The Santa Barbara County Pandemic Influenza Strategy Plan



March 2007



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Executive Summary: Introduction

Under the direction and leadership of the Santa Barbara County Board of Supervisors, the County has created a Pandemic Influenza Strategy Plan to help ensure a coordinated, countywide response in the event of a pandemic flu outbreak. This Executive Summary provides a brief synopsis of the Plan while the companion Plan Overview explains the Plan's components in greater detail.

The Pandemic Influenza Strategy Plan represents a comprehensive multidepartmental effort under the direction of the County Executive Officer and led by the County's Public Health Department and the

"Health experts generally agree that conditions worldwide are again favoring the appearance of a new pandemic strain of influenza."

Office of Emergency Services. The entire body of work referenced here is the culmination of more than 9,250 hours of work by more than 75 staff representing all 23 County departments, several outside agencies and other non-profit groups during the past nine months.

From inception, it has been the overriding goal of the Plan's Project Team to develop a comprehensive blueprint that provides for both the continuity of County government and the protection of the County's citizens during a flu pandemic. As such, it is important to note that the Plan is a dynamic, living document that will be updated as appropriate by County staff to incorporate new information, guidelines and strategies—such as the recent report issued in February 2007 by the federal Centers for Disease Control—in order to maintain the best and most accurate response plan to pandemic flu.

Description and Brief History of a Pandemic

An influenza pandemic is a worldwide outbreak of disease that occurs when a new influenza virus appears or "emerges" in the human population, causes serious illness, and then spreads easily from person to person. Pandemics are different and far more deadly than seasonal outbreaks of influenza.

Influenza occurs routinely worldwide each year, causing an average of 36,000 deaths annually in the United States. Nearly 40 years have passed since the previous influenza pandemic occurred. Health experts generally agree that conditions worldwide are again favoring the appearance of a new influenza pandemic. Planning at all levels of government and society is being done now to prepare for this very large-scale event.



During the last 400 years, there have been 12 known influenza pandemics that have occurred, on average, every 40 to 50 years, including three pandemics in the last century. The best known was the influenza pandemic of 1918 (the so-called "Spanish Flu") which was especially virulent, killing a large number of young, otherwise healthy

adults. It is estimated that this pandemic caused more than 500,000 deaths in the United States and more than 40 million deaths worldwide.



By comparison, if a major, Spanish Flu–like pandemic struck today, health experts predict between 45 million to 100 million people in the U.S.–about one-third of our current population–would fall ill and about 3 million to 9 million people would most likely die (a projected death rate of 1 percent to 3 percent). For Santa Barbara County, health experts estimate as many as 60,000 to 140,000 people could become ill and 4,000 to 12,000 people may die in a major pandemic here based on the current population of 401,000 residents.

Although the subsequent pandemics in 1957-58 and 1968-69 caused far fewer fatalities in the U.S., 70,000 and 34,000 deaths respectively, the pandemics caused significant morbidity and mortality around the world. Health experts generally agree that it is not a matter of "if" we will

experience another pandemic, but "when" and if the next pandemic will be as severe as the 1918 Spanish Flu.

Purpose and Goals of the Plan

The County's Pandemic Influenza Strategy Plan develops a coordinated countywide strategy through shared responsibility. It has three main purposes:

- Serve as a planning guide for the County Operational Area Disaster System and County departments to prepare and respond to a pandemic.
- 2. Provide guidance and tools to the many partners in the community who will be involved in preparing for and responding to a pandemic.
- 3. Guide activities to educate and prepare the general public regarding the public health threat.

"Health experts generally agree that it is not a matter of **if** we will experience another pandemic, but **when**..."

Ultimately, when the plan is implemented, the primary goal is to minimize the impact of the pandemic in Santa Barbara County and to protect the public's health by achieving the following goals:

- 1. Limiting the number of illnesses and deaths.
- 2. Preserving continuity of essential government functions.
- 3. Minimizing social disruption.
- 4. Reducing economic losses.

Organization and Scope of the Plan

Scope of the Plan and its Relationship to Other Plans

The scope of the Pandemic Influenza Strategy Plan includes actions defined in each of the response plans mentioned below, but makes them operational and specific to the context of a pandemic. Pandemic response efforts will likely trigger the activation of other plans external to the County, including the hospitals' infection control, surge capacity plans and continuity of operations plans for local governments and businesses.

The Pandemic Strategy Influenza Plan is an annex to the Santa Barbara County Emergency Operational Plan. The Pandemic Influenza Strategy Plan will be implemented in tandem with the Public Health Department's Emergency Response Plan and the Sheriff Department's Emergency Response Plan. Several portions of the existing Public Health Department Emergency Response Plan are particularly relevant to any pandemic response. These include:

- 1. Risk Communication Plan
- 2. Disease Surveillance and Disease Outbreak Investigation
- 3. Strategic National Stockpile Plan
- 4. Mass Prophylaxis Protocol & Procedures
- 5. Isolation and Quarantine Protocol



Critical Capacity Modules

The Pandemic Flu Strategy Plan is organized in the format of 14 Critical Capacity Modules (CCM). Each CCM encompasses a set of actions that are **critical for effective preparedness and response** in the event of pandemic influenza. The 14 modules included in the plan are:

 Legal Authority – analyzes the local, state and federal statutes that authorize necessary public health and law enforcement actions to prevent the introduction, transmission, or spread of communicable diseases.

"Pandemic response efforts will likely trigger the activation of other plans external to the County, including the hospitals' infection control, surge capacity plans and continuity of operations plans for local governments and businesses."

- Surveillance (includes laboratory) serves as an early warning system to detect outbreaks in both human and bird/animal populations that could lead to a pandemic. This module outlines surveillance activities and action established to track and monitor a pandemic's impact on public health (tracking cases), and disease activity to identify populations that are severely affected.
- Limiting the Spread of Disease (includes 3. personnel protective equipment, PPE) implements infection control guidelines including personnel protective equipment for responders, social distancing strategies (e.g., school closures, cancellation of large public

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gatherings such as theaters, travel restrictions and culling infected bird populations).

- Risk Communication and Public Education – identifies communications, public education and outreach strategies used to disseminate key messages to the general public, news media, health care providers, and other sectors of the community before, during and after a pandemic influenza.
- 5. Healthcare Systems addresses the role and coordinated strategy of the local health care system, including the Public Health Department, hospitals, clinics and private providers to prepare and provide for pandemic influenza patients at critical capacities. These efforts will be coordinated through state and federal health officials and the Centers for Disease Control.
- 6. Clinical Guidelines and Disease Management (includes vaccine and antiviral distribution) - addresses the ability to provide effective treatment and disease management of individuals who become infected with a strain of pandemic influenza and also describes plans for the distribution and use of antiviral drugs and vaccines for treatment and prophylaxis (prevention).



- Alcohol, Drug & Mental Health Psychosocial Support – addresses mental health and social support strategies.
- 8. Security & Law Enforcement addresses law enforcement strategies and plans to be implemented for community protection and security during a pandemic while operating under public health restrictions.



- 9. Preparing Essential Services for Continuity of Operations (local government, businesses, schools) ensures continuity of priority government services and that critical systems have plans developed to function within the constraints of a pandemic.
- 10. Decedent & Coroner Issues provides strategies necessary to compassionately respond to a large number of pandemic-related deaths while minimizing the impact to survivors.
- 11. Volunteers & Medical Reserve Corps identifies the strategy for coordinating volunteers, including establishment of a Medical Reserve Corps that will be vital to assist with the County's response to a pandemic.

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- 12. Communications and Information Technology – identifies and meets the hardware needs and requirements of the overall pandemic response and provides the communications equipment and information technology necessary to maintain redundant communication systems during all phases of а pandemic.
- Resources, People, Places & Equipment – addresses the logistical component (people, places, equipment) needed to support the County as it mobilizes the response to a pandemic.



14. Command Structure – following established guidelines under the State's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS), this module addresses the County's command structure during a pandemic response.

> "County government has a significant leadership role in pandemic influenza response."

The Plan identifies each CCM, provides operational details, and, as appropriate, the actions are organized by pandemic period, (alert or pandemic) to emphasize what actions need to occur in each period. Tools are also provided that will be implemented in the event that the plan is activated.

Conclusion

County government has significant а leadership role in pandemic influenza Development of the Plan response. through the coordination efforts of 75 county employees and partner agencies, has established a solid foundation for improved coordination and intervention by all participants, not only in response to a pandemic but for all major disaster responses. Implementation of this plan enables the County's departments to fulfill pre-identified important roles and responsibilities for a coordinated strategy aimed at protecting the public's health and minimizing the impact of a pandemic influenza in Santa Barbara County.



