H3N2 (avian)	1.3-1.6	<0.2%	1-4 million	All age groups
2009-2010 "influenza A(H1N1)"	North America	H1N1 (swine)	1.1-1.8	0.02%	100,000-400,000	Children and young adults

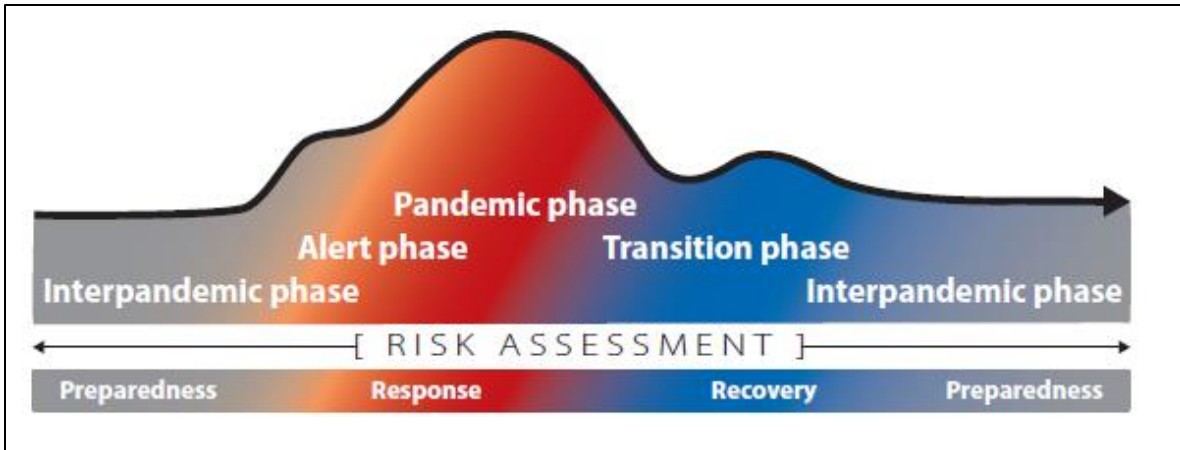
The WHO Pandemic Phases and the HHS-CDC Pandemic Intervals Framework

The World Health Organization (WHO) global influenza preparedness plan includes a classification or alert system based on a six-phase approach to help guide planning and response activities for an influenza pandemic. These phases were designed based on previous influenza statistics to address the global risk for a pandemic spread and provide benchmarks against which to measure global response capabilities. Over time, the WHO pandemic alert system has been revised, incorporating lessons learned from the recent 2009 H1N1 pandemic as well as recommendations from global experts to establish a pandemic alert system that would focus more on a potential disease risk assessment rather than its geographic spread.

The current WHO pandemic alert system referred to as the Continuum of Pandemic Phase comprises four phases⁵: *Interpandemic*, *Alert*, *Pandemic* and *Transition*. Each of these phases identify response measures and recommends actions for countries to follow. The risk assessment component incorporates three critical stages: *Preparedness*, *Response* and *Recovery* (See figure below).

⁴WHO Pandemic Influence Risk Management: Interim Guidance, 2017 (page 19)
https://www.who.int/influenza/preparedness/pandemic/GIP_PandemicInfluenzaRiskManagementInterimGuidance_Jun2013.pdf?ua=1

⁵ WHO Pandemic Influenza Risk Management: Interim Guidance, 2017.
<https://apps.who.int/iris/bitstream/handle/10665/259893/WHO-WHE-IHM-GIP-2017.1-eng.pdf;jsessionid=FF0E44DE342CCEF9F0A31E1EFB14C8E8?sequence=1>



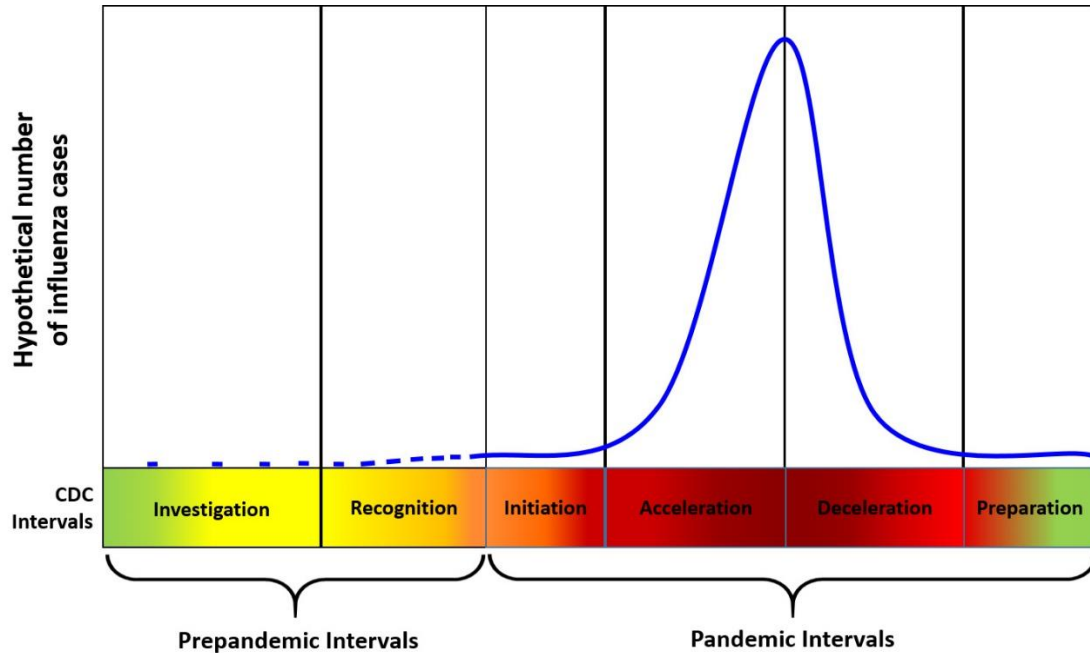
The global average of reported cases of infection greatly increase through the *Alert* and *Pandemic* phases, with the greatest global average of cases occurring in the *Pandemic* phase. Local planning efforts for a pandemic should anticipate and prepare for additional single or multiple waves of reported cases after the *Pandemic* phase or “peak” period. In the diagram above, this behavior is reflected with a short spike in the continuum curve during the *Transition* phase, indicating that – based on previous influenza analysis - the effect of influenza on communities has been relatively prolonged with multiple waves occurring.

In the United States, the Centers for Disease Prevention and Control (CDC), part of the Department of Health and Human Services (HHS), maintains the Pandemic Intervals Framework (PIF); one of three pandemic planning tools used to guide influenza pandemic planning that provides recommendations for severity-based risk assessment, decision-making and action at local/community level⁶. The other associated tools developed by the CDC include the Influenza Risk Assessment Tool (IRAT) and the Pandemic Severity Assessment Framework (PSAF)⁷

The CDC’s PIF comprises six pandemic intervals: *Investigation*, *Recognition*, *Initiation*, *Acceleration* and *Deceleration*. These intervals provide a common method to describe pandemic activity, which can inform public health actions. The duration of each pandemic interval might vary depending on the characteristics of the virus and the public health response (See figure below).

