



# Monterey County Health Department

## **ANNEX E**

## **PANDEMIC INFLUENZA RESPONSE PLAN**

May 18, 2005

## A. EXECUTIVE SUMMARY

*“ Health experts agree that a pandemic influenza is inevitable...just a matter of time. The goal of the Monterey County Health Department and our public health partners is to minimize illness, loss of life, reduce health-care overload, and disruption of the community from a pandemic influenza event.”*

The State of California (population of approximately 35 million people), when afflicted with an influenza pandemic (worldwide epidemic), could have nine million persons, or about one in four state residents, ill with influenza. The number of persons hospitalized would probably be about 97,000 persons (compared with about 3,000 in a normal year) and 21,000 deaths (compared with about 200 in a normal year). In order to lessen the impact of a pandemic, this **Pandemic Influenza Response Plan** (PIRP) will promote an orderly and effective response effort. It is also important to understand the role and responsibility of the World Health Organization (WHO), the Center for Disease Control and Prevention (CDC), and the State Department of Health (CDHS). To better cope with “false alarms” resulting from intensive surveillance, a series of “Preparedness Levels” have been defined that can be applied before the beginning of a pandemic, from the first novel virus alert through the conclusion of the last wave of the pandemic.

The **Pandemic Influenza Response Plan** is designated as Annex-E of the Monterey County Health Department **Disaster Preparedness and Response Plan**, and compliments **Annex-B, Mass Prophylaxis Plan** and **Annex-Q, Smallpox Plan**. Under the direction of the Health Officer, Monterey County Communicable Disease Control will have primary responsibility for planning and coordinating the MCHD response to the pandemic. The response activities will be carried out in collaboration with the local hospitals and clinics, local emergency management, cities and special districts, local public safety agencies (law enforcement, fire, and emergency medical services), neighboring counties (San Benito County, Santa Cruz, San Luis Obispo, Fresno, and King) , and state/regional agencies including CDHS, Emergency Medical Services Authority (EMSA), and the Governor’s Office of Emergency Services (GOES).

Essential functions that are covered by the PIRP are: surveillance of influenza disease, vaccine and pharmaceutical delivery and distribution, and emergency response and risk communications. Under the direction of the Health Officer, or his/her designee, the Monterey County Epidemiology and Disease Control Unit and the Monterey County Public Health Laboratory are the lead organizational units for local epidemiological surveillance.

Finally, in conjunction with the Monterey County Operational Area Emergency Operations Center (EOC), the Monterey County Health Department (MCHD) will coordinate the administration and distribution of vaccine and anti-viral products. In addition, the MCHD emergency response communications will be coordinated with the Operational Area EOC’s Public Information Section for continuity and efficiency.

## **B. ADMINISTRATION**

### **1. GENERAL**

Monterey County Health Department (MCHD) is in the process of developing the **Disaster Preparedness and Response Plan** (DPRP). The DPRP provides guidance on the MCHD emergency organization structure and responsibilities, preparedness and response activities, governing directives and authorities, and technical (discipline specific) information. The **Influenza Pandemic Response Plan** will be integrated as an annex to the MCHD DPRP. The MCHD DPRP is in concert with the Operational Area **Emergency Operations Plan** (EOP) and applicable state/regional disaster planning documents.

### **2. PLAN IMPLEMENTATION**

This original version of the **Pandemic Influenza Preparedness and Response Plan** is effective upon receipt and for record purposes on April 1, 2005.

### **3. PLAN REVIEW**

It is the responsibility of the Monterey County Health Department to bi-annually update this plan and all applicable associated documents. The basic plan and annexes are designed to be flexible documents and may be updated as required. **For record purposes, the Pandemic Influenza and Response Plan will be updated on April 1 of odd number years.** Any change recommendations are welcome from cognizant agencies, and should be submitted to the Monterey County Health Department.

### **4. EXECUTIVE REVIEW COMMITTEE**

The Executive Review Committee will be responsible for assisting with the review process, and coordinating any recommended changes to the plan. The Executive Review Committee will be composed of designated representatives of the following agencies:

- Monterey County Health Department – Health Officer,
- Monterey County Health Department – Laboratory Director,
- Monterey County Health Department – Bio-terrorism Coordinator,
- Monterey County Health Department – Epidemiologist,
- Monterey County Health Department – Immunizations Coordinator,
- Monterey County Health Department – Clinics Director,
- Monterey County Emergency Medical Services – Disaster Management,
- Monterey County Communications Coordinator,
- Monterey County Environmental Health – Director,
- Monterey County Sheriff's Office,
- Monterey County Health Department – Public Health Nursing Director, and
- Office of Emergency Services.

As appropriate, ad hoc members representing other cognizant agencies may be added to the Executive Review Committee with the unanimous approval of all represented agencies on the Executive Review Committee. Designated members of the Executive Review Committee are listed in **Appendix G3**. Recommended changes to composition and/or membership of the Executive Review Committee should be submitted in writing to the Monterey County Health Officer. Unanimous approval of all represented agencies on the Executive Review Committee is required for changes in composition.

## 5. TRAINING AND DRILLS

It is the responsibility of each participating agency to familiarize and train their respective personnel on the information contained within the basic plan and annexes. All agencies are encouraged to conduct periodic drills in order to assess/exercise the plan's co and functionality.

## 6. INPUTS

All cognizant agencies are welcome and encouraged to submit written comments and recommendations for the purpose of improving this plan. The Monterey County Health Department (Bio-terrorism Coordinator) will act as a collecting agent for all inputs.

## 7. INITIAL PLAN CONTRIBUTORS/POINTS OF CONTACT/DISTRIBUTION

The contributors to the initial draft and/or current edition of this plan are listed in Annex-G3, Distribution. For purposes of this plan, these individuals are considered the primary points of contact for matters relating to the implementation and employment of the plan. The plan is intended for distribution to all cognizant public service agencies within and outside of Monterey County. The plan distribution is contained in Annex-G3, Distribution. It is the responsibility of the Monterey County Office Health Department to promulgate the plan and any revisions thereto.

## 8. REPRODUCTION

Reproduction of the plan by the recipients is authorized.

## C. **AUTHORITY AND REFERENCES**

1. California Emergency Services Act (Government Code, Title 2, Division 1, Chapter 7, Section 8550 et seq): Grants authority to the governor and chief executives to provide for state assistance in organization and maintenance of emergency programs of counties, establishes the Office of Emergency Services, and establishes mutual aid procedures.
2. California Health and Safety (H & S) Code:
  - Sections 100170-100180: Establishes authority of state to enforce the H & S Code Regulations to address threats to the public health.
  - Sections 120125-120140: Establishes authority of state to investigate and control communicable diseases within the state.
  - Sections 120145-120150: Establishes authority of state to take actions related to persons, animals, or property to control threats to public health, including quarantine and inspection.
3. Department of Health Services, Emergency Response Plan and Procedures, January 1994, which is a reference for:
  - Executive Order No. W-9-91: Establishes the Department of Health Services' responsibility to prepare for and respond to emergencies. It mandates emergency preparedness and response assignments for all state agencies and departments under the coordination of the Governor's Office of Emergency Services (GOES).
  - Administrative Order No. 79-22: Details the emergency preparedness and response functions of the Department. This Administrative Order guides GOES and the department in coordinating priority tasks and programs related to emergency

preparedness, response, and recovery in accordance with the GOES **State Emergency Plan**.