Plan Overview



"Responding Together

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Coordinated Responsibilities for Preparedness and Response

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City Government

Colleges and Universities

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Environmental Health

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Mental Health

News Media

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Module1 - Legal Authority

Module 2 - Surveillance

Module 3 - Limiting the Spread of Disease

Module 4 - Risk Communication and Public Education

Module 5 - Healthcare Systems

Module 6 - Clinical Guidelines and Disease Management

Module 7 - Alcohol, Drug & Mental Health Psychosocial Support

Module 8 - Security & Law Enforcement

Module 9 - Preparing Essential Services for Continuity of Operations

Module 10 - Decedent & Coroner Issues

Module 11 - Volunteers & Medical Reserve Corps

Module 12 - Communications and Information Technology

Module 13 - Resources, People, Places & Equipment

Module 14 - Command Structure

Acknowledgements

Description and History of a Pandemic

An influenza pandemic is a worldwide outbreak of disease that occurs when a new influenza virus appears or "emerges" in the human population, causes serious illness, and then spreads easily from person to person worldwide. Pandemics are different from seasonal outbreaks of influenza. Seasonal outbreaks are caused by subtypes of influenza viruses that already circulate among people, whereas pandemic outbreaks are caused by entirely new subtypes to which the population has no immunity because the subtype has either never circulated among people, or has not circulated for a long time.

Influenza occurs routinely worldwide each year, causing an average of 36,000 deaths annually in the United States. Nearly 40 years have passed since the last influenza

"Influenza occurs routinely worldwide each year, causing an average of 36,000 deaths annually in the United States."

pandemic. Conditions worldwide are again favoring the appearance of a new pandemic strain of influenza. Planning at all levels of society must quickly begin to prepare for this potentially large-scale event.

Influenza viruses experience frequent slight changes to their genetic structure. Occasionally, however, they undergo a major change in genetic composition. It is this major genetic "shift" that creates a "novel" virus and the potential for a pandemic. The creation of a novel virus means that most, if not all, people in the world will have never been exposed to the new strain and have no immunity. A new vaccine must be developed to protect the population from the new virus strain, a process that takes 6-9 months. During this time, many people are likely to become infected.

Over the last 400 years, there have been 12 influenza pandemics, three of them during the last century. The influenza pandemic of 1918 was especially virulent, killing a large number of young, otherwise healthy adults. The pandemic caused more than 500,000 deaths in the United States and more than 40 million deaths around the world. Subsequent pandemics in 1957-58 and 1968-69 caused far fewer fatalities in the U.S., 70,000 and 34,000 deaths respectively, but caused significant morbidity and mortality around the world.

Estimates of Local Morbidity and Mortality

Using estimates from the 1968-69 minor pandemic years, the Centers for Disease Control and Prevention (CDC) estimates that in the U.S. alone, an influenza pandemic could infect up to 200 million people and cause between 100,000 and 200,000 deaths. Scientists and health officials throughout the world predict that more influenza pandemics will occur in the 21st century.

To maximize our level of readiness in Santa Barbara County, we are planning for a more serious scenario similar to the 1918 "major pandemic". The Public Health Department and the Health Officer are responsible for the overall public health for the entire county, including all of the cities and is assuming that 35% of Santa Barbara County's 401,000 population, or 140,000 people, will become clinically ill over the course of a 12 to 24-month pandemic. In a

normal flu year, 5-10% of the population will become ill, and of those who become ill .01% will die. If we assume a death rate, base on World Health Organization (WHO) of 1 % (consistent with the 1918 Spanish Flu), then we could possibly expect 4,000 deaths. Given the current greater than 50% case fatality rate of H5N1, we are including estimates up to 3% case-fatality rate, or possibly up to 12,000 deaths.

Impact of Influenza during a typical season - U.S. and Santa Barbara County Population data is from the U.S. census 2007 projections				
	Population	Clinically III (5 – 10%)	Hospitalized (.0610%)	Deaths (.00601%)
U.S.	301 million	15 – 30 million	180,000 - 300,000	18,000 - 30,000
Santa Barbara County	401 thousand	20,000 - 40,000	240 – 400	24 – 40



Potential Impact of a 1969-like "minor" Pandemic - U.S. and Santa Barbara County				
	Population	Clinically III (10-20%)	Hospitalized (.1220%)	Deaths % (.0307%)
U.S.	301 million	30 – 60 million	360,000 - 600,000	90,000 – 210,000
Santa Barbara County	401 thousand	40,000 - 80,000	480 – 800	120 – 280

Potential Impact of a 1918-like "major pandemic" Pandemic - U.S. and Santa Barbara County				
	Population	Clinically III (15 – 35%)	Hospitalized (5-10%)	Deaths (1-3%)
U.S.	301 million	45 – 100 million	15 – 29 million	3.0 – 8.9million
Santa Barbara County	401 thousand	60,000 - 140,000	20,000 - 40,000	4,000 - 12,000



Several characteristics of an influenza pandemic differentiate it from other public health emergencies. First, it has the potential to cause illness in a very large number of people, overwhelming the health care system. A pandemic will also jeopardize essential community services by causing high levels of absenteeism in critical positions in every sector of the workforce. Basic services, such as health

"Basic services, such as health care, law enforcement, fire, emergency response, communications, transportation, and utilities could be disrupted during a pandemic."

care, law enforcement, fire, emergency response, communications, transportation, and utilities could be disrupted during a pandemic. Finally, the pandemic, unlike many other emergency events, will last for months rather than days or weeks. Supply chains for essential items such as food, water, and other emergency provisions will be compromised. Therefore, it is critically important to have supplies purchased and stored ahead of time.

Classification of Pandemic Influenza

The World Health Organization (WHO) has developed а worldwide influenza preparedness plan that includes а classification system for guiding planning and response activities. This classification system is comprised of six phases of increasing public health risk associated with the emergence and spread of a new influenza virus subtype. The Director General of WHO formally declares the current global pandemic phase and adjusts phase level to correspond with the pandemic conditions around the world. For global influenza each phase. the preparedness plan identifies response measures WHO will take, and recommends actions that countries around the world should implement. As of the writing of this plan (February

2007), we are at Pandemic Alert, Phase 3 according to WHO, identified in bold below.

Pandemic Phases

Public Health Goals

Interpandemic Period	
Phase 1 – No new influenza virus subtypes detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection or disease is considered low.	Strengthen influenza pandemic preparedness at all levels.
Phase 2 – No new influenza virus subtypes detected in humans. However, a circulating animal influenza virus subtype poses substantial risk of human disease.	Minimize the risk of transmission to humans; detect and report such transmission rapidly if it occurs.
Alert Period	
Phase 3 – Human infection(s) are occurring with a new subtype, but no human-to-human spread, or at most rare instances of spread to a close contact.	Ensure rapid characterization of the new virus subtype and early detection, notification and response to additional cases.
Phase 4 – Small cluster(s) of human infection with limited human-to-human transmission but spread is highly localized suggesting that the virus is not well adapted to humans.	Contain the new virus within limited foci or delay spread to gain time to implement preparedness measures, including vaccine development.
Phase 5 – Larger cluster(s) of human infection but human-to-human spread is localized, suggesting that the virus is becoming increasingly better adapted to humans, but may not yet be fully transmissible (substantial pandemic risk).	Maximize efforts to contain or delay spread to possibly avert a pandemic, and to gain time to implement response measures.
Pandemic Period	
Phase 6 – Pandemic is declared. Increased and sustained transmission in the general population.	Minimize the impacts of the pandemic.

Influenza pandemics generally occur in waves with 3 to 9 months between waves. This cycle begins with a spike in cases and is followed by a drop and, then, resurgence of cases. The 1918 pandemic had three waves, while the 1958 and 1968 pandemics each had two waves. The reason for the wave behavior is not known. Therefore, the 140,000 illnesses that might occur during a major pandemic in Santa Barbara County would not occur evenly over the course of the outbreak but, rather, in several unpredictable waves.

Planning Assumptions

Due to the uncertainty about the timing, trajectory, and ultimate impact of a pandemic flu in Santa Barbara County, the following assumptions underlie the contents of this preparedness and response plan. These assumptions include potential scenarios and impacts in the context of Santa Barbara County.



1. An influenza pandemic will result in the rapid spread of infection with outbreaks throughout the world. Communities across the state and the country may be impacted simultaneously. Santa Barbara County will not be able to rely on timely or effective mutual aid resources, State or Federal assistance to support local response efforts.

- 2. An influenza pandemic may occur in waves and last for 12 to 24 months.
- 3. Residents will be required to stay in their homes for a significant period during an influenza pandemic; thus, residents will need public information, education and tools so they are prepared to take responsibility for basic needs (food, water, prescription and over-the-counter medications, etc.).
- Antiviral medications will be in extremely short supply. Administration of local supplies of antiviral medications will be prioritized by Santa Barbara County Public Health Department.
- A vaccine for the pandemic influenza strain will likely not be available for 6 to 8 months following the emergence of a novel virus.
- 6. The number of ill people requiring outpatient medical care and hospitalization will overwhelm the local health care system. In other words, the normal amount and level of hospital care will not be available.
 - a. Hospitals and clinics will have to modify their operational structure to respond to high patient volumes and maintain functionality of critical systems.
 - b. The health care system will have to respond to increased demands for service while the medical workforce experiences 25-35% absenteeism due to illness or caring for ill family members.
 - c. Demand for inpatient beds and assisted ventilators could increase

by ten fold or more and patients will need to be prioritized for services.