⁶ CDC Pandemic Intervals Framework (PIF)
<https://www.cdc.gov/flu/pandemic-resources/national-strategy/intervals-framework.html>

⁷ Further information on the three tools can be found on the CDC Pandemic Influenza Plan – 2017 Update
<https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf>



In accordance with the CDC's Pandemic Influenza Strategic Plan, the CDC will determine and communicate the pandemic interval for the U.S. The determination will be based on the global pandemic phase and the extent of disease spread throughout the country. The State and Local health authorities will abide by the CDC's recommendations. For Sonoma County, local pandemic preparedness and response efforts will be guided by the protocols stated in this annex as well as disease-specific assessments informed by the WHO, the CDC, and the California Department of Public Health (CDPH).

In the absence of preliminary pandemic severity assessments or data coming from the CDC, CDPH, or WHO, Sonoma County Public Health and/or Emergency Management may develop an interim pandemic threat assessment and/or a set of potential pandemic planning scenarios to guide long-term planning, resource development, and public information efforts.

III. PLANNING ASSUMPTIONS

Impact and potential consequences in Sonoma County

- A pandemic will result in the rapid spread of infection with outbreaks in multiple countries
- Communities across the state and the country may be impacted simultaneously
- The health impact of a pandemic event will be significant; up to 25-35% of persons may become ill in a major pandemic influenza wave
- A pandemic may result in long-term and costly emergency response operations, thus coinciding with other seasonal threats in the county, such as wildfire season and potential Public Safety Power Shutoff (PSPS) events
- Seasonal vaccination may or may not offer some level of protection against a novel pandemic influenza or coronavirus strain
- Vaccine is likely to be in short supply initially which will require prioritization
- Once a vaccine is available, it is expected that individuals will need an initial priming dose followed by a second dose approximately 30 days later in order to achieve optimal antibody response and clinical protections
- The number of infected people requiring outpatient medical care and hospitalization will overwhelm the local healthcare system. This will present significant and potentially overwhelming challenges:
 - There will be tremendous demand for urgent and significant medical intervention and care services
 - Healthcare workers will be at higher risk of exposure impacting the system's ability to care for patients in traditional hospital or clinic settings
 - The medical workforce itself will experience 25% to 35% absenteeism due to illness or caring for ill family members
 - Demand for inpatient beds and assisted ventilators could increase by ten-fold
 - Emergency Medical Service responders will face extremely high call volumes
 - Workforce impacts in general may be significant thereby interrupting public services, 911 call centers, law and fire response
 - The number of fatalities will overwhelm the resources of the Sheriff/Coroner's Office, morgues and funeral homes
 - The demand for home care and social services will increase dramatically
 - Supporting infrastructure for the health care delivery system i.e. supplies, services and transportation will be affected and impact the response capabilities of the system

- There will likely be significant disruption of public and privately owned critical infrastructure including transportation, commerce, utilities, public safety and communications; thus, planning for county continuity of operations is essential.
- High absenteeism levels may reduce available services within the community due to workers becoming ill, individuals staying home to care for sick family members, or those refusing to go to work due to fear of becoming ill
- Supply chain issues and shortages of medications, Personal Protective Equipment and mutual aid staff will occur when multiple Operational Areas across the state are impacted; in some cases the resource needs identified by partners will be delayed or go unfilled
- The closure of schools and childcare facilities may impact the workforce related to childcare. Any impact upon the workforce may have a negative influence on local, regional, and State economic communities
- Current resources for mass fatality care at all levels, including healthcare facilities, the county morgue and mortuaries, may be inadequate to meet the challenges posed by a pandemic
- The potential spread of disease and illness within correctional institutions is high due to the congregate nature of these facilities
- Homeless people generally live in crowded settings and suffer from chronic and acute health conditions putting them at a high risk of becoming infected
- Some individuals may not believe the reality of the threat posed by a pandemic influenza incident, and may take actions counterproductive to the government response efforts to contain and treat people infected with the disease
- Depending on the disease, there may be children orphaned by the death of their parents or caregivers
- Depending on the disease, there may be concerns regarding infection in or from pets, or exposure of pets to infected persons
- There will be a significant surge in the need for public communication and outreach
- Secondary events such as public demonstrations, looting, and civil unrest during a pandemic event or a concurrent disaster, may lead to an increased need for law enforcement

Response

- A pandemic presents significant challenges with scaling a OA response up and down, with operational surge, and with the length of activation given several possible waves of occurrence/infection
- Pre-event planning is critical to ensure a prompt and effective response as a pandemic could also last for up to 12 to 24 months

- DEM, DHS and other OA partner staff in emergency management roles may experience staff reductions comparable to other sectors potentially hampering response efforts
- Hospitals and clinics will have to modify their operational structure to respond to high patient volumes and maintain functionality of critical systems
- The medical/healthcare system will have to respond to increased demands for service:
 - Enhanced hospital infection control measures specific to management of large numbers of infectious patients will need to be developed and implemented
 - The health system will need to develop alternate care sites to relieve demand at hospitals
 - OA hospitals will be expected to maximize their medical surge capacity and capability, however, when hospital capacity is exceeded, specialized care centers will be needed for patients who can safely be managed outside of the acute care setting; hospitals will be reserved for patients needing the most sophisticated care
 - To maximize healthcare resources and achieve optimal benefit for the most people, traditional standards of care may need to be altered. "Sufficiency of Care," which is medical care that may not be of the same quality as that delivered under nonemergency conditions but that is sufficient for the situation, may be the standard of care during a pandemic.
 - Strategies for caring for low-acuity cases at home when possible should be implemented
 - Multi-Agency Coordination at local, regional and state levels will be required to develop process for scarce resource allocation of critical supplies and services that will be in high demand.
 - Increased communication and coordination between public safety, EMS, healthcare facilities, detention facilities, schools, and DHS will be needed in order to focus on surveillance
- Timely and/or effective mutual aid resources as well as State or Federal assistance to support local response efforts will probably be extremely limited or unavailable
- Residents may be required to stay in their homes for a significant period during a pandemic
- Social distancing measures aimed at reducing the spread of infection, such as closing schools, community centers and other public gathering points and canceling public events, may be implemented during a pandemic
- Schools or other County facilities may be needed during a pandemic for other purposes such as vaccine/prophylaxis point of dispensing sites (PODS), medical triage centers or mass care or mass feeding operations

- Emergency Risk Communication is critically important during all phases of planning and implementation of a pandemic response and therefore, information provided to the public from OA jurisdictions must come from a Joint Information Center and/or County and OA EOC, if activated
- Dissemination of information must be a coordinated effort with consistent messaging
- Law enforcement activities that may occur outside of normal duties may include situations of quarantine and/or isolation enforcement as well as security provision and support at sites of distribution of vaccinations and medications.
- Law enforcement will face the same staffing impact as other emergency services sectors and may be challenged to perform extra duties
- Social programs that address homelessness may be impacted and will have to make adjustments in their outreach protocols
- Under specific emergency conditions, volunteers, retired healthcare professionals and trained unlicensed personnel may be used to provide patient care in a variety of healthcare settings
- Legal and/or labor issues will arise related to altered standards of care, credentialing and licensing of individuals and facilities and worker safety

IV. CONCEPT OF OPERATIONS

Direction, Control and Coordination

At the Operational Area level, the Sonoma County Department of Health (DHS) will be the initial lead County agency for the OA pandemic response. DHS will work closely with the OA partners in coordinating the response and in consultation with the Department of Emergency Management (DEM), will have responsibility for activating the OA Pandemic Annex and, if needed, the OA Emergency Operations Center (EOC) at the level appropriate for the current risk assessment and phase of the pandemic.