- Memorandum of Understanding, Department of Health Services and Emergency Medical Services Authority, July 1988: Details the relationship between DHS and the Emergency Medical Services Authority in planning for and responding to a catastrophic disaster and describes the specific responsibilities of each department.
- 4. Emergency Medical Services Authority, **Disaster Medical Response Plan**, July 1992.

5. Governor's Office of Emergency Services, **State Emergency Plan**, May 1998: Defines the emergency management system used for all emergencies in California. The plan describes the State government's response to disasters, including the response of all levels of government and certain private sector organizations to all natural and manmade emergencies, which threaten life, property, and the resources of California. It focuses on the basic requirements for disaster management and coordination under the Standardized Emergency Management System (SEMS). It is intended to be used in conjunction with city, county, operational areas, and State agency plans and associated standard operating procedures.
6. Federal Emergency Management Agency, **Federal Response Plan**, April 1999: A signed agreement among 27 Federal departments and agencies, including the American Red Cross, that provides the mechanism for coordinating delivery of Federal assistance and resources to augment efforts of State and local governments overwhelmed by a major disaster or emergency. It supports implementation of the Robert T. Stafford Disaster Relief and Emergency Assistance Act plus individual agency statutory authorities. It provides for damage assessment teams, emergency communications, medical assistance, equipment and supplies, creation of facilities such as a Disaster Field Office and Recovery Center.
7. Regional Medical/Health Coordinator Emergency Plans: These plans are prepared by each Regional Medical/Health Coordinator to describe their local disaster response roles.

## D. FEDERAL RESPONSIBILITIES – PANDEMIC INFLUENZA

The Federal government has assumed primary responsibility for the following influenza vaccine related activities:

- Vaccine research and development.
- Coordinating national and international surveillance.
- Providing guidance on which target groups should receive vaccine, in priority order.
- Devising a suitable liability program for vaccine manufacturers and persons administering the vaccine. Liability protection will likely be made available through new congressional legislation.
- Developing a national clearinghouse for vaccine availability information, vaccine distribution and redistribution.
- Developing “generic” guidelines and/or information templates that can be modified and adapted as needed at the state and local levels, including: fact sheets and questions/answers on influenza, influenza vaccine, and preventive health measures.
- Strategies and guidelines for interacting with the media and communicating effectively with the public health and medical communities, and the general public.
- Guidelines for triage and treatment of influenza patients in outpatient, inpatient and non-traditional settings.
- Developing a national level central surveillance system for vaccine-associated adverse events.
- Responsibility for purchasing vaccine for the public and private sectors.

## E. PHASES OF A PANDEMIC

- **Novel Virus Alert Stage:** Detection in one or more humans of a novel virus for which there is little or no immunity in the general population. This is a potential, but not inevitable, precursor to a pandemic. During this stage, MCHD will monitor reports of the dissemination of the disease and conduct surveillance to detect the novel virus locally.
- **Pandemic Alert Stage:** Novel virus demonstrates person-to-person transmission and causes multiple cases in the same geographic area. During this stage, MCHD will monitor reports of disease spread and meet with surveillance partners to activate and augment surveillance systems. The State Viral and Rickettsial Disease Laboratory (VRDL) will increase laboratory surveillance. State Immunization Branch will work with the MCHD and state/regional/local OES to plan the delivery and administration of vaccines. CDHS will provide technical information, public information, and press releases; that will be further disseminated through MCHD and the Operational Area EOC. The CDC’s Epidemiology Program Office and the CDHS’s Division of Communicable Disease Control (DCDC) will ensure communication/coordination among the state’s epidemiology, laboratory surveillance, and emergency management/response agencies.

- **Pandemic Imminent Stage:** Novel virus begins causing unusually high rates of morbidity and mortality in widespread geographic areas. Pandemic alert activities will continue at an intensified level. Surveillance efforts will be increased for both influenza illness and the circulation of the influenza virus. If vaccine is available but limited security measures will be activated to ensure that vaccine will be given first to groups with highest priority. If the vaccine is plentiful, the Mass Prophylaxis plan will be activated. The GOES, local emergency management, CDHS, and hospitals/clinics may activate their respective emergency response systems/plans. The Sheriff/Coroner, hospitals, and funeral directors will be advised to prepare for increases in the number of dead (clients) they will have to handle.
- **Pandemic Stage:** Further spread of influenza disease with involvement of multiple continents. Locally, the novel virus would be detected in the County. Emphasis of surveillance will be shifted from detecting influenza cases to monitoring demographic characteristics that may indicate a need to revise priority groups for receiving vaccine and antiviral medications. Vaccine delivery will be prioritized and the system to detect possible adverse reactions to the vaccine will be closely monitored. Operational Area emergency and medical management will coordinate and/or establish alternative treatment sites, if hospital facilities are overwhelmed.
- **Second Wave:** After the number of cases of influenza falls and the pandemic appears to be ending, a second wave of cases typically occurs within several months. All agencies and health care providers must make use of the interim period to prepare for a resurgence of the disease. This includes addressing shortfalls in supplies and personnel, and continuing immunizations.
- **Pandemic Over:** After the successive pandemic “waves” there will be a return of the more typical seasonal “epidemic” cycle. An analysis/assessment of the local response should be made and the MCHD **Pandemic Influenza Response Plan** should be updated and exercised.

Note: Reference for Pandemic Stages is from the CDC Guide, **Pandemic Influenza: Planning Guide for State and Local Officials** (Version 2 – January 1, 1999) [www.cdc.gov/od/nvpo/pandemicflu.htm](http://www.cdc.gov/od/nvpo/pandemicflu.htm).

## **F. BACKGROUND (HISTORY)**

During inter-pandemic periods, the influenza viruses related to preceding epidemics circulate. Such circulation over a period of usually 2-3 years, promotes the selection of new strains, which have changed enough to cause epidemics among the general population; this process is termed “antigenic drift.” Drift variants may have different impacts in different communities, regions or countries in any year. The elderly, medically vulnerable, and infants are more likely to suffer increased morbidity and mortality.