- d. There will be tremendous demand for urgent care services.
- e. Hospital infection control measures specific to management of large numbers of influenza patients will need to be developed and implemented.
- f. The health system will need to develop alternative care sites to relieve demand at hospitals.
- g. Emergency Medical Service responders will face extremely high call volumes, and may face 25% -35% reduction in available staff.
- h. The number of fatalities will overwhelm the resources of the Coroner Office, morgues and funeral homes.
- i. The demand for home care and social services will increase dramatically.
- 7. There will likely be significant disruption of public and privately owned critical infrastructure including transportation, commerce, utilities, public safety and communications; thus, planning for continuity of operations is essential.
- 8. Social distancing strategies aimed at reducing the spread of infection such as closing schools, community centers, and other public gathering points and canceling public events will likely be implemented during a pandemic.
- 9. Risk Communication will be critically important during all phases of planning and implementation of a Pandemic Influenza Response.
- 10. The response to Pandemic Influenza will operate under the Standardized

Emergency Management System (SEMS) and the National Incident Management System (NIMS) through FEMA.



Purpose and Goals of the Plan and Strategy

This pandemic preparedness and response plan aims to develop a coordinated countywide strategy through shared responsibility. It has three main purposes:

- 1. Serve as a planning guide for the County Operational Area and County departments to prepare and respond to a pandemic.
- 2. Provide guidance and tools to the many partners in the community who will be involved in preparing for and responding to a pandemic.
- 3. Guide activities to educate and prepare the general public regarding this public health threat.

Ultimately, when the plan is implemented, the intention is to minimize the impact of the pandemic in Santa Barbara County and to protect the public's health by achieving these goals:

- 1. Limit the number of illnesses and deaths.
- 2. Preserve continuity of essential government functions.
- 3. Minimize social disruption.
- 4. Minimize economic losses.

Organization and Scope of the Plan

Scope of the Plan and its Relationship to Other Plans

The scope of the Pandemic Strategy Plan includes actions defined in each of the plans mentioned below, but makes them operational and specific to the pandemic flu context. Pandemic flu response efforts will likely trigger the activation of plans external to the County, including the hospitals infection control and surge capacity plans, business continuity of operations plans, government continuity of operations plans, etc.

The Pandemic Flu Strategy Plan is an annex to the Santa Barbara County Emergency Operational Plan. The Pandemic Flu Strategy Plan will be implemented in tandem with the Public Health Department Emergency Response Plan and the Sheriff's Emergency Response Plan. The Santa Barbara County Public Health Department, led by the Health Officer, serves as the lead authority for a Pandemic response. Several portions of the existing Public Health Department Emergency Response Plan are particularly relevant to pandemic flu response. These include:

- 1. Risk Communication Plan
- 2. Disease Surveillance and Disease Outbreak Investigation
- 3. Strategic National Stockpile Plan
- 4. Mass Prophylaxis Plan
- 5. Isolation and Quarantine Procedures

Critical Capacity Modules

The Pandemic Strategy Plan is presented in the format of critical capacity modules (CCM). Each CCM encompasses a set of actions that are **critical for effective preparedness and response** in the event of pandemic influenza. The fourteen modules included in the plan are:

- 1. Legal authority
- 2. Surveillance (includes laboratory)
- 3. Limiting the Spread of Disease (includes personnel protective equipment, PPE)
- 4. Risk Communication and Public Education
- 5. Healthcare Systems
- 6. Clinical Guidelines and Disease Management (includes vaccine and antiviral distribution)
- 7. Alcohol, Drug & Mental Health Psychosocial Support
- 8. Security & Law Enforcement
- 9. Preparing Essential Services for Continuity of Operations
- 10. Decedent/Coroner Issues
- 11. Volunteers & Medical Reserve Corps
- 12. Communications and Information Technology
- 13. Resources, People, Places & Equipment
- 14. Command Structure

The plan summary identifies each Critical Capacity Module (CCM) and provides an introduction to the topic, desired outcomes and actions completed. The CCM in the Pandemic Strategy Plan provide operational detail, and as appropriate, the actions are organized by pandemic period, alert or pandemic, to emphasize what actions need to occur in each period. Tools are also provided that will be implemented in the event that the plan is activated.

Coordinated Responsibilities for Preparedness and Response

The Santa Barbara County Office of Emergency Services and the Public Health Department are the lead agencies involved in planning and preparing for pandemic influenza and responding to the pandemic when it occurs as it relates largely to medical/health issues. Implementation of this plan will enable County Department's to significant fulfill their roles and responsibilities for a coordinated strategy aimed at protecting the public's health and minimizing the impact of the pandemic influenza in Santa Barbara County.

The Santa Barbara County government will have various important roles. As an employer and provider of services, county government has developed continuity of operations plans to protect the health and safety of its employees and customers and to minimize disruption for its delivery of essential services. County government also plays a leadership role in the pandemic influenza response as part of its Office of Emergency Services (OES), which will provide and coordinate logistical support (in coordination with cities). In addition. County government will be involved in monitoring the state of the pandemic and local outbreak and supporting the Health Officer in establishing necessary social distancing measures. The County government is currently developing plans that address roads, air travel, and provision of critical county services, such as social services, health services and jail services. The County is already taking steps to limit the spread of flu within its workplace (i.e. "no work while sick" and personal hygiene practices); and identifying resources for the pandemic flu response (e.g. vacant space

for Influenza Care Centers, critical services provision, staffing, equipment, etc.). Finally, all County employees are being trained to respond in the event of an emergency or disaster and may be called upon to serve as Disaster Service Workers during the pandemic.

Figure 1 below illustrates the relationship between the impact of a influenza pandemic and the level of preparedness. To minimize impact, effective preparedness and response requires active participation of numerous parties whose responsibilities are summarized below. Specific responsibilities for key response partners are included to highlight points of coordination between agencies during a pandemic. It is expected that health care providers, essential service providers, schools, local government officials, and business leaders will develop and incorporate procedures and protocols addressing influenza preparedness and response activities into their emergency response plans. The responsibilities of partners for effective preparedness and response related to pandemic flu are described and presented below in alphabetical order.



Pandemic Influenza Doctrine: Preparedness Minimizes Impact

Businesses

Local businesses, in order to protect their business' viability, employees, clients and customers during а pandemic, are to plan for continuity responsible of operations in the event that infrastructure and other services disrupted. are Disruption of services and supplies may be due to high absenteeism among their own employees and customers and/or absenteeism in outside partners, services or other organizations. Business plans should address how to continue to function due to a lack of utilities, supplies, deliveries and staff. Two important aspects, where applicable, will be to address providing essential products to the public (e.g., food, water and pharmacy merchandise) and planning for the potential suspension of business services that involve public assembly (e.g., entertainment venues, hotels, restaurants, etc.). Local businesses will play a key role in protecting the health safety of their employees and and customers by instituting protocols to limit the spread of disease in the workplace (i.e. "no work while sick" and infection control practices, such as covering cough and washing hands). Local businesses may be asked to provide resources for the pandemic flu response (i.e. vacant space for Influenza Care Centers, critical supply provision, telecommuniting provisions for employees, etc.).



California State Department of Health Services (CDHS)

The CDHS coordinates planning and preparedness efforts, surveillance activities, and disease containment strategies at the state level and across multiple counties and regions within the state. Additionally, the CDHS is responsible for operating a biosafety level 3 laboratory, coordinating the receipt and distribution of pandemic information, distributing antiviral medicines and vaccines from the Strategic National Stockpile and State caches to local health departments, and informing the public on the course of the pandemic and preventive measures.

Centers for Disease Control and Prevention (CDC)

The CDC is responsible for national and international disease

communicating direction and information Federal from the government to the State and local public health agencies, investigating pandemic outbreaks. and overall monitoring



CONTROL AND PREVENTION

surveillance.

the impact of a pandemic. The CDC acts as the national liaison to the World Health Organization (WHO).

City Government

City governments are responsible to have continuity of operations plans that consider the likelihood of a flu pandemic; take steps to limit the spread of flu within their jurisdictions (i.e. "no work while sick" and personal hygiene practices); and cooperate with the County to provide resources for the pandemic flu response (e.g. vacant space for Influenza Care Centers, critical services provision, etc.). City government has a

direct role in coordinating emergency services, providing law enforcement and providing Disaster Service Workers in response to a pandemic influenza.

Colleges and Universities

Colleges and universities are responsible to incorporate some of the responsibilities of business, schools, and city government. Depending on their size, they may need to secure space for Influenza Care Centers and/or mass prophylaxis sites, address how to provide services to students isolated in dormitories, and make academic plans should the university/college need to be

"Depending on their size, [colleges and universities] may need to secure space for Influenza Care Centers and/or mass prophylaxis sites..."

closed for several months. Colleges and universities should have continuity of business plans that consider the likelihood of a flu pandemic; take steps to limit the spread of flu within their institution (i.e. "no work while sick" and "no school while sick" policies and personal hygiene practices); and cooperate with the County to provide resources for the pandemic flu response vacant space for Influenza Care (e.g. Centers, critical supply provision, etc.). The major colleges in Santa Barbara County include: University of California Santa Barbara (UCSB), Westmont College, Santa Barbara City Collage (SBCC) and Alan Hancock.