The County Public Health Officer and the Director of Emergency Management, in collaboration with regional/state health experts will determine when to implement this Annex. Considerations will include the current WHO pandemic phase, CDC pandemic phase/interval, rate of community transmission, potential severity of the virus in circulation, and the first laboratory confirmed cluster in California or Sonoma County.

The following County and OA partner plans support this Annex throughout a pandemic response:

- Sonoma County Operational Area Emergency Response Plan (OA EOP)
- DHS Medical Health Response Plan (DOC Plan)
- Sonoma County Alternate Care Site (ACS) Plan
- DHS Crisis Emergency Risk Communication Plan
- County of Sonoma Continuity of Operations (COOP) Plan

- Sonoma County Office of Education Infectious Disease Response Plan
- Animal Services Disaster Response Plan

Proclamation of Local Emergency

As conditions warrant, the Sonoma County Health Officer may proclaim a Public Health Emergency which is subject to ratification by the Board of Supervisors. Under a proclamation of health emergency, the Health Officer may exercise expanded authorities for preventing the spread of disease. The Health Officer may order isolation or quarantine of individuals or closures of institutions or geographic areas in coordination and cooperation with law enforcement. Further details on the Health Officer authority can be found in the Department of Health Services DOC Plan.

Issuance of a Proclamation of a Local Emergency falls under the authority of the County Administrator in their statutory role as the Director of Emergency Services. For a description of authorities and procedures associated with a local emergency, see the OA EOP.

Activation of the Operational Area EOC

Activation of the OA EOC will occur in accordance with existing procedures described in the OA EOP.

Given the public health nature of a pandemic response, it is important to note that some functions within the OA EOC Sections would change/shift to ensure close coordination with the DHS DOC functions. For instance, under the OA EOC Logistics Section, procurement of essential medical supplies would need to be loosely coordinated with DHS DOC Supply Unit to avoid duplication of requests. Additionally, the OA EOC may have to modify its structure in order to operate on a "virtual" mode in response to any community measures put in place at County level to prevent potential virus spread, i.e. social distancing. See Appendix 3.

Phased Response Approach

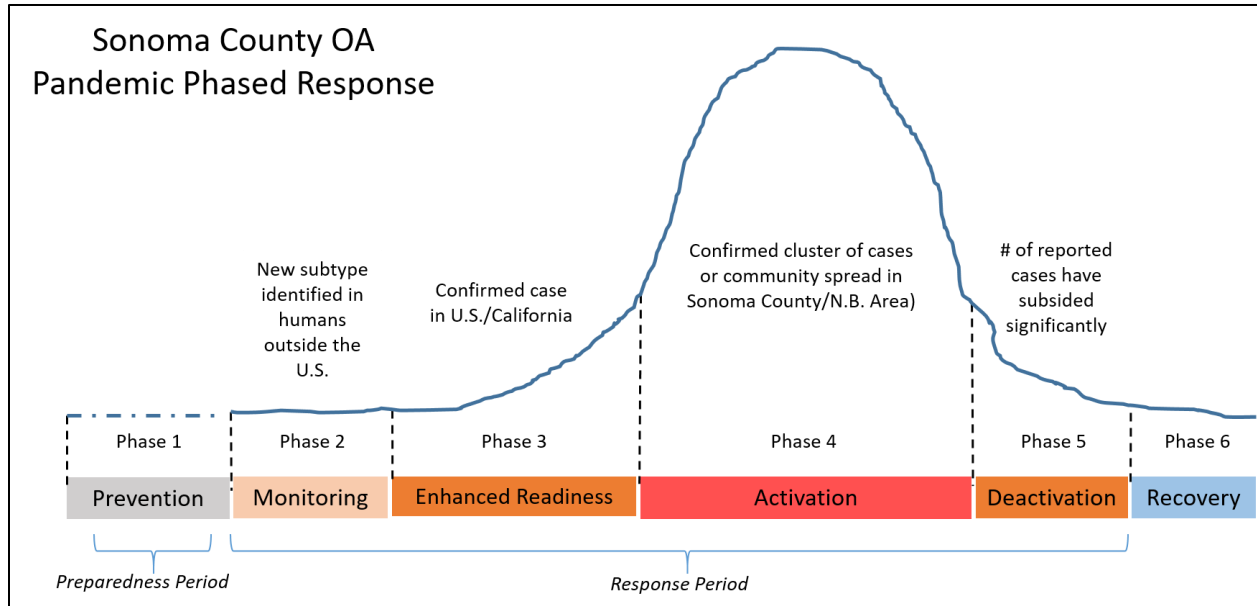
The Sonoma County Operational Area will plan for and respond to a pandemic using a phased approach. This allows for more efficient OA coordination by phases based on continuous risk assessment, ensuring that the appropriate planning and response protocols and resources are implemented and rolled out based on triggers and potential risks to the community. This phased response approach has also been designed to incorporate the global (WHO) and national (CDC) paradigms of a pandemic sequence. The diagram below outlines the correlation between the Sonoma County OA phased approach and the WHO and CDC frameworks^{8,9}.

⁸ WHO Pandemic Risk Management Guidance, 2017 (Page 13):

https://www.who.int/influenza/preparedness/pandemic/influenza_risk_management/en/

⁹ CDC Pandemic Intervals Framework (PIF):

<https://www.cdc.gov/flu/pandemic-resources/national-strategy/intervals-framework.html>



Phase 1: Prevention

Period of no new virus or pandemic threat reported globally

- Update and test/exercise pandemic, infectious disease and continuity of operations plans
- Strengthen local epidemiological surveillance systems
- Community outreach and promotion of seasonal flu vaccinations
- Community outreach and promotion of protective measures (hand-washing and respiratory etiquette) during flu season

Phase 2: Monitoring

An influenza or coronavirus disease caused by a new subtype has been identified in humans and the confirmed case is not in the U.S. or near Sonoma County

- Close monitoring of external surveillance systems and analysis of risk assessments
- If risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities may occur
- Operational Area briefings may take place
- Increased information sharing and coordination with CalOES and CDPH/EMSA partners

Phase 3: Enhanced Readiness

A confirmed case could exist in the U.S., particularly in California with the potential to spread throughout the North Bay Area

- DHS activates Incident Management Team (IMT) and establishes coordination at regional, State and Federal level
- Operational Area public messaging and communication protocols are established
- Enhanced patient detection protocols for hospitals and medical service providers including EMS established
- Call screening protocols implemented at REDCOM Fire/EMS dispatch center

- Depending on threat, DHS Department Operations Center (DOC) activates with focus on surveillance and public messaging
- Operational Area briefings take place as needed
- Health Care Coalition briefings take place as needed
- Local Health alert is issued
- Regional Disaster Medical Health Coordination function may convene regular regional briefings to coordinate health activities between operational areas or the region.
- CDPH, EMS and CalOES will collect situational awareness from local OA to incorporate into regular statewide updates and planning efforts
- Coordinate with local funeral directors to prepare for increased client activity
- Provide translations of all public information into Spanish and other major languages as needed, using materials from CDPH and CDC
- Issue guidance for first responders to increase protective measures

Phase 4: Activation

Confirmed cluster of community spread of a disease in the North Bay Area or Sonoma County