At unpredictable intervals, however, novel influenza viruses emerge with a key surface antigen (the hemagglutinin) of a totally different sub-type from strains circulating the year before. This is called “antigenic shift.” If the virus develops the ability to spread readily from person-to-person, then more widespread and severe epidemics may occur. If they spread country-to-country within a few months to a year, this results in a pandemic. Conditions that give rise to a pandemic include:

1. The emergence of an Influenza “A” virus with different hemagglutinin sub-type than strains circulating in humans for many preceding years, and
2. A high proportion of susceptible people in the community (i.e., now or low antibody titers to the hemagglutinin of the novel virus) and
3. High person-to-person transmissibility of the new virus, with accompanying disease.

As the pandemic develops, the World Health Organization (WHO) will notify the Centers for Disease Control and Prevention (CDC) and other national health agencies of the progress of the pandemic from one stage, to the next level. The CDC will communicate with CDHS who will in turn keep the MCHD and other local emergency and medical agencies informed about pandemic stages, vaccine availability, virus laboratory findings, anti-viral availability, resource limitations, fiscal considerations, and national response and coordination. There have been three pandemics in the 20th century; all three of the following pandemics spread worldwide within one year of being detected:

- **1918-19, "Spanish flu,"** [A (H1N1)], caused the highest number of known flu deaths: more than 500,000 people died in the United States, and 20 to 50 million people may have died worldwide. Many people died within the first few days after infection and others died of complications soon after. Nearly half of those who died were young, healthy adults.
- **1957-58, "Asian flu,"** [A (H2N2)], caused about 70,000 deaths in the United States. First identified in China in late February 1957, the Asian flu spread to the United States by June 1957.
- **1968-69, "Hong Kong flu,"** [A (H3N2)], caused approximately 34,000 deaths in the United States. This virus was first detected in Hong Kong in early 1968 and spread to the United States later that year. Type A (H3N2) viruses still circulate today.

Notes: Both the 1957-58 and 1968-69 pandemic viruses were a result of the re-assortment of a human virus with an avian influenza virus. The origin of the 1918 pandemic virus is not clear. Once a new pandemic influenza virus emerges and spreads, it typically becomes established among people and circulates for many years. The U.S. Centers for Disease Control and Prevention and the World Health Organization conduct extensive surveillance programs to monitor the occurrence of influenza activity worldwide, including the emergence of potential pandemic strains of influenza virus.

## G. DEMOGRAPHICS

Monterey County is in close proximity to several Bay Area air and sea ports of entry. Flights and maritime shipping from Asia have the potential to transport the novel virus to the United States. California’s urban and coastal communities would likely be an early outbreak-locations for an influenza pandemic. The CDHS estimates (see below note) that the impact of an influenza pandemic on California’s population of 35 million would include the following, and underscore the need for advance planning to lessen the impact of a pandemic catastrophe:

- 8.8 million persons ill with influenza (estimated range: 5.3 million to 12.3 million), or one out of every four residents in the state;
- 4.7 million outpatient visits (estimated range: 2.8 million to 6.6 million);
- 97,200 persons hospitalized (estimated range: 58,300 to 136,000); and
- 21,500 deaths (estimated range: 12,900 to 30,200).

Notes: These estimates are based on (1) population data provided by the California Department of Finance, Demographic Unit, and (2) rates for hospitalizations, outpatient visits, and deaths from Meltzer MI, Kownaski M, Crosby, R. 1999. FluAid 1.0: Software and manual to aid state and local-level public health officials plan, prepare and practice for the next influenza pandemic (Beta test version). Centers for Disease Control and Prevention, US Department of Health and Human Services. Attack rates of 15%, 25%, and 35% suggested by Meltzer, et al. would be affected.

## H. DISASTER CONSIDERATIONS

Most citizens of Monterey County are aware of the need to plan for a disaster because of their familiarity with earthquakes, urban wildland intermix fires, winter storms/floods, and other natural disasters. Many of the planning principles for mitigating, preparing, and responding to natural disasters and a pandemic event are the same, yet there are also important differences.

- In a pandemic event there should be some warning, which could range from several weeks, to five or six months.
- The duration of a pandemic event could range from months to a year or more, while a natural disaster response may last only days/weeks.
- In a pandemic event there would be little outside assistance in the early stages. In contrast, neighboring cities, counties, and states traditionally provide mutual aid response assistance for natural disasters.
- Natural disasters are most likely to cause property damage, economic and transportation network disruption, and acute injuries; while a pandemic event will result in mainly an increase requirement for medical care resources.

## I. EMERGENCY MANAGEMENT ORGANIZATION

The PIRP is intended to serve as a disaster-specific annex to the Monterey County Health Department's **Disaster Preparedness and Response Plan**. This section describes the emergency management structure that will be implemented in response to a pandemic influenza outbreak and the relationship with regional, state and federal response agencies (see **Appendix-E2, Pandemic Influenza – Summary Actions** for additional information and responsibilities). Following a proclamation of a local emergency or state of emergency as a result of local epidemic or pandemic of influenza in California, the MCHD emergency response organization may be activated. The MCHD response will be conducted in accordance with the Standardized Emergency Management System (SEMS) and National Incident Command System (NIMS), as described in the MCHD **Disaster Preparedness and Response Plan**.

**MCHD Director of Health:**

- In coordination with the Operational Area's Emergency Operations Center (EOC), activate the MCHD disaster plans as appropriate.
- Coordination and communication of MCHD activities with Operational Area EOC to ensure appropriate utilization of public health, medical, security, transportation, and communication resources.
- Ensure that all necessary MCHD resources are directed to respond to the disaster.
- Ensure that continuity of MCHD management, planning and operations is maintained through a clear command authority, and identification of staff to assume higher-level responsibilities in the event of the absence or incapacity of key MCHD leadership.

**MCHD Health Officer:**

- Activate the Department Operations Center (DOC) to accomplish all program responsibilities defined in the concept of operations.
- Ensure that all primary SEMS/NIMS functions (Management, Operations, Planning, Logistics, and Finance) are addressed within the DOC.
- Manage the DOC to ensure the development of an Incident Action Plan and implementation of the action plan by different programs.
- Assign a liaison representative to State programs such as the Immunization Branch (IB) and CDHS Division of Communicable Disease Control (DCDC).
- Coordinate local pandemic event activities with the Joint Medical/Health Emergency Operations Center (JEOC) in Sacramento and/or the State Operations Center (SOC).

**Operational Area Emergency Operation Center:**

- Manage local resources, and request/coordinate mutual aid assistance.
- Act as the "single ordering source" for all federal/state resources.
- Process all information relating to event, and disseminate to applicable agencies.
- Provide multi-jurisdictional coordination and management.
- Perform public information and notification activities.
- Support local government, special district, and county (MCHD) response efforts.

