

County-Wide Pandemic Influenza Preparedness & Response Plan

Presented by the Santa Clara County
Public Health Department to the
Emergency Managers Association
April 27, 2006

Public Health Department

Santa Clara Valley Health & Hospital System

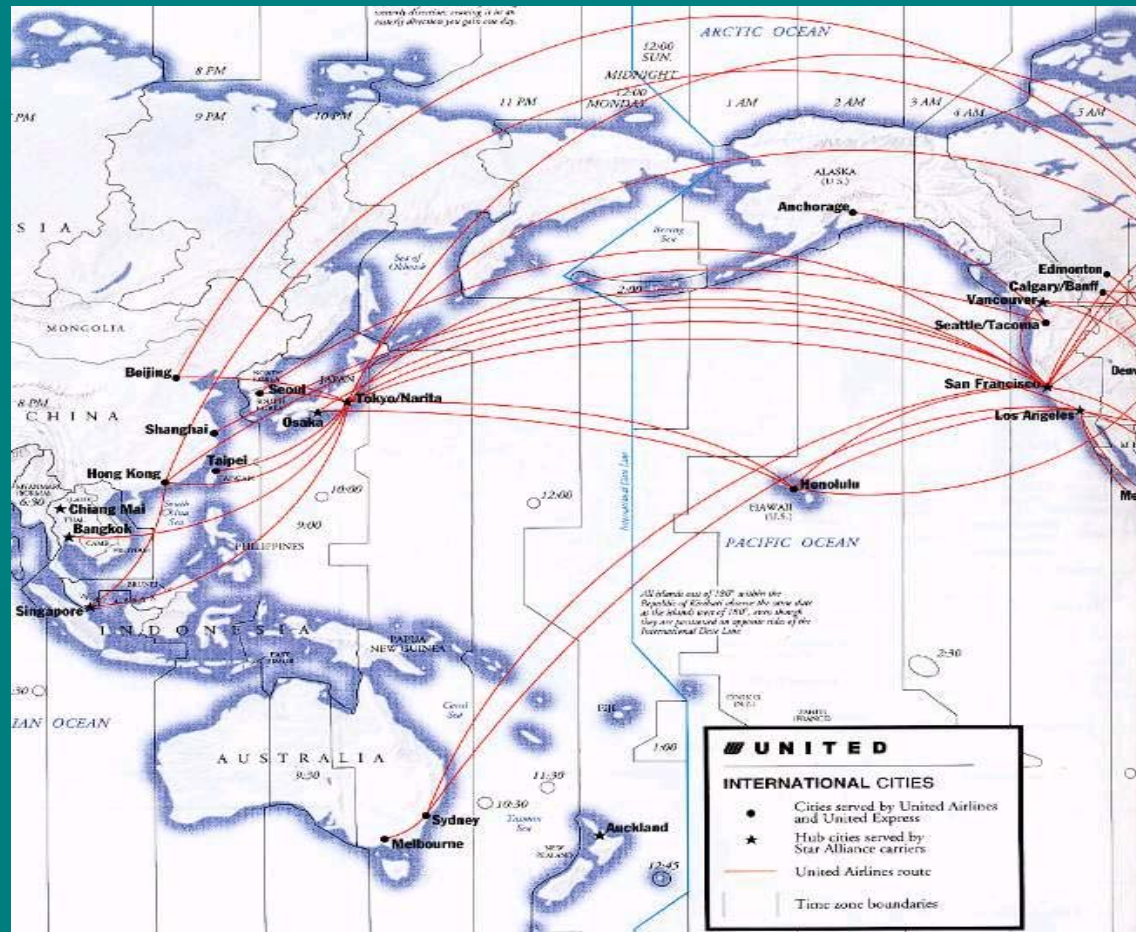


Why the Concern About Pandemic Influenza?



- ◆ Influenza pandemics are inevitable; naturally recur at more-or-less cyclical intervals.
- ◆ Current bird flu strain has great potential to become next human influenza pandemic.
- ◆ There will be little warning.

Pandemic Influenza in Today's World



About Seasonal Flu

- ◆ Virus that infects the respiratory system and people have some immunity – or protection – against it.
- ◆ It is predictable, typically seen in the winter months. Vaccine developed every year.
- ◆ Minor impact on the community and economy with people home sick from work and school.