- OA Pandemic Annex and OA EOC are activated to support county-wide response efforts
- County Continuity of Operations (COOP) Plan is activated
- Local Emergency and/or Public Health Emergency is proclaimed to facilitate coordination and prioritize public safety
- Treatment, isolation and voluntary home quarantine of those with confirmed cases
- Preparations for mass fatalities are in place
- Voluntary or mandatory closure of nonessential county businesses
- Community NPIs implemented as needed (social distancing, cancellation of public gatherings)
- Prepare for issuance of vaccine when available including prioritizing who will initially receive vaccine treatment
- Prepare for second wave

Phase 5: Deactivation

Number of reported cases have subsided significantly and/or outbreak has been contained

- De-escalation of response
- Return to normal procedures and protocols

Phase 6: Recovery

- Recovery operations based on Sonoma County OA Recovery Plan

Sonoma County OA Critical Response Focus Areas

Surveillance

Aggressive surveillance measures may ensure early detection and isolation of the pathogen responsible. Overall, surveillance data will drive the pandemic response. Surveillance activities may determine when pathogens are circulating, identify strains, assess the characteristics of circulating strains (such as transmissibility and virulence), detect changes in the micro-organisms, monitor influenza-like illness (ILI), and measure the impact of the disease.

Triage and Treatment

Effective triage will direct individuals to the appropriate level of care according to their needs. This will direct the flow of patients into the healthcare system and ensure that limited resources are used in the most efficient manner possible. Triage should be utilized to:

- Identify persons infected with the disease
- Isolate these persons from others to reduce the transmission
- Identify the type of care they require (home care or hospitalization)

Depending on the scope and severity of the incident, community-based triage includes on-site locations at healthcare facilities, off-site locations in close proximity to healthcare facilities, and other community locations determined during the incident (field treatment sites). Hospitals and outpatient facilities may need increased on-site triage/screening.

Home Care Providers may be unable to assist clients with disabilities, therefore, local health authorities should identify through In-Home Supportive Service, Home Health, Meals-on-Wheels, community-based organizations, etc., individuals that may need personal assistance services, access to medications and consumable medical supplies.

REDCOM Fire/EMS Communications Center may be directed to alter response plans for medical calls for service to limit exposure to responders

The Local EMS Agency may designate alternate destinations to receive ambulance transports, or provide additional patient care treatment protocols based on consultation with Public Health experts within DHS, State and federal partners.

Hospital Operations

With an increased demand on resources, OA hospitals may need to implement their surge capacity plans. Bedding and staffing needs may be met by:

- Discharging current patients, as appropriate
- Transferring patients to long-term care facilities, as appropriate
- Eliminating elective admissions and canceling elective procedures
- Augmenting existing facility space
- Requesting that all ancillary staff report for duty
- Inventory critical supplies to identify anticipated shortages (gloves, safety needles, ventilators, etc.)

Alternate Care Sites

If hospital surge capacities are near or in excess of capabilities, Alternate Care Sites (ACS) may be created to enable healthcare providers to provide medical care for injured or sick patients or continue care for chronic conditions in non-traditional environments. These ACS may include locations that need to be converted (e.g., schools and stadiums) or they may include facilities like mobile field hospitals.

Should conditions in pandemic response operations in the Sonoma County OA require setting up an ACS, either through local arrangements or mutual aid/external support, the following must be considered in planning efforts:

- Basic care provision (basic nursing, medications, oxygen, etc.)
- Patient documentation
- Public information
- American Disabilities Act (ADA) compliance

Non-Pharmaceutical Interventions (NPIs)

NPIs (also known as community mitigation strategies) are actions, apart from getting vaccinated and taking medicine, that people and communities can take to help slow the spread of illnesses like pandemic influenza. NPIs are implemented at community level and are likely to be very effective in limiting the spread of the disease, and reducing the number of deaths. NPIs are among the best ways of controlling a pandemic disease when vaccines are not yet available.

Depending on the severity of the virus and the level of exposure of the community to the virus, the following NPIs may be considered as community mitigation measures:

Individual Intervention

- Hygiene and respiratory etiquette
 - frequent handwashing
 - covering coughs and sneezes
- Personal Protective Equipment (PPE)
 - specialized clothing or equipment to prevent contact with hazardous substances (gowns, gloves, masks and goggles)
- Maintaining distance

- Isolation
- Quarantine

Community Intervention

- Social distancing - children
 - close of schools and child care facilities
 - decrease children's social contacts outside of school
- Social distancing – adults at the workplace
 - allow/encourage sick employees to stay home
 - have employees work from home
 - hold conference calls instead of face-to-face meetings
 - modify work schedules
- Social distancing – adults in the community
 - cancel/postpone public gatherings
 - arrange for home delivery of food, medication or other goods
- Evacuation
 - immediate movement of individuals away from a particular building or geographic area

Environmental Intervention

- Environmental surface cleaning
- Cleaning and disinfection of patient-care areas

Isolation and Quarantine

Public health quarantine and isolation are legal authorities that may be implemented to prevent the spread of communicable diseases. Both measures are usually recommended by health officials on a voluntary basis; however, federal, state, and local officials have the authority to impose mandatory quarantine and isolation when necessary to protect the public's health.

Isolation is for people who are sick with a contagious disease. They are separated from others until they are no longer considered contagious. Hospitals isolate some patients so they do not infect others with their illness. People in isolation may be cared for in their homes, hospitals, or in designated facilities.

Quarantine is for people who were exposed to a contagious disease but are not sick. They are separated from others as they could become sick and contagious. People may be asked to stay in their homes so they do not possibly spread the disease to others.

In the event of noncompliance with an isolation or quarantine order, the Sonoma County Health Officer may pursue civil or criminal legal actions against the noncompliant individual. Any person who fails to comply with an isolation or quarantine order issued by the Health Officer or their designee is guilty of a misdemeanor. The Local Health Officer will request assistance from the OA EOC, and request support from the Sonoma County Sheriff's Office to enforce a public health order.

Constitutional Considerations

Closures of public gatherings as well as the use of quarantine or isolation powers may create sensitive issues related to civil liberties (i.e. freedom of assembly, Brown Act, freedom of speech, due process and equal protection rights). Individuals have rights to due process of law, and generally, isolation or quarantine must be carried out in the least restrictive setting necessary to maintain public health.

Before proceeding with an order for involuntary isolation or quarantine, the following must be considered:

- Provision for due process of law and fundamental fairness principles
- Ensure that there is adequate justification that is clearly stated in plain language; the order cannot be “arbitrary, oppressive and unreasonable”
- Reasonable grounds for the proposed action
- Order should be narrowly drawn and the process must provide for the constitutional safeguards of notice and an opportunity to be heard, e.g., pre- or post-confinement hearing
- The Health Officer order (i.e. quarantine, social distancing) serves as “notice”. The order may be initially oral, but should be confirmed in writing at the earliest possible opportunity
- The procedures made available for subjects of the order will depend on the scale of the event (numbers of people subject to the order) and the degree to which individual liberties are restricted. Examples of available procedures:
 - Phone number where a person can register their objection
 - Pre or post-confinement hearing

No single NPI is sufficient on its own to limit the spread of a pandemic. It is most effective to use individual-level and community-level interventions together. NPIs can also be used together with vaccines and anti-viral drugs, if these are available.

Implementing certain NPIs (particularly social distancing policies) too early or before the pandemic has reached the community—or using them when the severity of the virus does not warrant their use, may result in unnecessary economic and social hardship without benefit to the public's health. These consequences may stem from the decision to close businesses, close schools and daycare facilities which in term, would negatively contribute to workplace absenteeism.