**Joint Medical/Health Emergency Operations Center (JEOC):**

- Manage all state and regional medical and health information and resources.
- Acquire public health and medical personnel upon request of an affected region.
- Acquire medical supplies, pharmaceuticals and equipment upon request of an affected region.
- Coordinate resource acquisition and support for CDHS field emergency response activities.
- As required, provide direct support to the State Operations Center (SOC) or Regional Emergency Operations Centers. (REOC).
- Provide liaison and support to CDC and other federal agencies responding to the pandemic influenza activities.
- Ensure coordination and information flow with all affected health management organizations, and other providers of medical care, facilities, and supplies.

## **J. INFLUENZA PANDEMIC PLANNING**

### **1. Preparation Activities - Monterey County**

Prior to the occurrence of an influenza pandemic, or a local epidemic, it is essential that plans for detection and response are compatible with national, state, and local levels of government. The following is a description of key activities focused on Monterey County:

- Meet yearly with community hospitals, infectious disease specialists, community clinics, Visiting Nurses Association (VNA), Public Health Nurses (PHN), public health laboratory, communicable disease, and other partners to develop a prioritization plan for distribution/administration of immunizations.
- MCHD plan includes surveillance of influenza-like-illness (ILI), distribution of vaccine and anti-virals, and emergency response and communication.
- Recruit at least two sentinel physicians from the health community.
- Develop and disseminate influenza surveillance information, applicable to both normal influenza seasons and pandemic situations.
- Establish a plan for obtaining needed resources in the event of an influenza pandemic, or local epidemic, including funding for additional laboratory testing, vaccine administration, surveillance, and communication.
- Promote the development of plans for committing needed resources for a pandemic response by other agencies, including private providers.
- Disseminate and promote the recommended prioritization plan for delivery and administration of vaccines and anti-virals in the event supplies are limited (including priorities for first and second doses).
- Establish a plan to secure and utilize refrigerated depots for storage of vaccines.
- Establish a plan for maintenance of operations in the event of increased workload and/or staff losses, including cross-training of staff and redirection of staff from related positions.
- Establish a plan for identifying and training the reserve and current workforce of nurses, paramedics, pharmacists, and laboratory personnel for participation in a pandemic.
- Implement the MCHD **Mass Prophylaxis Plan** as necessary.

## 2. Yearly Influenza Operations

The following is a description of annual influenza-related responsibilities and form the base upon which influenza pandemic activities will be added (as needed):

**Surveillance:** Surveillance is key to recognizing a new strain of influenza virus, determining its potential for transmission, and tracking its spread. The World Health Organization (WHO) maintains four collaborating centers for influenza located in London, Atlanta, Tokyo and Melbourne; and 110 national collaborating laboratories in 79 countries. One of these collaborating laboratories is the Department of Health Services' (DHS) Viral and Rickettsial Disease Laboratory (VRDL), located in Richmond, California. The Communicable Disease Control and Prevention (CDC) in Atlanta and World Health Organization (WHO) coordinate national and international surveillance. Alerts on the status of influenza shifts, drifts including pandemic phases, and travel advisories will come from WHO, CDC and CDHS. Applicable alert information will be disseminated to national, state, and local health authorities and emergency management officials.

Influenza is not a reportable disease in California. However, the Monterey County Health Department collaborates with public and private institutions to obtain information about the occurrence of influenza. During the influenza season (late October through late April), data is collected from the following surveillance systems:

- Weekly reports of influenza and other respiratory virus isolations and detections from facilities willing to do testing.
- Weekly reports from Community Hospital of Monterey Peninsula, Salinas Valley Memorial Hospital, and Mee Memorial Hospitals of inpatient hospitalizations with admitting diagnoses of "influenza," "influenza-like illness (ILI)," or "pneumonia".
- Passive reporting of influenza outbreaks, especially in chronic care facilities.
- Coordinate with our Level "B" Laboratory and the state VRDL regarding protocols to properly handle, collect, package, and ship clinical specimens and identify the appropriate laboratories to send specimens for testing.

**Vaccine and Pharmaceutical:** Since 1973, the California Immunization Branch (IB) has received funding annually to purchase influenza and pneumococcal vaccine for local health departments (LHDs). IB packages and ships the vaccine to LHDs using commercial shipping companies. IB estimates that state-purchased vaccine constitutes about 10 percent of all influenza vaccine delivered in California with the remaining 90 percent purchased and administered in the private sector.

MCHD administer the vaccines to the identified high-risk groups. The U.S. Public Health Service defines high-risk groups as persons age 60 years and older and persons with chronic medical conditions or children under two-years old. Distribution of vaccine is done through the immunization clinics with extended hours of operation, if necessary. In times of vaccine shortages or if the high-risk population changes, the MCHD collaborates with the community to prioritize doses. In addition, the Vaccines for Children (VFC) Program provides vaccine to children who are covered by the Child Health and Disabilities Prevention Program (CHDP), Medi-Cal, or who

do not have a payment source for vaccines. The Health Department receives and distributes VFC allocations to the physicians and children immunization clinics.

**Pharmaceuticals:** The anti-viral drugs, amantadine and rimantadine, are currently used for prophylaxis and treatment of influenza. The new anti-viral agents, oseltamivir and zanamivir, are currently licensed for treatment and may eventually be approved for prophylaxis. The Health Officer also disseminates the CDC's recommendations on use of anti-virals to community physicians.

**Emergency Response and Communications:** For normal operations, the Emergency Response and Communications system is not activated. The Health Officer, or his/her designee, keeps the public informed through press release and/or press conferences. Local health care/providers are kept apprised of local availability of vaccines and anti-virals, and any unusual events through traditional communication methods. In addition, community meetings are offered for feedback and suggestions from the health community and public.

### 3. Pandemic Operations

In the early stages of a pandemic, there may be no vaccines available at the local level. The **Federal Planning Guide** indicates that a minimum of six to eight months would elapse before the tens of millions of doses needed could be produced for distribution. In addition, manufacturing challenges such as poor or slow growth of the virus, contaminated vaccine, highly lethal virus impeding its culture in chicken eggs. When vaccine first becomes available the demand will likely exceed the supply. This will occur because not only will there be limited quantities, it is likely that two doses will be needed with a booster following approximately thirty days after the first injection.

Pharmaceutical delivery will become an important issue during a pandemic. While antiviral agents will play a role in both prophylaxis and treatment of influenza, the existing supplies may fall short of the need. Priorities for target groups and the use of limited supplies for prophylaxis versus therapy would need to be established. Widespread use of anti-virals and antibiotics could lead to emergence of drug-resistant strains. California DHS under usual circumstances has no role in pharmaceutical delivery. However, in a pandemic or epidemic, DHS in partnership with the MCHD may facilitate the handling and administration of pharmaceuticals.

## **K. PANDEMIC OPERATIONS – NOVEL VIRUS ALERT**

*Novel virus is detected in one or more humans. Little or no immunity in the general population. Potential, but not inevitable precursor to a pandemic.* At this stage, activities will be limited to monitoring reports of progress of the disease from the World Health Organization (WHO), the Centers for Disease Control and Prevention (CDC), CDHS, and the country in which the novel virus is detected. The MCHD will update local partners, as appropriate.