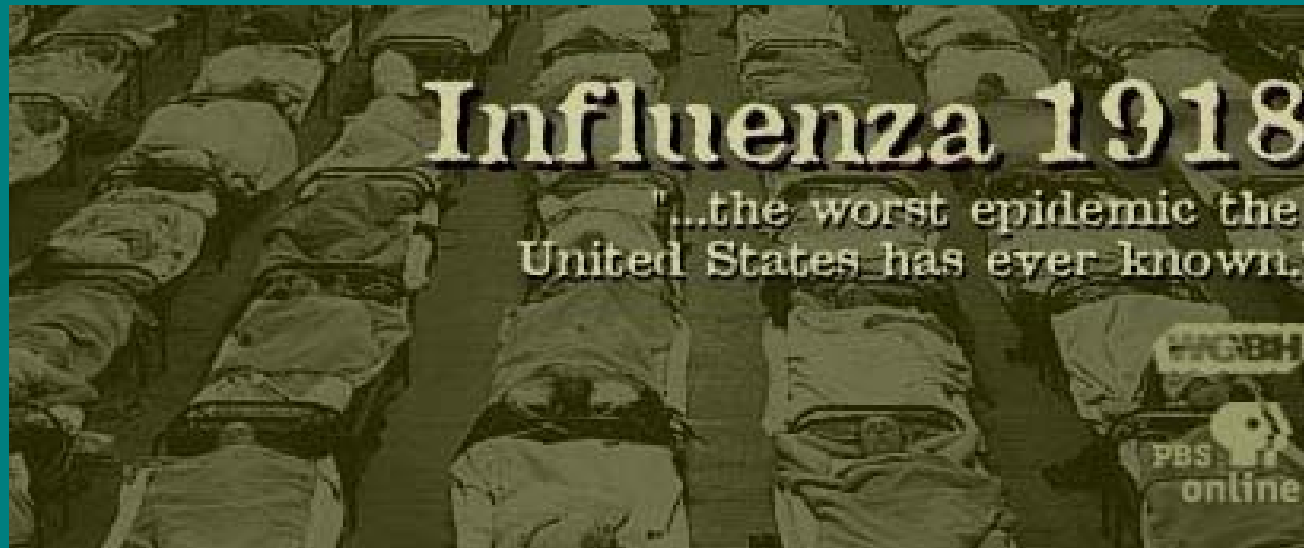
What is Avian Influenza?

- ◆ Literally “bird flu”, a non-human virus that causes illness in birds.
- ◆ Very contagious among birds, wild birds ‘carry’ the virus and infect domesticated birds.
- ◆ Does not usually infect people, but the latest outbreak has caused human illness and deaths. People get bird flu from close contact with infected birds.
- ◆ Hasn’t been able to effectively pass from person-to-person.



Pandemic Influenza

An outbreak of disease that occurs when a new influenza A virus appears or “emerges” in the human population, causes serious illness, and then spreads easily from person-to-person worldwide.