Appendix 5 serves as guidance for implementing NPIs by setting and pandemic severity based on the CDC's Pandemic Severity Assessment Framework.

Mass Vaccine/Prophylaxis Acquisition, Distribution, and Use

Medical countermeasures (MCM) such as the provision of prophylaxis in a pandemic response may occur with vaccine or antivirals. It is unlikely that sufficient quantities of either would be available at once in Sonoma County, so mass prophylaxis dispensing may occur multiple times and require prioritization at each occurrence. Multiple doses of new vaccine may also be required.

Prophylaxis shipments may occur through a slightly different system than other State or Strategic National Stockpile (SNS) assets, and may be staged, stored and distributed differently depending on local receipt, store and stage (RSS) protocols. It may not make sense to send antiviral to hospitals for treatment, if hospitals are reserved for the most critically ill. For effective treatment, patients need access to antiviral within 24-48 hours of symptom onset; transporting and setting up sites to dispense antiviral quickly may provide challenges. Expedited methods of distributing antiviral medications such as opened or closed PODS or mass prophylaxis clinics should be identified, i.e. cities readiness initiative and SNS protocols.

In the Sonoma County OA, medications may be provided by DHS directly to the public when an emergency prevails and normal community medication dispensing systems are not suitable. Mutual aid agreements (MOU) among local governments, non-governmental organizations (NGOs), the private sector, the State and the military would also be strategic in ensuring expedited distribution of medications and personal protective equipment (PPE).

The Public Health Officer will provide information to the OA on prioritization and distribution methods to ensure medications are allocated appropriately and reach their intended target groups. Appendix 5 serves as a guidance for prioritizing distribution of medications according to target population groups.

Mass Care

An infectious disease may require residents and visitors to stay in their homes or lodging for significant periods, requiring advance preparations and/or accommodation to meet basic needs (e.g., food, water, prescription medications, and over-the-counter medications). Isolation and quarantine measures may also be in place to attempt to prevent further spread of the disease, even outside a hospital setting such as an ACS. Given these conditions, mass feeding and mass food distribution operations may be needed through public-private partnerships to ensure food delivery to the affected population.

Mass Fatality Management

Infectious disease outbreaks have the potential to cause more deaths than what is normally expected. This increase in fatalities may exceed the capacity of the Sonoma County Sheriff's/Coroner's Office, as well as those of hospital morgues and funeral homes.

There may be multiple unattended deaths, which may require modification of routine processing procedures, especially in situations of critical personnel shortages. Issues with identification of the deceased and transport of deceased out of the area may also be encountered. There may also be a need for temporary storage of deceased. Preparations for a surge in fatalities will also be needed. Outreach to faith based groups to confirm culturally sensitive protocols for addressing fatalities will be needed.

Animal Care

A severe disease outbreak could result in an increase in strays, an increase in individuals unable to care for pets, and increased ectoparasites (e.g., fleas). Animal shelter capacity in existing facilities will likely be exceeded and infection control risks from ill animals will limit the ability to shelter some animals. The Animal Services Division of the Sonoma County Department of Health will coordinate any activity involving animal rescue, sheltering, quarantine, relocation and care during a pandemic response as delineated in the Animal Services Disaster Plan.

Behavioral Health & Incident Stress Management

An infectious disease outbreak or pandemic may pose physical, personal, social, and emotional challenges to the community as well as to healthcare providers, public health officials, emergency responders, and essential service workers.

The Sonoma County Behavioral Health Division has the ability to deploy a Mobile Support Team as part of their Community Response and Engagement Program. The Mobile Team is a community-based mobile crisis response team for those experiencing a psychiatric emergency in the community. The team is made up of qualified behavioral health professionals trained to assist individuals in psychological distress during heightened emotional situations, such as a public health emergency. As per OA responders, Sonoma County's Behavioral Health will implement enhanced workforce support activities and psychosocial support services to assist workers in managing emotional stress during response efforts.

Communications and Public Education

When faced with uncertainty and unpredictability, early and transparent communication during a pandemic is critical to build trust and to ensure the credibility of public health advice. A common plan is needed to ensure consistent, coordinated and appropriate communication. For this reason, a virtual Joint Information Center (JIC) should be created to engage with regional partners and stakeholders to deliver consistent and factual information. Tools within the JIC should include Google docs, a dedicated Slack channel as well as weekly update calls.

Sonoma County's diversity in terms of its size, geography, languages and culture also requires a multifaceted approach so that the right message is delivered at the right time to the right person in the right format. All public-facing information will be delivered in English and Spanish through County social media channels, the website SoCoEmergency.org and the public information hotline 211. Additionally, there is consistent communication with media outlets including online and print news sources, regional radio outlets and Bay Area television news. Media briefings will be conducted as necessary.

Key topics included in public messaging include:

- General information concerning the infectious disease (including transmission, case numbers, morbidity, and mortality)

- Disease control efforts, including the availability and use of vaccines, antibiotics and anti-viral medications
- Infection control measures for implementation by the public
- Self-care messaging to ease anxieties and calm fears

The DHS Crisis and Emergency Risk Communication (CERC) Plan provides detailed resource materials to assist the OA in developing a public health emergency communication plan and effectively managing and communicating during a pandemic.

Continuity of Operations

In an emergency situation, county government services that are provided to the community may be heavily disrupted and it would be critical to identify the essential government functions that must be maintained should the County be affected by a disease outbreak or pandemic. Mechanisms to monitor staff and volunteer absenteeism due to illness of self or a family member should be established given the possibility of a high level of absenteeism.

The Sonoma County Continuity of Operations (COOP) plan will be activated with certain modifications as needed to support response operations and enable continuity of essential government functions during a pandemic.

Planning for continuity of operations should consider a potential 30 – 45% absenteeism of essential workers and therefore, the following should be taken into consideration for the County:

- Personnel
 - primary and alternate staff; telecommuting
 - protocols for ill employees
 - infection control in the workplace
- Vendors/suppliers
 - critical and alternate vendors
- Critical resources
 - Technology
 - Inventory/supply stockpiling
- Sustainable service delivery

Recovery

Transitioning from response to recovery to resiliency may be an on-going effort over several years. The local government may be inhibited in its ability to provide adequate services due to loss of revenues. Additionally, medical providers and private insurance policies and coverage may be impacted if there are substantial losses of life and of business operations. In a public health emergency such as a pandemic, the recovery will address both loss of life and property.

Pandemic recovery programs should: 1) reduce fear and reestablish a sense of security; 2) reassess vulnerability; and 3) Strengthen and sustain relief activities.

Short-term recovery activities can be undertaken immediately following a pandemic. These activities should include those that will help reduce fear and reestablish a sense of calm. Long-term efforts take place once a sense of normalcy has returned. These activities should include those that strengthen the resiliency of households and communities so that they are better able to manage future events, including subsequent waves of the pandemic.