Community-based and Faith-based Organizations

Community-based and faith-based organizations are responsible for their own continuity of operations planning in the event of an influenza pandemic. Additionally, these organizations play a key role in providing support services to individuals, neighborhoods, and their customer/client base during a pandemic and may be called upon for assistance within their communities as appropriate.

Emergency Medical Systems (EMS) / Pre-Hospital Responders

EMS providers are responsible for prioritizing and providing patient transport, planning for surge capacity needs due to increased demand for service combined with increased employee absenteeism, and preparing responders for effective infection control. EMS has planned for and is training personnel in personal protective equipment and other disease and infection control measures. The EMS Agency is responsible for the entire county system including the cities and is developing policies and procedures to support response activities under severe pandemic conditions.

Environmental Health

Environmental Health is responsible for the entire county including the cities and will support the delivery of messages regarding infection control, especially in food establishments. Environmental Health will also assist in the planning for disposal of infectious waste.

Fire Services

As critical first responders, City and County Fire Departments will need to plan for increases in employee absenteeism due to the pandemic flu and an increase in demand for services. Fire Services have trained personnel in personal protective equipment and other disease and infection

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control measures. All Fire Services are responsible to have continuity of business plans that consider the likelihood of a flu pandemic; take steps to limit the spread of flu within their jurisdictions (i.e. "no work while sick" and personal hygiene practices); and cooperate with the County to provide resources for the pandemic flu response.

Individual Residents

Individuals and families, in order to protect themselves and limit the spread of the disease, need to take responsibility for keeping informed about the risk for pandemic flu and take appropriate common-sense actions such as practicing good hygiene and preparing their own pandemic flu emergency kits. Individuals and families should also become familiar with isolation, quarantine and social distance measures they may be required to take during a pandemic. Households need to make contingency plans for scenarios such as closure of daycare and school facilities. It is important that individuals prepare themselves so as to reduce the overall demand on government services.

Law Enforcement

The main responsibilities of law enforcement will be to provide security and assist in the enforcement of Health Officer Orders as necessary. Security issues will be likely at hospitals, Influenza Care Centers, closures of venues, etc. Law Enforcement has planned for and trained personnel in personal protective equipment and other disease and infection control measures. Law enforcement is responsible to have continuity of business plans that consider the likelihood of a flu pandemic; take steps to limit the spread of flu within their workplace (i.e. "no work while sick"

and personal hygiene practices); and cooperate with SBCPHD to provide resources for the pandemic flu response.

Local Healthcare System Partners (Hospitals, Clinics, Providers)

Healthcare partners will be instrumental in detecting influenza, limiting the spread of disease, and providing treatment to affected individuals. To this end, local healthcare system partners need to:

- Develop and update pandemic flu plans that details surge capacity addressing staffing, bed capacity, and stockpiling of food, water, fuel, and patient care equipment and supplies.
- 2. In the event of a pandemic, conduct enhanced surveillance among patients, staff and visitors.
- 3. Comply with public health orders for detecting, preventing, and reporting cases of pandemic flu.
- 4. Implement appropriate infection control measures.
- 5. Develop and provide education and training to healthcare staff on recommended aspects of Pandemic influenza



- 6. Comply with admission and triage guidelines provided by the CDC or SBCPHD.
- 7. Comply with Occupational Health Guidelines provided by the CDHS for healthcare staff.
- 8. Cooperate with SBCPHD by providing estimates of quantities of vaccine for healthcare staff and patients and develop a vaccination plan for own facility.
- 9. Plan for additional site security for own facility.
- 10. Develop plan for care of the deceased and cooperate in fatality management with guidance from the County Coroner.
- 11. Participate in a Pandemic Flu Task Force established by SBCPHD to maximize the health care system's ability to provide medical care during a pandemic. Specific responsibilities of the Health Care Task Force include:
 - a. Identify and prioritize response issues affecting the county-wide health system during a pandemic.
 - b. Develop mechanisms to efficiently share information and resources between health system partners.
 - Identify and C. communicate policy level recommendations regarding the operations of the local health system to the Local Health Officer for action.



Mental Health

Mental health professionals have a key role in planning for psychosocial services for responders and the community at-large. Durina pandemic, mental health а professionals will likely experience high levels of service demand, coupled with high employee absenteeism. The Mental Health service providers will develop and implement plans to address the psychosocial needs of health care workers, Disaster Service Workers, employees, and the community at large. This requires planning for maintaining essential workers and increasing staffing capacity as necessary.

News Media

The news media has a primary role in providing public education during the alert period, as well as timely and accurate

public information throughout the pandemic period. News media organizations need to consider planning for their continued operations



during a pandemic, addressing the issue of high absenteeism at all levels of their organization. With guidance from the SBCPHD news media organizations may want to provide personal protective equipment to reporters, camera operators and any other personnel expected to work in a public and potentially contagious setting.

Transportation Centers

The Airports, train and Mass Transit/Bus Stations are responsible to collaborate with the County to prepare for evaluating and managing ill travelers at ports of entry;

establishing quarantine for those exposed to ill travelers; distributing health information for travelers; establishing enhanced surveillance at ports of entry during the early stages of the pandemic; and implementing the cancellation or limitation of nonessential travel to affected countries as directed by CDC.

Santa Barbara County Public Health Department (SBCPHD)

The SBCPHD has a lead role in mobilizing partners in the county to prepare for and respond to pandemic influenza. To this end, the SBCPHD continues to:

- 1. Assist in countywide pandemic planning and preparedness efforts.
- 2. Coordinate the community's emergency public health response through the Department Operation Center (DOC) and the Medical Health Branch at the County's Emergency Operation Center (EOC).
- 3. Educate the public and health care providers, response partners, businesses, community based organizations and elected leaders about influenza and preventive measures.
- 4. Conduct county-wide surveillance to track the spread of the disease and its impact on the community.



- 5. Be prepared to propose a declaration of Health Emergency when appropriate.
- 6. Implement disease containment strategies and authorities, such as social distancing.

- Guide the health care system's planning and response efforts for medical surge capacity including mass casualty and mass fatality incidents.
- 8. Direct mass vaccination efforts. Plan for antiviral dispensing.
- 9. Provide effective communications to the public, the media, elected officials, health care providers, law enforcement, first responders, business and community leaders throughout public health emergencies.
- 10. Monitor and report on the state of readiness of critical partners (e.g., cities, schools, businesses as well as local, state and federal governments).

Schools, Preschools, Child Care Centers, Family Day Care Providers

All school districts are responsible to take steps to limit the spread of flu within the school (i.e. "no work while sick" for employees, "no school while sick" for students, and personal hygiene practices). Schools should have contingency options if schools are closed as part of a social distancing strategy (e.g. home schooling lesson plans for parents; catch-up school calendars, etc.). Schools may need to be closed for as long as several months.



U.S. Department of Health and Human Services (HHS)

The responsibility of HHS, Center of Disease Control (CDC) is to provide overall guidance on pandemic influenza planning within the United States and coordinate the national response to an influenza pandemic.

World Health Organization (WHO)

WHO is responsible for monitoring global pandemic conditions and providing information updates. WHO facilitates enhanced global pandemic preparedness, surveillance, vaccine development, and



health response. WHO the is organization responsible for declaring a global pandemic phase adjusting and phases based on outbreak current conditions.

Special Populations

Preparing for pandemic influenza requires specific attention to special populations to ensure effective outreach and education. definition of special populations The extends beyond the notion of preparing to meet the culturally and linguistically diverse populations in Santa Barbara County. The County and its partner agencies have a common practice to provide multilingual and culturally competent services. Such practice will be integrated into pandemic influenza preparedness and response efforts. In the context of pandemic influenza, special populations refer to:

- Members of our community with little or no ability to successfully address implement or be fully responsible for their own emergency preparedness, response and recovery.
- People whose life circumstances leave them unable or unwilling to follow emergency instructions, as well as anyone unable or unwilling to fully access or use traditional disaster preparedness and response services.

Several categories of special populations have been proposed and are defined in the Pandemic Strategy Plan. A number of key issues related to special populations have been identified and incorporated into the Critical Capacity Modules.



Critical Capacity Modules

Module 1

Legal

Authority

A critical capacity of the Santa Barbara County is its ability to invoke its legal authority to implement actions to limit the spread of disease. During pandemic influenza, the Santa Barbara County Public Health Department (SBCPHD) may need to invoke such authority. While numerous federal, state and local statutes authorize public health actions to address pandemic influenza, cooperation with local law enforcement and the legal system will be critical.

At the federal level, the Public Health Service Act grants authority to the Secretary of Health and Human Services to make and enforce regulations "necessary to prevent the introduction, transmission, or spread of communicable diseases from foreign countries into the States or possessions, or from one State or possession into any other State or possession"¹. The role of the California State Department of Health Services (CDHS) in emergencies and disasters is described as follows: "DHS may take any necessary action to protect and preserve the public health…if the department determines that public health is menaced, it shall control and regulate the actions of the local health authorities"².