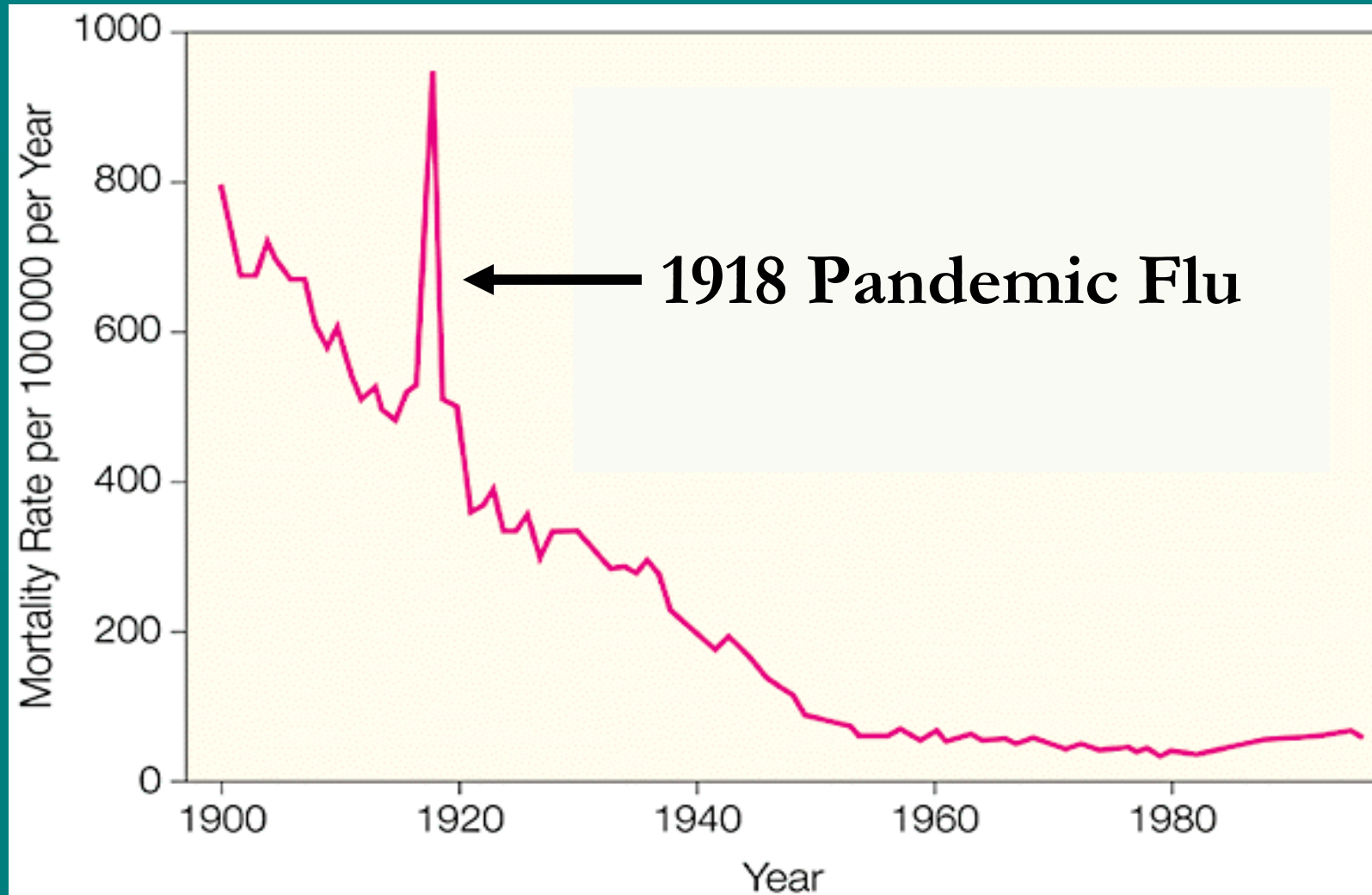


Influenza Pandemics in the 20th Century

Global pandemics are unpredictable. They don't happen often – only three times in the 20th Century.

<u>Years</u>	<u>Flu</u>	<u>Virus</u>	<u>Deaths</u>
1918-1919	“Spanish”	Type A (H1N1)	550,000 US
1957-1958	“Asian”	Type A (H2N2)	70,000 US
1968-1969	“Hong Kong”	Type A (H3N2)	34,000 US

Infectious Disease Mortality United States – 20th Century



Mode of Transmission



- ◆ **Primarily close contact – large droplets spread by coughing, sneezing, talking**