Post-pandemic recovery efforts in Sonoma County will focus on three recovery activities

1. Short-term relief activities
 - Evaluate data from the medical/health community regarding the status of the event. This will establish if it is over or just going through a periods of waves
 - Evaluate the efficacy of containment measures and emergency management strategies in the County
 - Prevent or minimize subsequent waves of influenza by using current vaccines or antiviral resources
 - Provide mental health messages to facilitate recovery with continuance of self-care messages
 - Work with COAD on short-term relief activities
2. Community impact assessment
 - Track and report on the status of and impacts to critical community institutions such as government facilities, schools, and hospitals
 - Track and report on the status of and impacts to critical community infrastructure, including utilities, water, roads, drainage, garbage removal and sanitation
3. Long-term recovery and resilience building
 - Provide a detailed retrospective characterization of the pandemic in the County
 - Assess the total costs by OA for losses, including workforce time, tourism, loss of product sales due to embargos, loss of infrastructure, etc.
 - Assess financial recovery needs for response and recovery costs to the County
 - Work with COAD on sustaining recovery and resiliency efforts

V. Operational Area Stakeholder Roles and Responsibilities

Department of Emergency Management (DEM)

- Acts as the lead coordinating entity during critical disease outbreak and pandemic response operations
- Staffs the Management section of the OA EOC, when activated
- Coordinates OA conference calls as appropriate
- Identify any regulatory or ordinance issues that may need to be suspended
- Determine protocols for succession at all levels of Emergency Management

Department of Health Services (DHS)

- Acts as the technical area lead in the response operation
- Activates the Department of Health Emergency Operations Center (DOC)
- Informs DEM and OA partners on epidemiological surveillance, resource needs and the evolution/progress of the outbreak/pandemic
- Staffs the Health and Medical Branch of the OA EOC and may act as Operations Section Chief, if needed; may staff the Logistics Section
- Advises leadership on critical decision-making situations

Operational Area Public Information Officer (PIO)

- Coordinate public information with impacted local jurisdictions
- Post updates to the County www.SoCoEmergency.org website
- Liaise with media partners and coordinate situational updates to elected officials

Sheriff's Office/Law Enforcement

- Participate in OA conference calls
- Provide safety and security support to critical medical supplies and facilities, and SNS if received or if Vendor Managed Inventory is pushed by CDC
- Provide enhanced safety and security in prisons and related facilities
- Enforce quarantine measures, if needed
- Coordinate mass fatality management under Coroner's office direction and protocols
- Staff the Law Enforcement Branch of the OA EOC
- Identify isolation and quarantine wards within detention facilities
- Identify temporary morgue facilities

Fire/EMS

- Participate in OA conference calls
- Modify Fire/EMS dispatch protocols
- Respond to increased calls for medical assistance

Human Services Department (HSD)

- Participate in OA conference calls
- Staff the Mass Care Branch of the OA EOC Operations Section
- Ensure AFN coordination and outreach

General Services Department (GSD)

- Participate in OA conference calls
- Manage COOP
- Staff the Logistics Section of the OA EOC
- Identify and assess potential county facilities and space for alternate care sites, mass feeding preparation, mass prophylaxis or CPOD for distribution of antivirals
- May activate DOC to support OA EOC operations
- Implement janitorial and HVAC best practices to prevent or mitigate transmission

Human Resource Department (HR)

- Participate in OA conference calls
- Support Logistics Personnel Unit
- Coordinate occupational health protocols for county employees as part of COOP operations
- Reassign employees to essential duties
- Track sick employees Countywide
- Establish protocols for telecommute job classifications

Animal Services

- Participate in OA conference calls
- Staff the Animal Care unit of the OA EOC Operations Section
- Provide guidance and coordination on animal care and shelter response as needed

Sonoma County Healthcare Coalition (HCC)

- Participate in OA conference calls
- An identified HCC member may staff the Hospital Unit of the OA EOC Operations Section, if needed
- Identify and educate patients with access and functional need about preparedness planning, complications, and resources
- Identify gaps in resources and develop internal plans to mitigate impacts to individual healthcare facilities
- Establish MOUs with other healthcare facilities to coordinate patient transfers, medication storage, and resources
- Provide regular situational updates as needed/requested

Information Systems Department (ISD)

- Expand VPN access capabilities
- Publish WebEx protocols for all meetings

Economic Development

- Support communication to area businesses regarding social distancing measures

Transportation and Public Works Department (TPW)

- Participate in OA conference calls
- Supports county health advisories and regulations on public transportation to support pharmaceutical and non-pharmaceutical interventions (NPI)
- Facilitate health response operations in the Sonoma County Airport and facilities

Community Development Commission (CDC)

- Coordinate modification of outreach protocols for social programs addressing homelessness in the County

Sonoma County Office of Education (SCOE) and Education Partners

- Participate in OA conference calls

- SCOE activates departmental infectious disease response plan
- Universities activate their respective pandemic plans, if available
- Ensure public health guidance, recommendations and protective measures are communicated to schools staff, students and parents
- Support medical personnel surge capacity as appropriate (Universities)
- Activate internal EOC as appropriate (Universities)

Cities and Special Districts

- Participate in OA conference calls
- Coordinate public information
- Conduct public alert and warning messaging
- Activate local EOC
- Respond to increased medical aid and law enforcement calls for service
- Support transportation of individuals with access and functional needs
- Provide additional security to hospitals, jails, off-site treatment sites, staging and storage areas as needed
- Conduct continuity of operations

Tribal Governments

- Participate in OA conference calls
- Coordinate public information

Appendix 1: Acronyms

ACS	Alternate Care Sites
ADA	American Disabilities Act
AFN	Access and Functional Needs
BH	Sonoma County Behavioral Health Division
CalOES	California Office of Emergency Services
CDC	U.S. Centers for Disease Control and Prevention
CDPH	California Department of Public Health
CERC	Crisis and Emergency Risk Communication
CFR	Case Fatality Ratio
COAD	Community Organizations Active in Disasters
COOP	Continuity of Operations
CoV	Coronaviruses
COVID-19	Coronavirus Disease 2019
DEM	Sonoma County Department of Emergency Management
DHS	Sonoma County Department of Health Services
DHS/CDC	Sonoma County Community Development Commission
DOC	Department Emergency Operations Center
EMS	Emergency Medical Services
EMSA	Emergency Medical Services Authority
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
GSD	Sonoma County General Services Department
HCC	Sonoma County Healthcare Coalition
HHS	U.S. Department of Health and Human Services
HR	Sonoma County Human Resources Department
HSD	Sonoma County Human Services Department
ILI	Influenza Like Illness
ISD	Sonoma County Information Systems Department
JIC	Joint Information Center
IRAT	Influenza Risk Assessment Tool
MERS	Middle East Respiratory Syndrome
MOU	Memorandum of Understanding
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NPI	Non-Pharmaceutical Intervention
OA	Operational Area
PIF	Pandemic Intervals Framework
PIO	Public Information Officer
POD	Point of Dispensing
PSAF	Pandemic Severity Assessment Framework
PSPS	Public Safety Power Shutoff
PPE	Personal Protective Equipment
RSS	Receipt, Store and Stage

County of Sonoma Emergency Operations Plan Annex:
Pandemic Response

SARS	Severe Acute Respiratory Syndrome
SCOE	Sonoma County Office of Education
SEMS	Standardized Emergency Management System
SNS	Strategic National Stockpile
TPW	Sonoma County Transportation and Public Works Department
WHO	World Health Organization