### **Surveillance:**

- Surveillance to detect the arrival of disease caused by the novel virus in Monterey County will be carried out according to guidelines provided by WHO and CDC.
- Case definition will be sent by the CDC and will include travel from the affected region in the world.
- Hospitalized cases of severe viral illness will have samples taken and tested for influenza .
- Obtain appropriate reagents from the VRDL to detect and/or identify the novel strain.
- Confirmation of the antigenic strains of suspected cases of the novel virus will be done by the Level B Lab in Santa Clara or the State VRDL. Transportation of samples will be arranged the Monterey County Epidemiology and Disease Control Unit and/or the Monterey County Public Health Laboratory.

**Vaccine and Pharmaceutical Delivery:** At this stage activities by MCHD will be limited to monitoring reports of the progress of the vaccine manufacturing and the testing of the novel virus' susceptibility to current anti-virals.

### **Emergency Response and Communications:**

- Local health care providers are kept apprised of geographic progress of the novel virus and progress on vaccines and anti-virals.
- Broadcast fax and community meetings are the methods to address concerns of the medical community and plan further actions.
- The Health Officer, or designee, keeps the public informed through press release and/or press conferences. Press release templates from the CDHS and CDC may be modified.

## L. PANDEMIC OPERATIONS – PANDEMIC ALERT STAGE

*Novel virus demonstrates sustained person-to-person transmission and causes multiple cases in the same geographic area.* **Novel virus alert** activities will be continued at a more advanced level, and other activities will be added.

### Surveillance:

- Surveillance to detect the arrival of disease caused by the novel virus in Monterey County will be carried out according to guidelines provided by WHO and CDC.
- The CDC will send a case definition that will include travel from the affected regions.
- Hospitalized cases of severe viral illness in Monterey County will have samples taken and tested for Influenza “A.”
- CDC or VRDL will send appropriate reagents to MCHD to detect and identify the novel strain.
- The MCHD **Mass Prophylaxis Plan** will be activated if enough vaccine is available.
- Update patient demographic information, in order to identify groups with increased risk.
- Inform surveillance partners of the need to increase specimen collection for detection of novel virus and alert laboratories to prepare for increased numbers of specimens.
- Recruit additional physicians to obtain influenza isolates. VRDL will distribute specimen collection kits to MCHD if necessary and facilitate sending isolates to VRDL.
- Recruit local pharmacies or large pharmaceutical (commercial) chains to participate in reporting antiviral prescriptions filled.
- Assess inventory of medical equipment and supplies (including ventilators, ICU equipment, oxygen saturation monitors, etc.), note and order what is needed.
- Develop contingency plans for procurement of laboratory equipment and supplies, and also for possible redirection and hiring of additional laboratory employees.
- The Director of CDHS will obtain authorization for special funding for additional laboratory testing.
- Explore re-certification of non-traditional labor pool and redirection of staff with appropriate skills to alleviate need for additional laboratory personnel, both at CDHS and MCHD.

**Vaccine and Pharmaceutical Delivery:** During the pandemic alert stage, vaccine may not yet be available for several months.

- MCHD Immunization Coordinator will maintain close contact/liaison with CDC and FDA to obtain information on plans for vaccine manufacture.
- The immunization coordinator will take the lead on influenza vaccines.
- Implement the plan for vaccine delivery and storage with partners and stakeholders.
- Work with local resources: VNA, clinics, hospitals, pharmacies, and merchants, to distribute vaccine to identified high-risk groups.
- If enough vaccine is available implement the mass prophylaxis plan.
- Use the Vaccines for Children Program distribution system for eligible children.
- Obtain latest CDHS recommendations for priority groups for vaccine allocation and

modify as necessary based on current surveillance data.

- Monitor the local supplies of antiviral and anti-microbials and address shortages with the CDC's SNS Program or through CDHS.
- Organize training using resources developed by CDC or CDHS for training/refresher course on vaccine administration techniques for persons who do not usually administer vaccines, but will be enlisted to do so in a pandemic.

### **Emergency Response and Communications:**

- Ensure communication between the MCHD and local emergency and medical management.
- Identify contact person for communication with CDHS, and CDC if necessary.
- The Health Officer, or his/her designee, will communicate with the press, broadcast media, public, and community physicians according to the **Risk Communication Plan**.
- Receive and modify if necessary, fact sheets from CDHS or CDC detailing responses to frequently asked questions, including the MCHD web site.
- Receive and process messages from the California Health Alert Network (HAN).
- Identify methods to address personnel and supply shortfalls.
- Plan for implementation of emergency medical treatment sites and temporary treatment locations.
- Issue guidelines on reducing influenza transmission in workplaces, clinical facilities, schools, and other institutions.
- Inform the local community of any "Travel Alerts" issued by the WHO or CDC.

## **M. PANDEMIC OPERATIONS – PANDEMIC IMMINENT STAGE**

*Novel virus causing unusually high rates of morbidity and mortality in widespread geographic areas.*

**Novel virus alert** and **pandemic alert** activities will be continued at a more advanced level, and other activities will be added.

### **Surveillance:**

- Consider local ordinance to make hospitalized Influenza "A" reportable.
- Assure that clinics and hospitals have the means to test for Influenza "A."
- Analyze state, national and world morbidity and mortality data to identify vulnerable populations within Monterey County and prioritize groups for vaccine allocation when the supply is limited.
- Consider organizing the medical community:
  - To describe unusual clinical syndromes.
  - To describe unusual pathologic features associated with fatal cases.
  - To conduct efficacy studies of vaccination or chemo prophylaxis.
  - To assess the effectiveness of control measures such as school/business closings.
- Maintain increased laboratory surveillance and other activities outlined previously in the **Pandemic Alert** section.

**Vaccine and Pharmaceutical Delivery:**

- Immunization Coordinator will keep the staff and community informed of the progress in obtaining influenza immunizations.
- Increase public information effort designed to prevent the spread of influenza and prevent hysteria including the provision of Spanish translations.
- If vaccine delivery is imminent activate the Mass Prophylaxis Plan.
- Obtain from the CDHS or CDC on the effectiveness and availability of antiviral and anti-microbial supplies.
- Meet with local health care providers to plan for the allocation of anti-viral and anti-microbial supplies.

**Emergency Response and Communications:**

- Notify the Operational Area EOC and Emergency Medical Services of the **Pandemic Imminent Stage**.
- MCDH will post updated information on web site, including Spanish translations.
- EMS will monitor the ability of hospitals and outpatient clinics to cope with increased patient loads.
- Implement public health education campaign with emphasis on the following:
  - Hand washing.
  - Stay home rather than be exposed to/spread the influenza virus.
  - Check on family, friends living alone.
  - Vaccination clinic locations.
  - Signs, symptoms including when to seek care.
- Encourage a telecommuting system, so more people can stay home.
- Conduct inventory of critical supplies/personnel.
- Implement mutual aid or other plans to address supply and personnel shortfalls.
- Implement plan for counseling/behavioral health services.