Impact of Pandemic Influenza

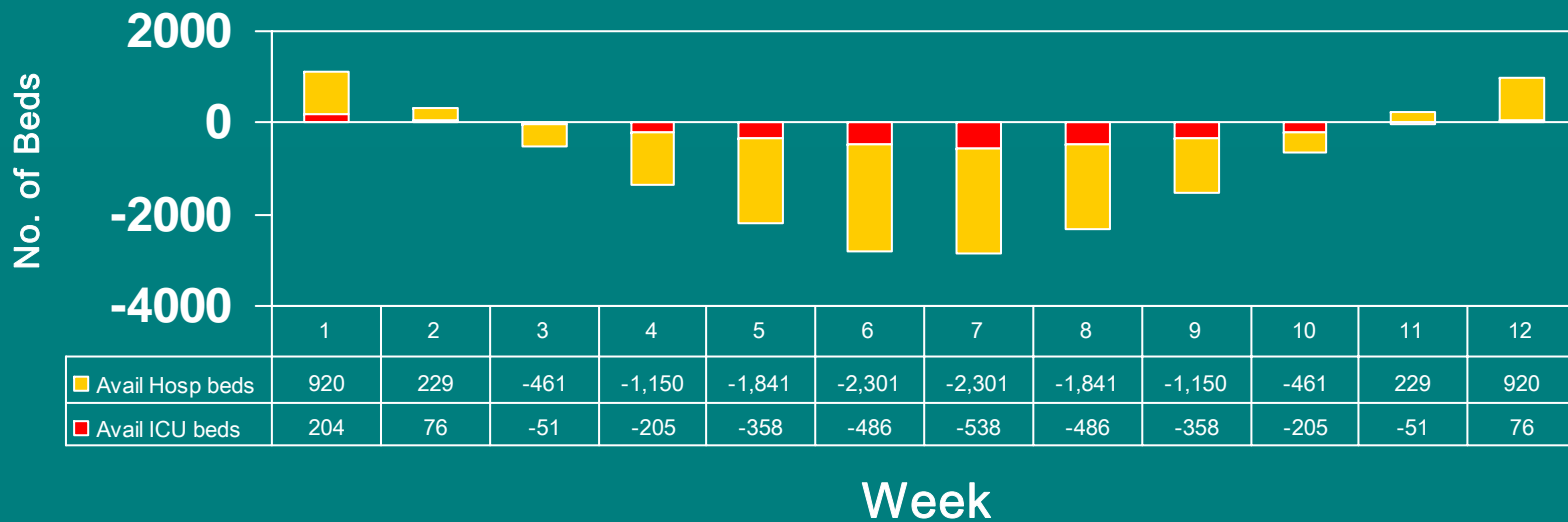
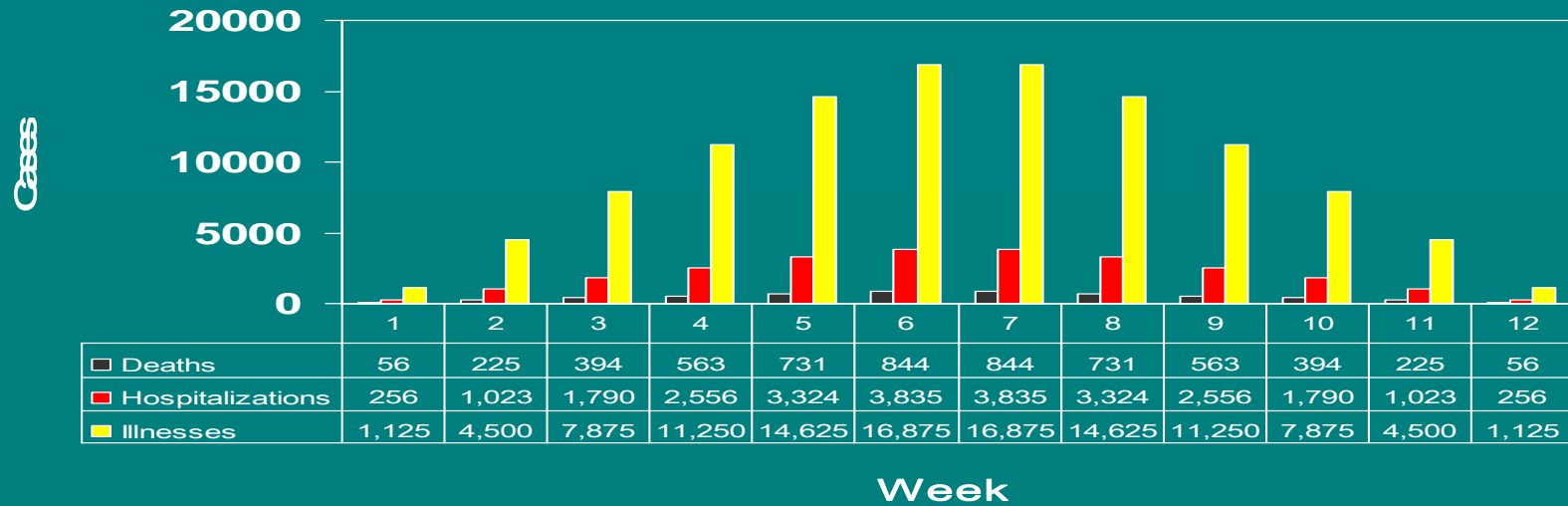
- ◆ Estimates for a major pandemic in Santa Clara County:
 - 25% to 35% clinical attack rate (people getting sick)
 - 450,000 to 620,000
 - Hospitalizations
 - 61,000 to 143,000
 - Fatalities
 - 22,500 to 31,000



Impact on Healthcare System

- ◆ Staffing and bed shortages.
- ◆ Shortages of key supplies and equipment; anti-virals, ventilators, etc.
- ◆ Demand will outpace supply for months (waves of illness for up to 2 years).
- ◆ Vaccine not available for 6 to 8 months.
- ◆ Vast majority of ill people will be taken care of at home by family members.