Module I provides references and documentation regarding the legal authority of Public Health and the County in emergencies such as pandemic influenza. It also includes the legal actions and procedures require`d for local preparation and response to pandemic influenza. The module is consistent with current California guidance on Health Officer authorities.³

¹ 42.U.S.C.264

² CA HSC § 100180; Abbot, D. and McGurk. (1998), Authority and Responsibility of Local Officers in Emergencies and Disasters, California Department of Health Services. ³ Health Officer Practice Guide for Communicable Disease Control (2005), California

³ Health Officer Practice Guide for Communicable Disease Control (2005). California Department of Health Services. www.SCCPHD.org.

Desired Outcomes

- 1. Adherence to legal processes for issuance of Declaration of Emergency, Health Officer Orders and Directives, and other public health actions.
- 2. Adherence to legal requirements for workers compensation, licensing, and credentialing for Disaster Service Workers and Medical Disaster Volunteers.
- 3. Effective and efficient identification and resolution of legal issues related to pandemic influenza response.



Actions Completed

- 1. Health Officers Orders Drafted for the following:
 - a. Isolation
 - b. Quarantine
 - c. Medical Evaluation
 - d. Implementing Social Distancing Measures
- 2. Matrix of Laws Relevant to a Public Health Emergency
- 3. Educational Forums on legal issues:
 - a. Public Health & Law table top exercise
 - b. Presentation to School Superintendents
 - c. Presentation to Hospital and Healthcare providers
 - d. Meeting with Courts & Legal Community.

Critical Capacity Modules

Module 1

Legal Authority

Established local surveillance systems are

Introduction

monitoring of disease.

Critical Capacity Modules

fundamental for detecting influenza activity, identifying and circulating strains, and monitoring the burden of influenza morbidity and mortality. Pandemic influenza surveillance includes surveillance for influenza viruses (virologic surveillance) and surveillance for influenza-associated illnesses and deaths (disease surveillance). Enhancing existing influenza surveillance networks can lead to rapid detection of novel virus strains with pandemic potential. Locally, the goal of virological surveillance is to detect the introduction of a novel ⁴ or pandemic strain into Santa Barbara County, and to detect any changes in the virus (including development of resistance to anti-virals) that might necessitate a change in clinical or public health management. The goal of influenza disease surveillance is to serve as an early warning system to detect increases in influenza-like illnesses (ILI) in Santa Barbara County, to monitor the pandemic's impact on health (e.g. by tracking hospitalizations and deaths), and to track trends in influenza disease activity and identify populations that are severely affected.

Surveillance is a critical capacity required for the early identification and

Surveillance

Module 2

Influenza infection is not a reportable condition in California or Santa Barbara County. Therefore, tracking of influenza morbidity and

mortality is done with several complementary sentinel surveillance systems. Recently, California has asked for the voluntary reporting of severe pediatric influenza infections. We will use these existing influenza surveillance systems during the Alert period, and may require certain types of new reporting during the Pandemic period.



Santa Barbara County is not directly involved in virologic surveillance for infection in wild or domestic birds or other animals. However, the California Animal Health and Food Safety Lab (CAHFS), the veterinary lab system statewide under the California Department of Food and Agriculture, does perform testing on domestic birds. A national program, coordinated by the U.S. Department of Interior and U.S. Department of Agriculture, has been recently activated, which provides monitoring of migratory birds in the U.S., and is testing populations of birds for avian influenza.

⁴ Novel influenza virus refers to a new strain of influenza virus for which there is little or no immunity in the human population.

Desired Outcomes

- 1. Ensure early detection of cases and clusters of respiratory infections that might signal the presence of a novel influenza virus or pandemic influenza strain in Santa Barbara County.
- 2. Timely and accurate laboratory testing and confirmation of cases.
- 3. Timely and accurate reporting and monitoring of suspected cases.
- 4. Increased coordination with State agencies responsible for animal surveillance to ensure early detection of animal cases where there is concern about human epidemiologically associated with infected birds or other animals.

Actions Completed

- 1. Increased Human Surveillance
 - a. Enhanced Sentinel Provider Network (healthcare providers testing for influenza and sending samples to the State lab).
 - b. Enhanced Clinical Laboratory Reporting.
- 2. Increased Syndromic Surveillance.
 - a. Participate in National Retail Data Monitor of over-the-counter retail pharmaceuticals sales (15 retail outlets in Santa Barbara County).
 - b. Established through the EMS Agency "ReddiNet" emergency communication system a method to generate reports of ILL based on chief complaint.
 - c. Established system to collect attendance data from local schools.
- 3. Increased the Public Health Laboratory Readiness
 - a. Enhanced testing capacity (new equipment and testing procedure for automated testing of sample to detect the H5 strain of influenza)
 - b. Established SBCPHD guidelines for collecting and shipping specimens for Influenza A (H5N1) diagnostics.
 - c. Developed a SBCPHD Pandemic Influenza laboratory Communication Algorithm.
- 4. Established protocol to increase epidemiologic surge capacity.
- 5. Increased outreach and communication efforts with veterinary provider, animal rescue advocacy groups and hunting associations.

Critical Capacity Modules

Module 2

Surveillance

Limiting the Spread of Disease is a critical capacity required to minimize morbidity and mortality in Santa Barbara County. After a pandemic strain of influenza virus and or an avian strain begins circulating in the

community, individual and community cooperation with implementation of disease control measures will be necessary to limit the disease spread. These measures include adherence to infection control guidelines, personal protective equipment guidelines for healthcare and emergency responders, social distancing strategies such as school closures and cancellation of



large public gatherings, travel restrictions and culling bird populations. Isolation of ill persons and quarantine of those exposed may also be useful measures, but only during the Alert period or very early in the pandemic before the virus is circulating widely in the local area.

Module 3

Critical

Capacity

Modules

Limiting the Spread of Disease All of these measures are designed to slow the spread of disease and limit cases to the extent possible, particularly during the time when a vaccine is not yet available.

Desired Outcomes

- 1. Implement effective infection control measures at all levels of society.
- 2. Slow the spread of pandemic influenza within Santa Barbara County.
- 3. Effective measures to control avian influenza in wild and domestic bird population.

"After a pandemic strain of influenza virus and or an avian strain begins circulating in the community, individual and community cooperation with implementation of disease control measures will be necessary to limit the disease spread." Critical Capacity Modules

Module 3

Limiting the Spread of Disease

Actions Completed

- 1. Established protocol for coordinating public information about community-based non-medical containment measures (social isolation).
- 2. Established protocols for identifying avian strain in bird populations.
- 3. Established protocols and procedures are in place to control the spread of avian influenza in bird populations.
- 4. Established protocol for clinical evaluation and management of isolated/quarantined residents.



National Strategic Stockpile

- 5. Established personal protective equipment guidelines and training for healthcare workers and emergency responders, and purchased required equipment.
- 6. Established protocol for "surge capacity" for the provision of medical care, food and other social services specifically for isolation and quarantine.
- 7. Established protocol for the provision of alcohol, drug and mental health services for individuals in isolation or quarantine.
- 8. Established law enforcement isolation and quarantine security procedures.
- 9. Community-Based isolation and quarantine facilities identified.

Critical Capacity Modules

Module 4

Risk Communication and Public Education The ability to implement communication strategies and actions before and during an influenza pandemic is a critical capacity. A communication strategy supports effective preparedness and response efforts. Strong risk communications and public outreach activities are conducted in order to build trust, confidence and cooperation. The goal is to prevent fear-driven and potentially damaging public responses to a pandemic influenza crisis.

It is important to remember that the public is more likely to respond and

cooperate more readily if they are involved in the discussions and planning for pandemic influenza, have general knowledge of situation, are aware of the issues and concerns that are to be addressed, and understand their individual role and responsibilities. All risk communication strategies will keep these points in mind.



This module will help guide and prepare the Public Information Office and the Public Health Department in communicating key messages to the general public, the news

media, health care providers and other partners (business, schools, local government, etc.) before, during, and after a pandemic influenza.

Overall, risk communications works to convey to the general public the need for preparedness and not 'business as usual', develop central messages and materials to be shared broadly with public and private sectors, and provide support to Public Health Department staff working with key partners.

All messages are developed with key Public Health Department staff and are approved by the Health Officer and the County's Communication Director. During the course of pre-event activities and especially during a pandemic influenza event, messages and other information will be updated and customized.

Critical Capacity Modules

Module 4

Risk Communication and Public Education

Desired Outcomes

- 1. Provide timely, accurate and consistent pre-event information to the public about pandemic influenza, pandemic influenza preparedness and actions, as well as County Emergency Response plans and response.
- 2. Instill and maintain the public confidence in the county's public health and healthcare systems and their ability to respond to and manage an influenza pandemic.
- 3. During a pandemic event, provide the most current, consistent and accurate information including what is happening, what is being done, and what people can do to protect themselves.