**N. PANDEMIC OPERATIONS – PANDEMIC STAGE**

*Further spread of influenza disease with involvement of multiple continents. Novel virus alert, pandemic alert, and pandemic imminent* activities will be continued at a more advanced level, and other activities will be added.

**Surveillance:**

- Continue to monitor selected statistics for mortality and morbidity data received from the inpatient diagnosis surveillance system.
- Continue to monitor reports from WHO, CDC, and CDHS on morbidity and mortality data.
- Laboratory surveillance will focus on sampling to detect antigenic variants and re-assortment of viruses that could limit the efficacy of vaccines or anti-virals.
- Personnel who are not incapacitated by influenza will be diverted to higher priority pandemic mitigation efforts.

**Vaccine and Pharmaceutical Delivery:**

- Use surveillance data to reassess risk factors to identify priority groups for immunization as vaccine availability changes.
- Monitor Vaccine Adverse Event Report for evidence of adverse reactions or medical considerations to the influenza vaccine.
- Monitor availability of anti-virals and reassess recommendations for administering anti-virals.

**Emergency Response and Communications:**

- All of the activities of the **Pandemic Imminent** stage and the following:
- Notify Operational Area EOC and County Leadership of the **Pandemic Stage**.
- Implement emergency medical treatment sites and temporary infirmary locations as needed.
- If law enforcement mutual aid system is overwhelmed, request the Operational Area EOC request the Governor, via GOES, to issue waiver to allow the National Guard and military to act as “emergency” law enforcement.
- If medical/health mutual aid system is overwhelmed, request health care workers through the Operational Area EOC and/or Regional Disaster Medical and Health Coordinator (RDMHC); the RDMHC and JEOC will request assistance through state-wide and federal resources .

**O. PANDEMIC OPERATIONS – SECOND WAVE**

*Reoccurrence of epidemic activity within several months or years following the initial waive of infection.*

**Surveillance:** Typically in a pandemic, the number of new cases of influenza peaks and then declines, giving the impression that the pandemic is over. Then within a few months, influenza incidence once again increases. State and local officials and health care providers need to remain vigilant for a return of the epidemic activity. This is especially difficult given that all personnel and supplies involved in responding to the epidemic will be exhausted by efforts to respond to the pandemic. The perceived “end of the pandemic” may be viewed as an opportunity to relax and recover. However, all essential functions should be restored to return to pandemic imminent status. Public health personnel who provide the data to CDHS DCDC will probably still be backlogged with reports, but should be encouraged to maintain extra staffing levels. All sources of surveillance data will need to be convinced that their contributions are still essential because of the likelihood of a second wave. If the decline in the number of cases occurs outside the normal influenza season, it will be necessary to explain the importance of maintaining vigilance because the second wave could occur at any time. Continue immunization efforts in lower risk groups as vaccine becomes available.

**Laboratory Surveillance:** This essential function should also return to pandemic imminent status while maintaining surveillance for possible new cases.

## APPENDIX-E1, ABBREVIATIONS AND ACRONYMS

CAHAN	California Health Alert Network
CDC	Centers for Disease Control and Prevention
CDHS	California Department of Health Services, Sacramento
CHDP	Child Health and Disabilities Prevention Program
CMA	California Medical Association
CPA	California Pharmacists Association
DCDC	Division of Communicable Disease Control, CDHS
DISB	Disease Investigations and Surveillance Branch, CDHS
DOC	Department Operations Center, Monterey County Health Department
DPRP	Disaster Preparedness and Response Plan, Monterey County
EMS	Emergency Medical Services, Monterey County
EMSA	Emergency Medical Services Agency, California
EOC	Emergency Operations Center, Salinas – Monterey County
EOP	Emergency Operations Plan, Monterey
EPO	Emergency Preparedness Office, CDHS
GOES	Governor’s Office of Emergency Services
IB	Immunization Branch, CDHS
JEOC	Joint Medical/Health Emergency Operations Center, Sacramento
LHDs	Local health departments
MCHD	Monterey County Health Department
MHOAC	Medical and Health Operational Area Coordinator, Monterey
NIMS	National Incident Management System
OES	Office of Emergency Services, Monterey
OPA	Office of Public Affairs, DHS
PIRP	Pandemic Influenza Response Plan, Monterey
REOC	Regional Emergency Operations Center, Oakland
RDMHC	Regional Disaster Medical/Health Coordinator
SEMS	Standardized Emergency Management System, California
SOC	State Warning Center, Sacramento
VAER	Vaccine Adverse Event Report
VFC	Vaccines for Children Program
VNA	Visiting Nurses Association
VRDL	Viral and Rickettsial Disease Laboratory, Richmond, California
WHO	World Health Organization

## APPENDIX-E2, PANDEMIC INFLUENZA – SUMMARY OF ACTIONS

### A. STAGE – ROUTINE MONITORING (PHASE 0)

#### WORLD HEALTH ORGANIZATION

- Four collaborating centers: London, Atlanta, Tokyo and Melbourne.
- There are 110 national collaborating laboratories in 79 countries.
- Maintains up-to-date summary reports on the WHO World Wide Web site (FluNet).
- Reporting in the *Weekly Epidemiological Record*; informing national influenza centers and health authorities.

#### CENTER FOR DISEASE CONTROL AND PREVENTION

- A network of sentinel physicians throughout the state report to CDC/ and DHS the percentage of patients, by age group, with ILI on weekly basis.
- Passive reporting of influenza outbreaks.

#### CALIFORNIA DEPARTMENT OF HEALTH SERVICES

- Kaiser and local health department laboratories collect specimens and forward isolates to VRDL for testing.
- Weekly reports of viral isolates from 19 laboratories throughout the State.
- Inpatient Hospitalizations from (N&S) Kaiser “influenza-like-illness”.
- Weekly reports of influenza antiviral prescriptions in (N&S) Kaiser pharmacies.
- Passive reporting of influenza outbreaks.