Surge and Capacity Challenges



Pandemic Impact: Infrastructure

- ◆ Initially, limited or no assistance from State and Federal governments
- ◆ Significant disruption of transportation, commerce, utilities, public safety and communications
- ◆ Social distancing strategies may include closing schools, and canceling public events

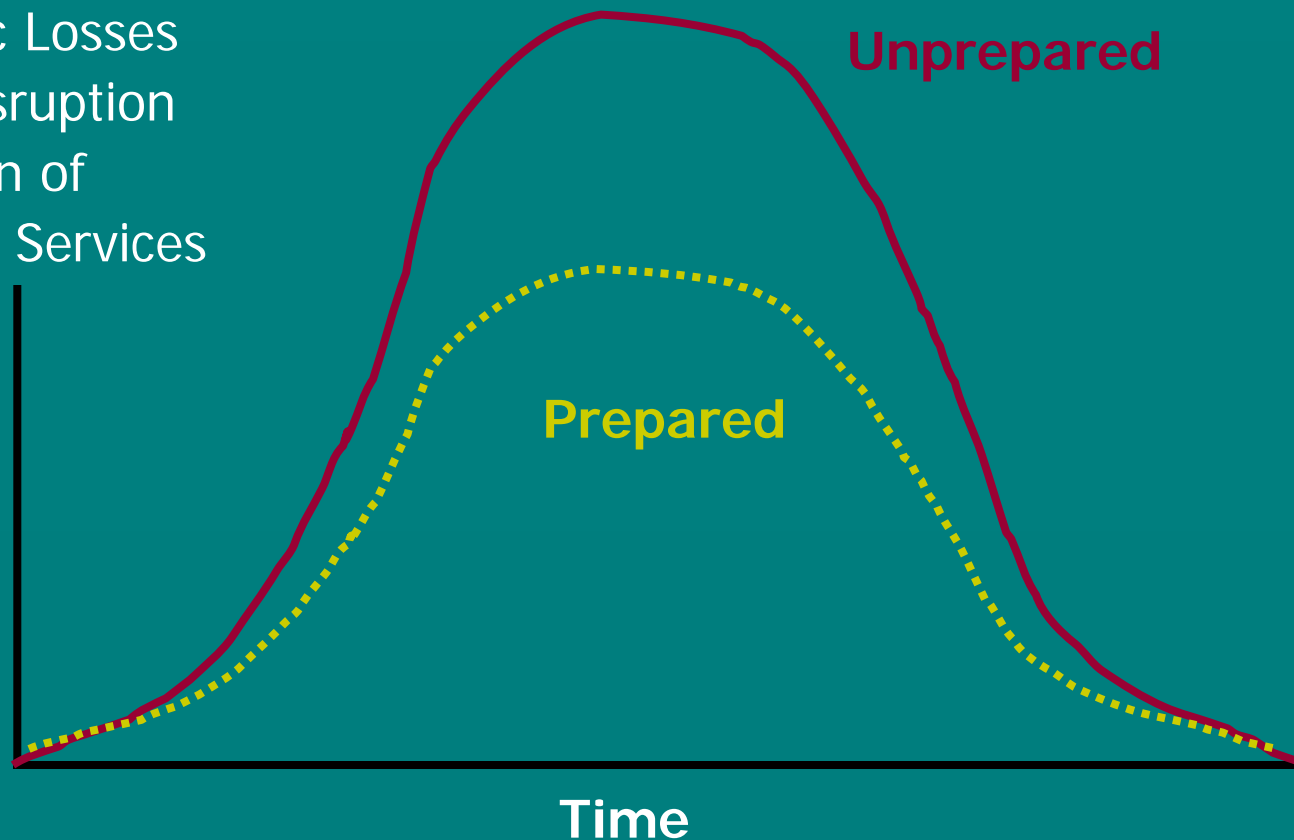
Pandemic Impact: Government and Business

- ◆ High absenteeism will necessitate continuity of operations plans
- ◆ Psychological impacts on workforce will be extreme
- ◆ Changes in workplace policies and practices critical to minimize the spread of disease (mandatory sick leave)

Pandemic Influenza Doctrine: Preparedness Minimizes Impact

Impact

- Human Illness/Death
- Economic Losses
- Social Disruption
- Disruption of Essential Services