Actions Completed

- 1. Educational brochure developed in Spanish and English with broad distribution throughout the county at grocery stores, community clinics and hospitals. (13,000 distributed)
- 2. Educational presentation (PowerPoint) downloadable from website for public use.
- 3. Establishing direct links to our website with city, schools and healthcare provides for consistency of pandemic flu information.
- 4. Spanish and English bus poster on all city buses in promoting the Website.
- 5. Educational video produced in Spanish and English to be aired on Government Television.
- 6. Established a website for one source information on pandemic Influenza (www.SBCFluInfo.org).
- 7. Established an 800 phone number (888) SBCOFLU, or (888) 722-6358, that provides a recorded message that allows callers to leave a mailing address for printed educational materials or to access the SBCPHD's Communicable Disease office. The information will be updated depending on the phase alert/response stage.
- 8. Pandemic informational mailer sent to all Medi-Cal recipients (approx. 10,000).

Critical Capacity Modules The ability of our healthcare system to develop a coordinated health care strategy to effectively prepare and provide for pandemic influenza patients is a critical capacity. Currently the H5N1 strain of Avian Influenza has been recognized by the World Health Organization to be at a threat level consistent with the **alert period**. Because of the nature of influenza viruses and their natural ability to mutate and become more or less of a threat to humans, there remains uncertainty as to when and how a pandemic will evolve (or whether the H5N1 strain will be the cause), and its effect on local conditions that will influence decision making within the healthcare system. Healthcare facilities must be prepared for the rapid pace and dynamic characteristics of an influenza pandemic.

Module 5

Healthcare Systems

of patients infected with pandemic influenza virus, or other novel strain of influenza, as part of normal operations; and 2) an overwhelming increase in the number of patients in the event of escalating transmission of pandemic influenza.

All hospitals should be equipped to care for: 1) a limited number

The primary partners responsible for this module include the Santa Barbara County Public Health Department (SBCPHD) and the local

healthcare system, including hospitals, clinics, and private providers among others. It is the responsibility of healthcare facilities to: identify and isolate all potential patients with pandemic influenza; implement infection control practices to prevent influenza transmission; to provide medical treatment to patients; and to ensure rapid and frequent communication within the healthcare facility, between healthcare facilities, and with the SBCPHD.

The guidelines included in Module 5 are intended to be synergistic with other pandemic influenza planning efforts, including state and



federal preparedness plans. Hospital planning for pandemic influenza preparedness should address internal and external collaboration and coordination with the healthcare community. An internal, multidisciplinary planning committee should be appointed, by each healthcare provider, to address each of the guidelines below to ensure that both a coordinated response and the specific needs of the individual hospital are included in the hospital pandemic influenza plan. Pandemic Influenza Strategy Plan

Santa Barbara County hospitals are expected to use the Hospital Incident Command System (HICS) in their response to pandemic influenza.

Critical Capacity Modules

The guidelines critical to acute care hospitals include: 1) decisionmaking structures for response; 2) hospital surveillance; 3) infection control; 4) hospital risk communications; 5) education and training; 6) patient triage; 7) clinical guidelines; 8) use, administration and of vaccines and anti-viral drugs; 9) surge capacity; 10) mortuary issues; 11) security/facility access; 12) occupational health and, 13) recovery of operations.

Non-hospital healthcare settings will serve an important role during pandemic influenza. Surgical centers, skilled nursing facilities, physician offices, and community ambulatory clinics must be prepared to alter their usual activities and evaluate and treat pandemic influenza patients.



Guidelines will be prepared for the identification and management of Influenza Care Centers (ICCs). These are locations not purpose-built as a setting for the delivery of health care. At ICCs, basic services food, shelter and health care—will be provided at a standard well below that of institutional settings. Concentrating resources and staffing at an ICC may facilitate provision of services to larger numbers of ill patients.

Module 5 Healthcare Systems

Desired Outcomes

The desired outcomes of the County pandemic flu strategy plan for healthcare planning, which are compatible with those of California Department of Health Services (CDHS), are:

- 1. Maintenance, to the greatest extent possible, the provision of healthcare services to meet the needs of Santa Barbara County during an influenza pandemic;
- 2. Maximization of Santa Barbara County's ability to respond to the healthcare needs of an influenza pandemic through effective planning at the local level and to collaborate with healthcare

providers to address medical surge capacity and capability demands.



Module 5

Critical

Capacity

Modules

Healthcare Systems

Actions Completed

- 1. All hospitals in Santa Barbara County have established pandemic planning committees that include participation from SBCPHD.
- 2. Development of pandemic plans for all hospitals in Santa Barbara County that are consistent with key areas outlined in critical guidelines and the public health department's pandemic response plan.
- 3. Hospital Incident Command System (HICS) plans have been written and are in place at each hospital. HICS training is scheduled for Spring 2007 at each hospital.
- 4. SBCPHD regional triage planning presentation has been done at SB Cottage Hospital and is scheduled for all other hospitals for Spring 2007.
- 5. Collaborating with community healthcare providers to coordinate uniform outpatient, inpatient and alternative care site practices.

Critical Capacity Modules

Module 6

Clinical Guidelines and Disease Management The ability to provide effective treatment and disease management for individuals who become infected with pandemic influenza is a critical capacity required by all health care providers within Santa Barbara County. Module 6 describes clinical guidelines for the screening, assessment, and management of patients with suspected novel⁵ influenza during the Alert period, and for patients with suspected pandemic⁶ influenza during the Pandemic period. The module also describes plans for the distribution and use of antiviral drugs and vaccines for treatment and prophylaxis.

This module is intended to provide community-wide standardized procedures by which healthcare providers may (1) efficiently diagnose cases of novel and pandemic influenza infection, (2) evaluate and

manage patients with novel pandemic influenza and infection, (2) triage cases to appropriate levels of care, (3) determine when antiviral treatment can and should initiated. be and (4) determine when and how to administer prophylaxis in the form of antiviral agents and vaccinations. In addition. the module describes actions that must be performed by the local Public Health Department in order to support healthcare providers in these activities.



Actions recommended to contain the spread of infection to others, once a case has been identified, are described in Module 3 "Limiting the Spread of Disease".

⁵ In this document, the term "novel" influenza virus refers to new strains of influenza to which the human population is immunologically naïve. These may include avian or animal influenza strains that can infect humans, as well as new or re-emergent human influenza viruses that cause cases or clusters of human disease.

⁶ In this document, the term "pandemic" influenza virus refers to a novel influenza strain that has demonstrated efficient transmission from human to human, and that has caused or is causing widespread outbreaks of disease in the US or elsewhere in the world.

"

Critical Capacity Modules

Module 6

Clinical Guidelines and Disease Management The clinical guidelines presented in Module 6 constitute a practical application, for Santa Barbara County, of existing guidance from the Centers for Disease Control and Prevention (CDC) and the US Department of Health and Human Services (HHS). As such, they are consistent with CDC and HHS guidance, but they incorporate additional considerations from medical and public health literature as well as practical considerations specific to Santa Barbara County. Module 5 was developed by the Santa Barbara County Public Health Department (SBCPHD) in collaboration with physicians practicing in our community.

As used in this document, the term "guideline" means a recommendation, while a "directive" or an "order" from the Health

Officer requires compliance with a specified course of action. Directives and orders are issued by the Santa Barbara County Health Officer only when necessary to protect the health and safety of the community. Module I of the Pandemic Influenza Plan discusses legal authorities and related issues in detail.



These clinical guidelines are current as of February 2007, and will be subject to change as knowledge of novel and pandemic influenza virus infections is gleaned from experience.

Desired Outcomes

- 1. Community-wide standardized procedures for diagnosis, evaluation, and management of patients with suspected novel influenza and for patients with pandemic influenza.
- 2. Effective patient education and patient triage.
- 3. Effective distribution procedures for mass prophylaxis and or vaccination.
- 4. Effective risk communication on clinical guidelines and disease management strategies.

Actions Completed

- 1. Standardized procedures for diagnosis, evaluation, and management of patients with suspected novel influenza are accessible to providers and others on the PHD website. Guidance for pandemic influenza would also appear on this website once guidance is received from CDC and CDHS.
- 2. Developed mass vaccination/prophylaxis plan per the recommended national guidelines.
- 3. Established a first responder immunization plan that defines the procedures and has a recommended clinic staffing model with job action sheets.
- 4. Developed procedures to activate the Receiving, Storage and Staging (RSS) aspects of the Strategic National Stockpile (SNS) Plan. This provides for the distribution of medical resources to

healthcare providers and the public as soon as possible during a public health emergency.

 Conducted a tabletop exercise to practice the Strategic National Stockpile and RSS plan and procedures.



- 6. Location of distribution dispensing sites for mass vaccination are identified and categorized by volume capacity and other essential characteristics.
- 7. Risk communication messages drafted and ready for implementation for mass vaccination/prophylaxis strategies.
- 8. Initial patient triage plan is complete. Additional input from providers is solicited during regional pandemic triage presentations currently underway Jan-March 2007).