#### MONTEREY COUNTY HEALTH DEPARTMENT

- Meet with medical, public health and emergency response partners to develop prioritization.:
  - Local Hospitals and urgent care clinics report emergency visits and cases of ILI to Health Department; Passive reporting of influenza outbreaks.
  - Ensure local laboratory capacity is in place to support routine surveillance, including testing for influenza and other common respiratory agents that may cause influenza-like illness.
- Coordinate with the state VRDL to identify local or regional laboratories capable of influenza sub-typing to monitor for new pandemic strains of influenza.
- Develop diagnostic testing algorithms and protocols, if appropriate, for suspect influenza cases including other agents that may cause pneumonia of unclear etiology during the inter-pandemic period (e.g. respiratory syncytial virus (RSV), parainfluenza virus, *Chlamydia pneumoniae*, *Mycoplasma pneumoniae* and *Legionella pneumophila*.)
- Coordinate with your local laboratory and the state VRDL regarding procedures to properly collect, package, and ship clinical specimens and identify the appropriate laboratories to send specimens for testing.
- Ensure that protocols for specimen handling, collection, and packaging during transport and testing are developed and address possible need for BSL-2 or BSL-3 precautions. Also ensure that personnel are trained in the use of personal protective

equipment (PPE) and appropriate infection control procedures.

## ***B. STAGE – ROUTINE VACCINE DELIVERY (PHASE 0)***

### **WORLD HEALTH ORGANIZATION**

- Surveillance to identify the antigenic “drift.”
- The selection of new strains which have changed enough to cause an epidemic among certain populations.

### **CENTER FOR DISEASE CONTROL AND PREVENTION**

- Work with vaccine manufacturers to produce vaccine against the identified strains.

### **CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Immunization Branch purchases influenza vaccine for local health departments.

### **MONTEREY COUNTY HEALTH DEPARTMENT**

- Administers vaccine to identified high-risk groups, defined by enabling legislation by the U.S. Public Health Service.(~10% of total).
- Private physicians, pharmacies, VNA, etc. Purchase vaccine from distributor.
- Vaccine for Children Program (VFC) provides vaccine to qualified children.

## ***C. STAGE – NOVEL VIRUS ALERT (PHASE 0 – LEVEL 1)***

### **WORLD HEALTH ORGANIZATION**

- Assist the United States with initial cases, develop a case definition; determine the prevalence of antibody in the general population; promote enhanced surveillance; develop vaccine and reagents necessary to determine the identity of new influenza strains.
- Plan for pre-clinical and clinical trials of vaccine.

### **CENTER FOR DISEASE CONTROL AND PREVENTION**

- Works with WHO in the development of reagents and vaccine.
- Develop strategies for the most efficient use of newly developed vaccine.

### **CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- VRDL laboratory implements its novel virus surveillance plan.
- Provide reagents and identifying sentinel physicians.

### **MONTEREY COUNTY HEALTH DEPARTMENT**

- Inform the local medical community, work with local providers to obtain appropriate samples for the State or reference laboratory.
- Maintain, and continue to enhance and refine the existing influenza surveillance infrastructure during the inter-pandemic period.
- Increase the number of sentinel physicians reporting in your jurisdiction to enhance inter-pandemic influenza surveillance.

## **D. STAGE – PANDEMIC ALERT (PHASE 0 – LEVEL 2)**

### **WORLD HEALTH ORGANIZATION**

- Disseminate the case definition for surveillance for the new virus sub-type.
- Distribute to manufacturers of developed vaccine.

### **CENTER FOR DISEASE CONTROL AND PREVENTION**

- Recruits manufacturers for the new influenza vaccine.

### **CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Plan for the distribution of vaccine to local health departments.

### **MONTEREY COUNTY HEALTH DEPARTMENT**

#### **Surveillance:**

- Surveillance to detect the arrival of disease caused by the novel virus in Monterey County will be carried out according to guidelines provided by WHO and CDC.
- The CDC will send a case definition that will include travel from the affected regions.
- Hospitalized cases of severe viral illness in Monterey County will have samples taken and tested for Influenza “A.”
- CDC or VRDL will send appropriate reagents to MCHD to detect and identify the novel strain.
- The MCHD **Mass Prophylaxis Plan** will be activated if enough vaccine is available.
- Update patient demographic information, in order to identify groups with increased risk.
- Inform surveillance partners of the need to increase specimen collection for detection of novel virus and alert laboratories to prepare for increased numbers of specimens.
- Recruit additional physicians to obtain influenza isolates. VRDL will distribute specimen collection kits to MCHD if necessary and facilitate sending isolates to VRDL.
- Recruit local pharmacies or large pharmaceutical (commercial) chains to participate in reporting antiviral prescriptions filled.
- Assess inventory of medical equipment and supplies (including ventilators, ICU equipment, oxygen saturation monitors, etc.), note and order what is needed.
- Develop contingency plans for procurement of laboratory equipment and supplies, and also for possible redirection and hiring of additional laboratory employees.
- The Director of CDHS will obtain authorization for special funding for additional laboratory testing.
- Explore re-certification of non-traditional labor pool and redirection of staff with appropriate skills to alleviate need for additional laboratory personnel, both at CDHS and MCHD.

**Vaccine and Pharmaceutical Delivery:** During the pandemic alert stage, vaccine may not yet be available for several months.

- MCHD Immunization Coordinator will maintain close contact/liaison with CDC and FDA to obtain information on plans for vaccine manufacture.
- The immunization coordinator will take the lead on influenza vaccines.
- Implement the plan for vaccine delivery and storage with partners and stakeholders.
- Work with local resources: VNA, clinics, hospitals, pharmacies, and merchants, to distribute vaccine to identified high-risk groups.
- If enough vaccine is available implement the mass prophylaxis plan.
- Use the Vaccines for Children Program distribution system for eligible children.
- Obtain latest CDHS recommendations for priority groups for vaccine allocation and modify as necessary based on current surveillance data.
- Monitor the local supplies of antiviral and anti-microbials and address shortages with the CDC's SNS Program or through CDHS.
- Organize training using resources developed by CDC or CDHS for training/refresher course on vaccine administration techniques for persons who do not usually administer vaccines, but will be enlisted to do so in a pandemic.

**Emergency Response and Communications:**

- Ensure communication between the MCHD and local emergency and medical management.
- Identify contact person for communication with CDHS, and CDC if necessary.
- The Health Officer, or his/her designee, will communicate with the press, broadcast media, public, and community physicians according to the Risk Communication Plan.
- Receive and modify if necessary, fact sheets from CDHS or CDC detailing responses to frequently asked questions, including the MCHD web site.
- Receive and process messages from the California Health Alert Network (HAN).
- Identify methods to address personnel and supply shortfalls.
- Plan for implementation of emergency medical treatment sites and temporary treatment locations.
- Issue guidelines on reducing influenza transmission in workplaces, clinical facilities, schools, and other institutions.
- Inform the local community of any "Travel Alerts" issued by the WHO or CDC.

**E. STAGE – PANDEMIC IMMINENT (PAHSE 1 – LEVEL 3)**

**WORLD HEALTH ORGANIZATION**

- Make recommendations for composition and use (doses and schedules) of vaccines and organize consultations to facilitate efficient vaccine production and distribution..
- Issue guidance on use of available anti-viral drugs against the new virus.
- Mobilize resources for countries with limited capacities.