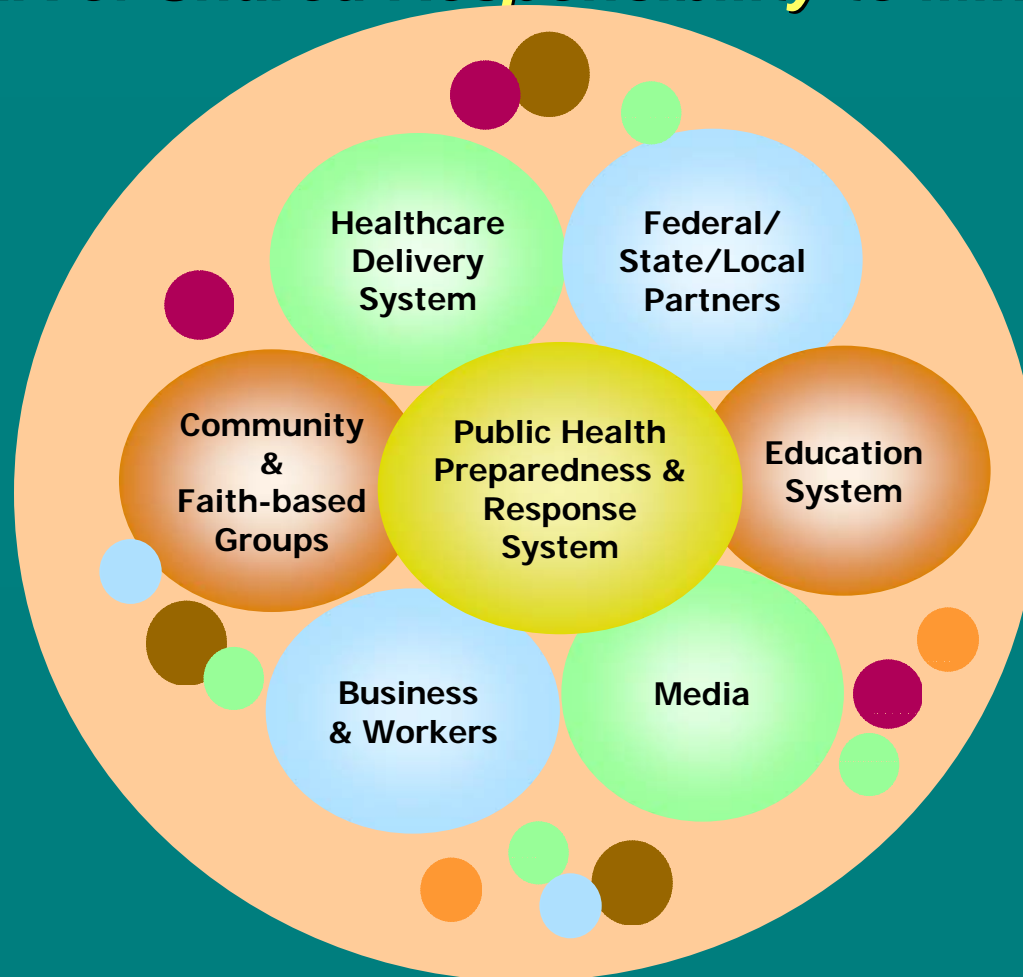
Purpose of Plan

- ◆ Guides the Public Health Department and other County departments to prepare for and respond to pandemic influenza
- ◆ Provides guidance and tools to the many partners in the community who will be involved in a response
- ◆ Guides activities to educate and prepare the general public regarding this public health threat

Public Health Preparedness & Response System

A NETWORK of Shared Responsibility to Minimize Impact!

- ◆ People
- ◆ Plans
- ◆ Products
- ◆ Practice



Overall Mission:

Minimize Impact through Coordinated Action to
Protect Public's Health

- ◆ Limit number of illnesses
- ◆ Limit number of deaths
- ◆ Preserve continuity of essential services and functions
- ◆ Minimize social disruption and economic losses

Plan Components: Critical Capacity Modules

I. Legal Authority:

Clearly defines authority and powers of the Health Officer, ie, Isolation and quarantine, restricting of public gatherings, school closures

II. Surveillance:

Early identification and reporting of cases, laboratory surveillance for disease

III. Health Care:

Hospital planning guidance, specifications for Influenza Care Centers

IV. Limiting Spread of Disease:

Infection Control Guidelines at home, Personal Protection Equipment, social distancing, ie “snow days”

Plan Components: Critical Capacity Modules

V. Clinical Guidelines and Disease Management:

Use of and prioritization of vaccines and antivirals, triage and hospital admission criteria

VI. Risk Communication/Public Awareness & Education:

Alert Period messages, pocket guide

VII. Psychosocial Support:

Coordination of mental health resources, alert period guidance on coping skills

VIII. Essential Services:

Continuity of services, prioritization for first responders, health care providers utility, food, and transportation workers.