Critical Capacity Modules

Module 6

Clinical Guidelines and Disease Management

Critical Capacity Modules

Module 7

Alcohol, Drug & Mental Health Psychosocial Support A critical capacity for an effective response is the ability to address the inevitable psychosocial impact of pandemic influenza. The professional and research literature on the psychosocial impact of natural and manmade disasters has little mention of the emotional, mental, and behavioral impact of pandemic influenza. While pandemics appear to occur in every century, we have much to learn as to how to prepare and respond to the psychosocial impact of a worldwide pandemic in the 21st Century. Certainly stress has become a known factor of modern life, and we have learned a great deal on how to minimize disaster-related stress, however the prolonged and fluctuating stress that will accompany a pandemic in American communities will be unique and unlike anything experienced in the United States in the last half century. For this reason, it is critical that we put in motion a community learning process that enables us to be prepared for the psychological impact of a pandemic that will likely persist over several years.

Whereas past epidemics and disasters have generally not personally touched the majority of health care providers, pandemic influenza is expected to impact the system beyond the typical stress that has been associated with past crises and disasters, as staff will also have family



that are vulnerable members to contracting the disease throughout the duration of the pandemic. The combination of both professional and family stresses will contribute to behavioral health reactions that will affect the ability of health care providers to perform their duties. This pandemic may last as long as 24

months. The fact that the pandemic will come in waves will very likely produce cumulative stress that accelerates performance impairment as the prolonged resurgence of infections and illness over the 24 months repeatedly occurs among health care providers.

The Santa Barbara County Alcohol, Drug & Mental Health Services Department (ADMHS) has taken the lead in developing the alcohol, drug and mental health psychosocial support module of the current plan. This was done in partnership with mental health experts in the public and private sectors, as well as with the leadership of the various mental health community providers.

Desired Outcomes

- 1. Santa Barbara County employees will have the necessary knowledge and preparation to maintain their own psychological resilience during a prolonged influenza pandemic, including how to insure the emotional and psychological resilience of their families and other loved ones.
- 2. Santa Barbara County health care workers, mental health workers, and their families will have the necessary knowledge, tools, and intervention strategies to respond to their own and others' (families, clients, community members) psychological needs during a prolonged influenza pandemic.
- 3. Community members and organizations will have the necessary knowledge, tools, and response strategies to address their own and

others (families, employees, neighbors) psychological and emotional needs during a prolonged influenza pandemic.

4. Santa Barbara County ADMHS and its community partners and network provider resources will have guidelines for service delivery to the community, with special emphasis upon priority populations.



Actions Completed

Established protocol to broker services for Response Personnel Families, as requested through Access Team, Mental Health Network (MHN), ADP, via existing protocol and resources.

- 1. Coordination of Chaplains to work as Disaster Service Workers in accordance with State DSW guidelines.
- 2. Established protocol for accessing Critical Incident Stress and counseling services.
- 3. Established protocols for Family Support Groups (FSG) for families of response personnel.
- 4. Established program and network with community-based organizations.
- 5. Established protocols for triaging priority population service delivery.

Critical Capacity Modules

Module 7

Alcohol, Drug & Mental Health Psychosocial Support

Critical Capacity Modules

Module 8

Security & Law Enforcement The law enforcement response activities described in this Critical Capacity Module is in concert with the Santa Barbara County Operational Area Emergency Operations Plan (EOP). Elements of this plan may be activated prior to formal activation of the Operational Area Emergency Operations Center (EOC), when necessary. Law Enforcement may open its Department Operations Centers at the time the Operational Area elects to open the County EOC. This will allow coordinated information sharing and resource management between all law enforcement agencies.

Local law enforcement has established plans to identify minimum staffing levels that maintain a patrol presence. This pre-planning will allow law enforcement to better respond to high priority calls. During a pandemic event, the Sheriff's DOC will maintain daily reports on available law enforcement personnel from all law enforcement agencies throughout the county.



The County Sheriff's Department is the Operational Area Mutual Aid Coordinator for Law Enforcement Mutual Aid. All law enforcement agencies within Santa Barbara County have met and contributed to this plan. These agencies understand the challenge of a pandemic event and the necessity of working within SEMS/NIMS.

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Desired Outcomes

- 1. Law Enforcement staffed and trained to mitigate civil unrest
- 2. Hospitals and other healthcare sites adequately secured.
- 3. Protocols established to provide security to the Strategic National Stockpile, other supplies and Receiving, Storing and Staging (RSS) of these operations.
- 4. Law enforcement responsive to support and enforce Health Officer Orders.

Actions Completed

- 1. Established notification flow chart with defined organization reporting lines.
- 2. RSS job action sheets developed for law enforcement.
- 3. All law enforcement staff trained in the National Incident Management System (NIMS) and exercised through a flu pandemic tabletop scenario.

Santa Barbara County Pandemic Response Plan Law Enforcement Communication Flow Chart



Critical Capacity Modules

Module 8

Security & Law Enforcement

Critical Capacity Modules

Introduction

A critical capacity of pandemic influenza preparedness and response is the ability for essential services to plan and implement continuity of operations. This module identifies and defines essential public services and describes the prioritization of response resources that will be necessary to support the maintenance and continuity of critical public service infrastructure during an influenza pandemic. Essential services are particular public and private sector organizations that provide services or products that support vital societal needs and/or critical infrastructure functions within the community.

Furthermore, this module is intended to provide guidance on pandemic influenza for essential public service organizations to assist in mitigating staffing shortages and ensuring continuity of operations.

Module 9

Preparing Essential Services for Continuity of Operations While the County Operations Plan addresses all hazards, an influenza pandemic differs from many threats due to the magnitude and duration of its impact and the likelihood of subsequent waves of disease. An influenza pandemic will pose a distinct and serious threat to the residents of Santa Barbara County with the disruption of critical community services due to incapacitation of the human infrastructure.

Desired Outcomes

- 1. Preparedness and response Continuity of Operations Plans in place for all essential services.
- 2. Effective implementation of Continuity of Operations Plan to maintain adequate infrastructure and to respond effectively to an influenza pandemic.

Actions Completed

- 1. Continuity of Government (COG) database developed.
- 2. Critical system identified and prioritized for all County Services.
- 3. Disaster call-back database developed for all county employees.
- 4. Established Intranet communication structure to facilitate on-going planning and response efforts.
- 5. Conducted Business Continuity Workshop for local businesses.

Critical Capacity Modules

Module 10

Decedent & Coroner Issues

Introduction

Management of the dead is one of the most difficult aspects of disaster response and a pandemic flu, in particular, can cause a large number of deaths. The number of deaths from a pandemic will most likely overwhelm the local systems that care for the deceased. Although

deaths attributed to а pandemic flu are naturally deaths. occurring which would not normally fall under jurisdiction the of the Coroner, it is the Coroner's office that will have the facilitate responsibility to and oversee the plans and procedures in this critical capacity module.



Desired Outcomes

- 1. Responsible compassionate management of human remains.
- 2. Minimize the impact to survivors through correct identification of victims and notification of kin.
- 3. System for rapid retrieval, identification and notification of kin to reduce psychological burden on survivors.

Actions Completed

- 1. Assessment of current capacity limitations
- 2. Procedures established for:
 - a. proper handling of dead bodies,
 - b. proper identification & notification,
 - c. proper storage & burials.
- 3. Locations assessed and identified for mass burials graves.
- 4. Legal issues reviewed for mass graves.

Critical Capacity Modules

Module 11

Volunteers & Medical Reserve Corps During phases of a pandemic, volunteers may be needed as disaster service workers to assist in a variety of operations, support, and human caring roles. This document addresses the strategy the county will need to mobilize, utilize and track volunteers during the outbreak.

There are many volunteer groups in existence at any given time, but the challenge will be to organize, train and place workers to places where they are most needed. The volunteer disaster service worker CCM is designed after the State of California's Office of Emergency Services Disaster Service Worker Volunteer Program Guidance which defines many of the rules and regulations. In order for the County of Santa Barbara to develop and maintain a registry of volunteers available to assist on an emergency basis or in the advent of a pandemic flu, certain steps must be taken.

The plan identifies resources for the three primary activities to develop and maintain the registry. The volunteer registry will be implemented by the Office of Emergency Services to insure an available volunteer base to respond in a declared disaster or in the case of a pandemic outbreak where existing human resources are exhausted. The critical capacity module contains specific information on how to work with disaster service workers and parameters of the program as set out by the state that apply to using volunteers during a declared emergency.

Medical Reserve Corps (MRC) are licensed professionals who want to donate their time and expertise to prepare for and respond to emergencies. MRC volunteers supplement existing emergency and public health resources. MRC volunteers include medical and public



health professionals such as physicians, nurses, pharmacists, dentists, veterinarians, paramedics and epidemiologists.

The Mission of the Medical Reserve Corps is to establish teams of local volunteer medical and public health professionals who can contribute their skills and expertise throughout the year and during times of local disaster when the hospital and existing emergency medical system is overwhelmed. MRCs will help to address medical surge needs within our community.

Critical Capacity Modules

Module 11

Volunteers & Medical Reserve Corps

1. Recruitment of Volunteers

The plan identifies a process to solicit personnel and identify necessary resources to register volunteers as disaster service workers. The plan identifies the need to sustain this effort along with providing proper identification, and mechanism to seek proof of licensure. The plan also provides a process for receiving convergent volunteers.