Appendix 2: Glossary

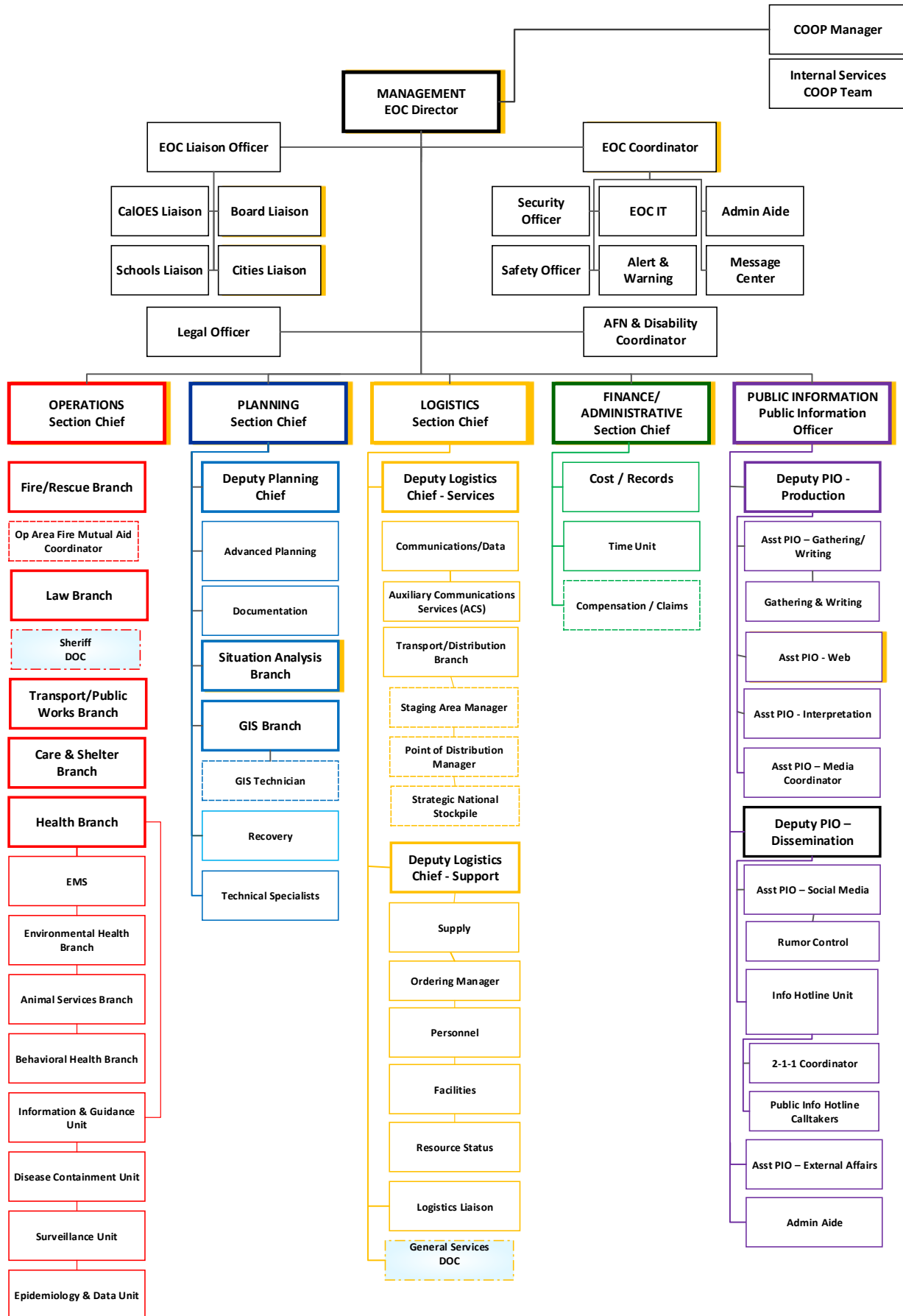
Terminology	Definition
Acute respiratory illness (ARI)	A disease that typically involves the airways within the nose and throat and that may or may not include fever (measured by a thermometer) or feverishness (i.e., self-reported sense of fever).
Attack rate	A variant of an incident rate, applied to a narrowly defined population observed for a limited period of time, such as during an epidemic.
Avian influenza A virus	These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry (such as chickens, ducks and turkeys) and other bird and animal species.
Case definition	A set of standard criteria for deciding whether a person has a particular disease or health-related condition, by specifying clinical criteria and limitations on time, place, and person.
Case Fatality Ratio (CFR)	Proportion of deaths among clinically ill persons
Case or person under investigation (CUI/PUI)	A patient who meets illness criteria for influenza (flu) but laboratory tests for influenza virus infection have not been performed. A CUI/PUI will have an exposure history that will prompt a public health investigation
Contact	Exposure to a source of an infection, or a person.
Close Contact	Someone who has come within about 6 feet of a confirmed case or case under investigation (CUI) while the case was ill.
Confirmed influenza case	A patient who tests positive for influenza virus (flu) infection by an approved laboratory test.
Droplet spread	The direct transmission of an infectious agent from a reservoir to a susceptible host by spray with relatively large, short-ranged aerosols produced by sneezing, coughing, or talking.
Epidemic	The occurrence of more cases of disease than expected in a given area or among a specific group of people over a particular period of time.
Hand hygiene	The cleaning of one's hands. This is usually done with soap and water, hand sanitizer, or hand wipes. To kill an influenza virus hands must be washed with soap and warm water for 15 seconds or cleansed with a hand gel or hand wipe that has an alcohol content of at least 60%.
Human-to-human transmission	The ability of an influenza (flu) virus to spread from one person to another (instead of from an animal to a person, for example). Seasonal influenza viruses spread easily from person to person, most commonly through large or small droplets containing influenza virus that are expelled when a sick person is coughing or sneezing.

Incubation period	A period of subclinical or inapparent pathologic changes following exposure, ending with the onset of symptoms of infectious disease.
Infection control	Measures designed to detect, prevent, and contain the spread of infectious disease. Some measures include hand washing, respiratory etiquette, use of personal protective equipment (PPE), prophylaxis, isolation, and quarantine.
Infectious disease	An infectious disease, or communicable disease, is caused by the entrance of organisms (e.g. viruses, bacteria, fungi) into the body, which grow and multiply there to cause illness. Infectious diseases can be transmitted, or passed, by direct contact with an infected individual, their discharges (e.g., breath, cough, sneeze), or with an item touched by them.
Influenza	A viral disease that causes high fever, sore throat, cough, and muscle aches. It usually affects the respiratory system but sometimes affects other organs. It is spread by infectious droplets that are coughed or sneezed into the air. These droplets can land on the mucous membranes of the eyes or mouth or be inhaled into the lungs of another person.
Influenza-like illness (ILI)	ILI is defined as fever (temperature of 100 °F or greater) and cough and/or sore throat. It is used for flu surveillance worldwide.
Isolation	The separation of infected persons from other persons for the period of communicability in such conditions as will prevent transmission of the agent.
Morbidity	Ratio of sick to well persons in a community during a stated period of time.
Non-Pharmaceutical Interventions (NPI)	Measures to limit the spread of infection that do not involve medication or treatment.
Oseltamivir	An influenza (flu) antiviral drug that is approved for use in the United States. Antiviral drugs are prescription medications that can be used to flu illness.
Pandemic	An epidemic occurring over a very wide area (several countries or continents) and usually affecting a large proportion of the population.
Personal Protective Equipment (PPE)	Specialized clothing or equipment worn to protect someone against a hazard including an infectious disease. It can range from a face mask or a pair of gloves to a combination of gear that might cover some or all of the body.
Prophylaxis	An infection control measure whereby antimicrobial, including antiviral, medications, are taken by a healthy individual (e.g., nurse, contact) to prevent illness before or after being exposed to an individual with an infectious disease (e.g. influenza).
Quarantine	The separation of people who may have been exposed to an infected person, but appear healthy, from the general public, until it can be determined that they have not been infected.