Pandemic Influenza Levels of Care

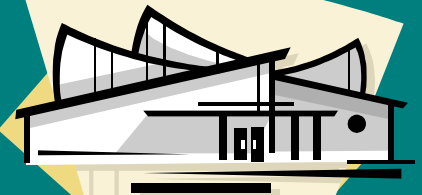
At Home Care

- ◆ Isolation
- ◆ Oral Hydration
- ◆ Oral Antibiotics



Influenza Care Centers

- ◆ Intermediate
- ◆ Board & Care
- ◆ Nursing Services
- ◆ MD on call





Hospital Admissions

- ◆ Critical Care
- ◆ Ventilators
- ◆ Ancillary Services



Continuity of Operations Planning: Government/Business/Schools

- ◆ Plan for impact on business/service
- ◆ Protect employees and customers
- ◆ Establish policies
- ◆ Allocate resources
- ◆ Engage employees
- ◆ Coordinate with external organizations

BUSINESS PANDEMIC INFLUENZA PLANNING CHECKLIST			
<p>In the event of pandemic influenza, businesses will play a key role in protecting employees' health and safety as well as limiting the negative impact to the economy and society. Planning for pandemic influenza is critical. To assist you in your efforts, the Department of Health and Human Services (HHS) and the Centers for Disease Control and Prevention (CDC) have developed the following checklist for large businesses. It identifies important, specific activities large businesses can do now to prepare, many of which will also help you in other emergencies. Further information can be found at www.pandemicflu.gov and www.cdc.gov/business.</p>			
1.1 Plan for the impact of a pandemic on your business:			
Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify a pandemic coordinator and/or team with defined roles and responsibilities for preparedness and response planning. The planning process should include input from labor representatives.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify essential employees and other critical inputs (e.g. raw materials, suppliers, sub-contractor services/ products, and logistics) required to maintain business operations by location and function during a pandemic.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Train and prepare ancillary workforce (e.g. contractors, employees in other job titles/descriptions, retirees).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Develop and plan for scenarios likely to result in an increase or decrease in demand for your products and/or services during a pandemic (e.g. effect of restriction on mass gatherings, need for hygiene supplies).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on company business financials using multiple possible scenarios that affect different product lines and/or production sites.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Determine potential impact of a pandemic on business-related domestic and international travel (e.g. quarantines, border closures).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Find up-to-date, reliable pandemic information from community public health, emergency management, and other sources and make sustainable links.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Establish an emergency communications plan and revise periodically. This plan includes identification of key contacts (with back-ups), chain of communications (including suppliers and customers), and processes for tracking and communicating business and employee status.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement an exercise/drill to test your plan, and revise periodically.
1.2 Plan for the impact of a pandemic on your employees and customers:			
Completed	In Progress	Not Started	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Forecast and allow for employee absences during a pandemic due to factors such as personal illness, family member illness, community containment measures and quarantines, school and/or business closures, and public transportation closures.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Implement guidelines to modify the frequency and type of face-to-face contact (e.g. hand-shaking, seating in meetings, office layout, shared workstations) among employees and between employees and customers (refer to CDC recommendations).
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Encourage and track annual influenza vaccination for employees.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of healthcare services during a pandemic, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Evaluate employee access to and availability of mental health and social services during a pandemic, including corporate, community, and faith-based resources, and improve services as needed.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Identify employees and key customers with special needs, and incorporate the requirements of such persons into your preparedness plan.
<p>December 6, 2005 Version 3.6</p> 			

Public Health's Role

- ◆ Facilitate Preparedness & Response Planning
- ◆ Early Detection of Disease
- ◆ Medical Health Response System Coordination
- ◆ Mass Fatality Response Coordination
- ◆ Public Information & Education
- ◆ Limiting Spread of Disease through Protective Measures

Pandemic Influenza Preparedness

"For the first time in human history, we have a chance to prepare ourselves for a pandemic before it arrives...it is incumbent upon the global community to act now."