2. Training

Training needs are ongoing for all registered disaster service workers. Many types of training will need to be identified along with NIMS, SEMS, first aid, mental health, shelter care, first responder, how medical professional fit into existing emergency medical



system surge plans and many more. The plan also identifies just-intime training needs for convergent volunteers based on the type of emergency or disaster.

3. Tracking and Maintenance

To maintain the volunteer registry databases will require ongoing monitoring of in order to keep information up to date.

Desired Outcomes

- 1. Enrolled volunteers and certified medical volunteers throughout the county in a database so that when the need arises, "people are ready" to go to work."
- 2. Adequately trained medical volunteers to augment existing emergency healthcare providers, through coordinated MRC teams to meet surge demands of a pandemic.
- 3. Adequate cache of medical equipment to support the MRC in the field.
- 4. All volunteers trained in SEMS/NIMS so that they are prepared to work within the unified command system.

Actions Completed

1. Established an MRC for Santa Barbara County which has received national approval.

2. Became a test site for the State database/registry (ESAR-VHP) to enroll licensed medical personnel with built-in credentialing verification.



- 3. Identified the database format for the Volunteer Disaster Service Worker.
- 4. Developed marketing plan to increase MRC program enrollment.
- 5. Established volunteer Medical Director for the MRC (EMS Medical Director & President of Medical Society)
- 6. MRC Steering Committee meetings held to establish by-laws and training schedule.

Critical Capacity Modules

Module 11

Volunteers & Medical Reserve Corps

Critical Capacity Modules

Module 12

Communications and Information Technology

Communications systems including information technology are critical in any disaster, including a pandemic. The mission and ultimate goal of the Communications Critical Capacity Module is to identify and meet the needs and requirements of the other CCMs, and thereby be positioned to support the communications requirements within the overall Pandemic Strategy Plan. The CCM identifies communications structures and necessary technology for redundant systems. This CCM establishes communications and information technology solutions and the procedures necessary to meet the demands of a pandemic response.

Desired Outcomes

- 1. Effective communication redundant systems in place, equipment working properly and staff training to operate appropriate communication equipment.
- 2. Enhanced communication tools to establish lines of communications with the public.
- 3. Provide communications solutions to enhance alternate work sites.
- 4. The ability to quickly surge communication systems to meet the increased demands during a pandemic response.
- 5. Enhanced interoperable communications between agency responders.

Actions Completed

- 1. Established a 1-800 number to enhance public information and provide direct access to SBCPHD Communicable Disease office.
- 2. Established procedures to implement a 1-800 call center to provide information to the public during a pandemic.
- 3. Established procedures to implement a 1-800 phone triage call center to provide for alternative healthcare response.
- 4. Implement procedures and policies through technology to support simple, robust and sustainable telecommuting capabilities.
- 5. Implemented three new mobile interoperable communications trailers for area responders.
- 6. Enhancements to remote wireless accessibility to facilitate remote work locations and telecommuting.
- 7. Developed databases to support efforts of other CCMs.

Critical Capacity **Modules**

Pandemic influenza will affect the entire world at the same time. Response will therefore not be limited to any one country, state, region or local jurisdiction. While the federal government is responsible for nationwide coordination of the pandemic influenza response, the County will be responsible for coordination of the pandemic influenza

response within and among its jurisdictions. Coordinated delivery of resources among these localities is a critical component as the local response is implemented.

During the phases of a pandemic, a



Module 13

Resources, People, Places, & **Equipment** critical component is the facilities and resources required (people, places, & equipment). This is referred to as logistic under the Standardized Emergency Management system (SEMS) and National Incident Management System (NIMS) and is needed to assist workers in a variety of operations, support and human caring roles. This CCM addresses the logistical support the county will need to mobilize, utilize and track resources and facility request.



Desired Outcomes

- 1. Streamline emergency purchasing system established to expedite needed resources.
- 2. A centralized inventory control and warehousing system which could be implemented during an emergency operation.
- 3. Partner with community college health occupation programs to coordinate students as potential healthcare volunteers.
- 4. Comprehensive database maintained of facilities to be used for storage, points of distribution, shelters and alternative care site.

Actions Completed

- 1. Protocols and agreements in place with major vender for resources.
- 2. Partnered with a non-profit organization to identify a secure warehouse facility to receive, store and assist in the distribution of the Strategic National Stockpile during a pandemic.



Module 13

Critical

Capacity

Modules

Resources, People, Places, & **Equipment**



- 3. Identified critical staffing levels necessary to maintain essential county functions through the COG plans.
 - 4. Established partnership with community colleges health occupation programs to facilitate utilization of student volunteers.
 - 5. Each critical capacity module identified resources necessary for their mission.
 - 6. Developed comprehensive facilities database.

Critical Capacity Modules

Module 14

Command

Structure

The command structure of the County's response to a pandemic incident would follow the established guidelines under the Incident Command System and integrated with the State's Standardized Emergency Management System (SEMS) and the National Incident Management System (NIMS). In order to respond to the complexities involved with a widespread pandemic, a Unified Command would be established. Members of the Unified Command consist of representatives from the federal, state and county government with direct interaction with the Center for Disease Control (CDC). County agencies serving in the Unified Command would be led by the Public Health Officer and include the Agricultural Commissioner, Sheriff and Fire Department and the County Executive's Office of Emergency Services.

Desired Outcomes

- 1. Adherence to ICS protocols and command structure in accordance with SEMS and NIMS.
- 2. Effective coordination of a managed response to a pandemic.

Actions Completed

- 1. Identification of the overall command structure organization for implementation in the event of a pandemic. (*see chart*)
- 2. Provided training in NIMS to county employees.



Presented to:

The Santa Barbara County Board of Supervisors

- **Brooks Firestone, Third District, Board Chair**
- 🔸 🛛 Salud Carbajal, First District, Board Vice Chair
- Joseph Centeno, Fifth District
- Joni Gray, Fourth District
- Janet Wolf, Second District

Acknowledgements

These planning efforts have been successful because of the tremendous leadership, teamwork and technical expertise of the following project leaders:



Executive Steering Committee

Michael Brown, County Executive Officer Elliot Schulman, MD, MPH, Public Health Director Jim Laponis, Deputy, CEO Tom Franklin, Deputy Fire Chief Michael Harris, Deputy Director, Public Health Bruce Carter, Manager Office of Emergency Services Nancy Lapolla, MPH Director Emergency Medical Services

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Limiting Spread of Disease	Paige Batson, RN & Kelly Lazarus, EMT-P
Public Health Risk Communication	Michele Mickiewicz, MPH
Health Care	Angelo Salvucci, MD, Frank Alvarez, MD & Jan Koegler, MPH
Clinical Guidelines & Disease Management	Carol Cullen, RN & Angelo Salvucci, MD
Alcohol, Drug & Mental Health	Rob Walton, RN
Essential Services	Elsa Arndt & Liz Snyder, MHA
Security & Law Enforcement	Tom Walton, Sgt
Decedent & Coroner Issues	Court Williams, Sgt
Volunteers	Maria Gardner, Molly Marino, & John Eaglesham, EMT-P
Communication Systems	Mitch Evans & Anne Fearon
Resources	Jack Williams
Command Structure	Jason Geneau

In addition to the project leaders identified above special appreciation goes to the 75 project participants, the many outside community partners and to Rose Davis, PHD IT, for her exceptional talent in graphic design. We would also like to thank Santa Clara County Public Health Department for their technical assistance.

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- 31. Mitch Evans
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Community Partners

American Medical Response American Red Cross California Highway Patrol City of Buellton City of Carpinteria City of Goleta City of Guadalupe City of Lompoc City of Santa Barbara

- 36. Henry Franklin
- 37. Sharon Friedrichsen
- 38. Maria Gardner
- 39. Bill Gillette
- 40. Jan Glick
- 41. Lisa Gosdschan
- 42. Joe Guzzardi
- 43. Julie Hagen
- 44. Natlee Hapeman
- 45. Michael Harris
- 46. Michael Hartley
- 47. Evette Howe
- 48. Jim Isaac
- 49. Alan Kasehagen
- 50. Randall Kempf
- 51. Gary Kitzman
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- 54. Nancy Lapolla
- 55. Kelly Lazarus
- 56. Richard Lindley
- 57. Andras Lipthay
- 58. Frank Mannix
- 59. Molly Marino
- 60. Mark Masoner
- 61. Lisa Mathiasen
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- 63. Jay McAmis
- 64. Kathryn McKee
- 65. John McMillin
- 66. Michelle Menendez
- 67. Michele Mickiewicz
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- 69. Ray Montes de Oca

Direct Relief International

Lompoc Hospital District

Marian Medical Center

Santa Barbara County

Education Office

Goleta Valley Cottage Hospital

Santa Barbara Cottage Hospital

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City of Solvang

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- 79. Eric Peterson
- 80. Lisa Pritchard
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- 83. Leslie Robinson-Stone
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- 85. Dr. Angelo Salvucci
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- 95. Fr. John Stephen-Hedges

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