County of Sonoma Emergency Operations Plan Annex:
Pandemic Response

Respiratory etiquette	Good coughing and sneezing manners as a way of minimizing the spread of viruses, which are passed from human-to-human in the tiny droplets of moisture that come out of the nose or mouth when coughing, sneezing, or talking. Healthy and sick people should cover their nose and mouth when sneezing, coughing, or blowing their nose.
Severe acute respiratory infection (SARI)	SARI is an acute respiratory that results in severe clinical illness, typically requiring hospitalization and/or resulting in death.
Social distancing	An infection control strategy that includes methods of reducing the frequency and closeness of contact between people to limit the spread of infectious diseases. Generally, social distancing refers to the avoidance of gatherings with many people, which may include schools, sports events, cultural gatherings, use of mass transportation, etc.
Surveillance	The systematic collection, analysis, interpretation, and dissemination of health data on an ongoing basis, to gain knowledge of the pattern of disease occurrence and potential in a community, in order to control and prevent disease in the community.
Workplace absenteeism	Refers to time taken off work due to illness or other reasons, such as child care or transportation issues.

Appendix 3: OA EOC Pandemic Response Organization

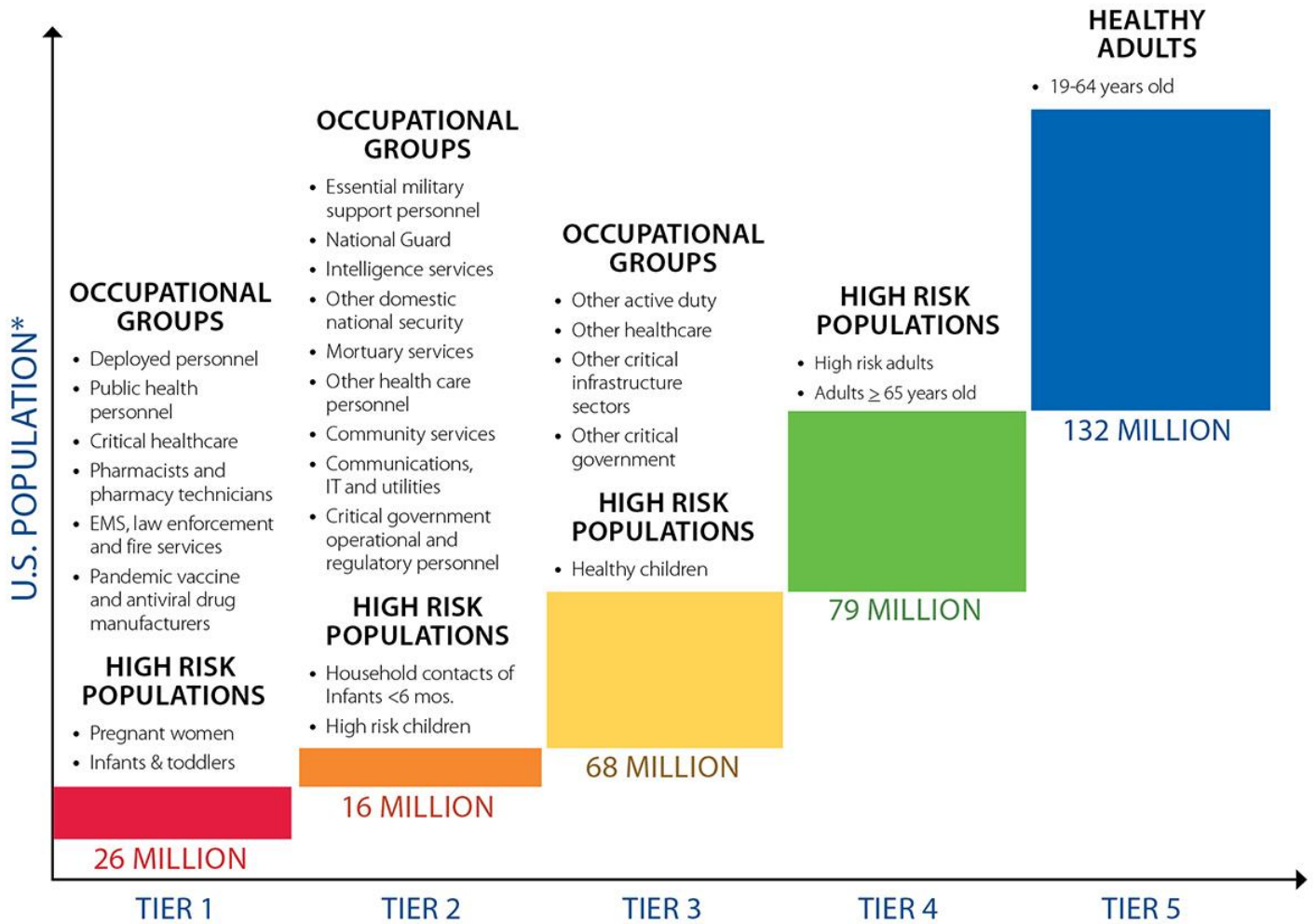


Appendix 4: CDC Recommended NPIs for Influenza Pandemic¹⁰

Setting	PANDEMIC SEVERITY		
	Low to moderate severity (mild to moderate pandemic)	High severity (severe pandemic)	Very high severity (very severe to extreme pandemic)
All	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects	CDC recommends voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and routine cleaning of frequently touched surfaces and objects
Residences	CDC generally does not recommend voluntary home quarantine of exposed household members	CDC might recommend voluntary home quarantine of exposed household members in areas where novel influenza virus circulates.	CDC might recommend voluntary home quarantine of exposed household members in areas where novel influenza virus circulates.
	CDC generally does not recommend use of face masks by ill persons.	CDC might recommend use of face masks by ill persons when crowded community settings cannot be avoided.	CDC might recommend use of face masks by ill persons when crowded community settings cannot be avoided.
Child care facilities, schools for grades K-12, and colleges and universities	CDC might recommend selective school dismissals in facilities serving children at high risk for severe influenza complications.	CDC might recommend temporary preemptive, coordinated dismissals of childcare facilities and schools. If schools remain open, CDC may suggest social distancing measures.	CDC might recommend temporary preemptive, coordinated dismissals of childcare facilities and schools.
Workplaces	CDC generally does not recommend social distancing measures.	CDC might recommend social distancing measures	CDC might recommend modifications, postponements, or cancellations
Mass gatherings	CDC generally does not recommend modifications, postponements, or cancellations.	CDC might recommend modifications, postponements, or cancellations	CDC might recommend modifications, postponements, or cancellations

¹⁰ CDC Community Mitigation Guidelines to Prevent Pandemic Influenza, 2017
https://www.cdc.gov/mmwr/volumes/66/rr/rr6601a1.htm#F5_down

Appendix 5: Vaccination Tiers and Population Groups for High Pandemic Severity¹¹



¹¹ CDC Interim Guidance: Pandemic Vaccine Targeting Guidance
<https://www.cdc.gov/flu/pandemic-resources/pdf/2018-Influenza-Guidance.pdf>