-Dr. Margaret Chan, WHO Director, Communicable Diseases

Pandemic Influenza

What Cities Can Do

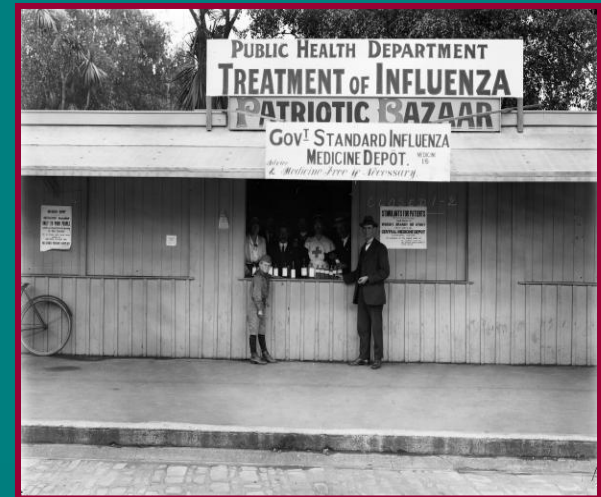
ALERT PERIOD

- ◆ Have Continuity of Operations plans in place.
- ◆ Change workplace policies and practices critical to limiting the spread of disease. Example: mandatory sick leave.
- ◆ Allocate resources to preparedness and response efforts.
- ◆ Participate in training and education of your workforce.
- ◆ Provide information through local forums and distribution of materials to your residents.

Pandemic Influenza

What the Public Can Expect

- ◆ You may be asked or required to do things to limit the spread of disease in our community.
 - Isolation or Quarantine
 - Comply with Social Distancing Measures



Pandemic Influenza

What Individuals Can Do

- ◆ Access to healthcare services will be limited. Most people will be cared for at home*:
 - Know how to isolate the ill person(s) within your home.
 - Practice good hand-hygiene.
 - Practice “Cover Your Cough” and other measures to protect members of the household.
 - Be able to circulate fresh air in your home.
 - Have enough supplies on hand, including gloves, masks, soap, tissues, cleaning supplies, food and water.

* Home Isolation Checklist in development.

Pandemic Influenza

What Individuals Can Do

- ◆ **Adapt your Emergency Preparedness Kit for Pandemic Influenza.**
 - Two weeks of food and water, prescription medicines and ibuprofen and tylenol.
 - Rehydration Solution, supply of facemasks/gloves, disinfectants and chlorine bleach.
- ◆ **Limit the spread of disease.**
 - Practice common-sense steps; washing hands, covering coughs, don't go to work sick and don't' send sick kids to school/day care.

What Can a 1st Responder Do To Prevent Exposure?

- ◆ Stay informed – listen to the news
- ◆ Stop germs from spreading
 - Wash your hands often, using soap & water or 60% alcohol based hand cleaner
 - Cover your mouth and nose with tissue when coughing or sneezing, or use your sleeve
 - Respect personal space and keep a 3 to 5 foot distance, large droplets don't generally travel more than that distance.
 - Always wash your hands for at least 20 seconds after handling a patient or putting someone into custody
 - Stay home when you are sick, stay away from others to avoid infecting them

Pandemic Influenza

Stay Informed!

- ◆ Watch and read the news, check the Web:
 - www.sccphd.org for Fact Sheets and Your Guide for Preparing for Pandemic Influenza.
 - www.cdc.gov for general information about pandemic flu and other health related issues.
 - www.cdc.gov/business for information about pandemic flu business planning.
 - www.fda.gov for information about personal protective equipment.
 - www.redcross.org for information on what you need to make an emergency preparedness plan and kit.

Pandemic Influenza

Public Health Information

- The SCC Public Health Department Web site www.sccphd.org will post new materials and information as they become available.
- The Public Health Information Line (PHIL) will have updated information on pandemic influenza and other health issues, and can answer questions: 408.885.3980.

Public Health Department

Santa Clara Valley Health & Hospital System



City Challenges

- ◆ Prioritize essential services
- ◆ Coordinate with service providers
- ◆ Evaluate telecommuting options
- ◆ Potential to cross train staff
- ◆ Increasing depth of Chain of Command
- ◆ Encourage personal preparedness
- ◆ Identify influenza care center sites
- ◆ Risk communication

Potential uses of volunteer

- ◆ Staff influenza care centers
- ◆ Distribute food and supplies to homebound
- ◆ Communications
- ◆ Public information distribution
- ◆ Garbage collection?
- ◆ ???