### CENTER FOR DISEASE CONTROL AND PREVENTION

- Initiate national pandemic plans that are undated to account for the characteristics of the new sub-type and knowledge of vaccine availability.
- Make recommendations for composition and use (doses and schedules) of vaccines and organize consultations to facilitate efficient vaccine production and distribution..
- Issue guidance on use of available anti-viral drugs against the new virus.

### CALIFORNIA DEPARTMENT OF HEALTH SERVICES

- Initiate national pandemic plans that are undated to account for the characteristics of the new sub-type and knowledge of vaccine availability.
- Make recommendations for composition and use (doses and schedules) of vaccines and organize consultations to facilitate efficient vaccine production and distribution..
- Issue guidance on use of available anti-viral drugs against the new virus.

### MONTEREY COUNTY HEALTH DEPARTMENT

#### **Surveillance:**

- Consider local ordinance to make hospitalized Influenza “A” reportable.
- Assure that clinics and hospitals have the means to test for Influenza “A.”
- Analyze state, national and world morbidity and mortality data to identify vulnerable populations within Monterey County and prioritize groups for vaccine allocation when the supply is limited.
- Consider organizing the medical community:
  - To describe unusual clinical syndromes.
  - To describe unusual pathologic features associated with fatal cases.
  - To conduct efficacy studies of vaccination or chemo prophylaxis.
  - To assess the effectiveness of control measures such as school/business closings.
- Maintain increased laboratory surveillance and other activities outlined previously in the **Pandemic Alert** section.

#### **Vaccine and Pharmaceutical Delivery:**

- Immunization Coordinator will keep the staff and community informed of the progress in obtaining influenza immunizations.
- Increase public information effort designed to prevent the spread of influenza and prevent hysteria including the provision of Spanish translations.
- If vaccine delivery is imminent activate the **Mass Prophylaxis Plan**.
- Obtain from the CDHS or CDC on the effectiveness and availability of antiviral and anti-microbial supplies.
- Meet with local health care providers to plan for the allocation of anti-viral and anti-microbial supplies.

**Emergency Response and Communications:**

- Notify the Operational Area EOC and Emergency Medical Services of the **Pandemic Imminent Stage**.
- MCDH will post updated information on web sited, including Spanish translations.
- EMS will monitor the ability of hospitals and outpatient clinics to cope with increased patient loads.
- Implement public health education campaign with emphasis on the following:
  - Hand washing.
  - Stay home rather than be exposed to/spread the influenza virus.
  - Check on family, friends living alone.
  - Vaccination clinic locations.
  - Signs, symptoms including when to seek care.
- Encourage a telecommuting system, so more people can stay home.
- Conduct inventory of critical supplies/personnel.
- Implement mutual aid or other plans to address supply and personnel shortfalls.
- Implement plan for counseling/behavioral health services.

**F. STAGE – PANDEMIC (PHASE 2 – LEVEL 4)**

**WORLD HEALTH ORGANIZATION**

- Keep international community informed.
- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among nations.
- Update guidance on vaccine and anti-viral drugs.

**CENTER FOR DISEASE CONTROL AND PREVENTION**

- Update guidance on vaccine and anti-viral drugs
- Assess the effectiveness of control measures to reduce the spread of influenza infection.
- Mobilize resources and materials

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Update guidance on vaccine and anti-viral drugs
- Assess the effectiveness of control measures to reduce the spread of influenza infection.
- Mobilize resources and materials

**MONTEREY COUNTY HEALTH DEPARTMENT**

**Surveillance:**

- Continue to monitor selected statistics for mortality and morbidity data received from the inpatient diagnosis surveillance system.
- Continue to monitor reports from WHO , CDC, and CDHS on morbidity and mortality data.
- Laboratory surveillance will focus on sampling to detect antigenic variants and re-assortment of viruses that could limit the efficacy of vaccines or anti-virals.
- Personnel who are not incapacitated by influenza will be diverted to higher priority pandemic mitigation efforts.

**Vaccine and pharmaceutical delivery:**

- Use surveillance data to reassess risk factors to identify priority groups for immunization as vaccine availability changes.
- Monitor Vaccine Adverse Event Report for evidence of adverse reactions or medical considerations to the influenza vaccine.
- Monitor availability of anti-virals and reassess recommendations for administering anti-virals.

**Emergency Response and Communications:**

- Notify Operational Area EOC and County Leadership of the **Pandemic Stage**.
- Implement emergency medical treatment sites and temporary infirmary locations as needed.
- If law enforcement mutual aid system is overwhelmed, request the Operational Area EOC request the Governor, via GOES, to issue waiver to allow the National Guard and military to act as “emergency” law enforcement.
- If medical/health mutual aid system is overwhelmed, request health care workers through the Operational Area EOC and/or Regional Disaster Medical and Health Coordinator (RDMHC); the RDMHC and JEOC will request assistance through state-wide and federal resources .

**G. STAGE – PANDEMIC INTERMISSION (PHASE 3 – LEVEL 4)**

**WORLD HEALTH ORGANIZATION**

- Keep international community informed.
- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among nations.
- Update guidance on vaccine and anti-viral drugs.

**CENTER FOR DISEASE CONTROL AND PREVENTION**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among states.

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among counties and state regions.

**MONTEREY COUNTY HEALTH DEPARTMENT**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation with the county and region.

**H. STAGE – SECOND WAVE (PHASE 4 – LEVEL 5)**

**WORLD HEALTH ORGANIZATION**

- Keep international community informed.
- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among nations.
- Estimate remaining needs for vaccines and anti-viral drugs.

**CENTER FOR DISEASE CONTROL AND PREVENTION**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among states.
- Estimate remaining needs for vaccines and anti-viral drugs.

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation among counties and state regions.
- Estimate remaining needs for vaccines and anti-viral drugs.

**MONTEREY COUNTY HEALTH DEPARTMENT**

- Continue to monitor and report the global spread and impact of the virus; encourage cooperation within county and region.
- Estimate remaining needs for vaccines and anti-viral drugs.

***I. STATE – PANDEMIC OVER (PHASE 5 – LEVEL 6)*****WORLD HEALTH ORGANIZATION**

- Assessment of overall impact of the pandemic.
- Evaluation of response to pandemic.
- Update **WHO Influenza Pandemic Plan**.

**CENTER FOR DISEASE CONTROL AND PREVENTION**

- Assessment of overall impact of the pandemic.
- Evaluation of response to pandemic.
- Update **CDC Influenza Pandemic Plan**.

**CALIFORNIA DEPARTMENT OF HEALTH SERVICES**

- Assessment of overall impact of the pandemic.
- Evaluation of response to pandemic.
- Update **CDHS Influenza Pandemic Plan**.

**MONTEREY COUNTY HEALTH DEPARTMENT**

- Assessment of overall impact of the pandemic.
- Evaluation of response to pandemic.
- Update MCHD **Pandemic Influenza Response Plan**.