

5. **Pandemic Flu Planning/Use of City Facilities and Staff for Public Health Emergencies**

City Point Persons – **Darryl Von Raesfeld**, Fire Chief, **Rob Davis**, Police Chief, and **Kimberly Shunk**, City OES Director

County Point Persons – **Marty Fenstersheib**, Public Health Officer, and **Bob Fracoli**, Acting County OES Director

Est. Completion Date: TBD.

Synopsis: Public Health is the local lead agency for Bioterrorism and Pandemic Flu planning. Public Health is working with the City to identify Medication Centers/Points of Dispensing (POD) for the purpose of providing medicine/vaccine for prophylaxis as well as to address other associated needs, such as, volunteer coordination, Disaster Service Worker status for City employees, etc.

County View: Strong coordination between the Public Health Department and the City Office of Emergency Services (OES) on bioterrorism and pandemic planning and response is necessary. Public Health is responsible for developing a plan for mass prophylaxis and for determining when to activate our plans for the care of healthy people during a bioterrorism event. It is also responsible for developing a plan for medical care of pandemic victims and coordinating with cities and other partners to meet the needs of ill people and taking measures to limit the spread of disease.

The City is responsible for nominating Medication Centers (POD locations for distribution of mass prophylaxis). The City also has a role in helping to identify Influenza Care Center (ICC) locations. In addition, it is responsible for providing staffing support of PODs and ICCs. Six large facilities countywide need to be identified to serve as ICCs.

Other related coordination issues include logistics oversight (traffic and security), procurement of supplies, volunteer coordination, Joint Information Command Center (JIC), exercises and drills, and the use of City Disaster Service Workers.

Home preparedness for disasters including Pandemic Flu is critical to an effective response. San Jose has a strong neighborhood association structure with ties to the city. Public Health needs to work much more closely with these neighborhood groups in collaboration with the City.

City View: Significant progress has been made on the entire range of Public Health initiatives beginning in Spring 2007. Topics are divided between initiatives to keep healthy people well and providing treatment to people who are ill.

Those who are Healthy

The City and County have collaborated on three major preparedness activities: planning, exercises, and purchase of equipment and supplies.

Points of Dispensing (PODs or Medication Centers) – In order to provide timely service to a city of almost 1,000,000 residents, San José plans to use multiple models to deliver

medicine to keep healthy people well. A drive-thru model is currently the most efficient model; fixed sites will also be necessary to provide service to residents without cars and to vulnerable populations. San José has identified 10 fixed sites and 2 drive-thru sites as its initial effort, with more under consideration. The addition of drive-thru sites may reduce the total number of fixed sites necessary because drive-thru sites have a higher capacity.

On May 10, 2007, San José's Metropolitan Medical Task Force conducted a field exercise to test its priority prophylaxis plan for first responders. Exercise planning began in September 2006 and included Task Force members representing Fire, Police, OES, County Public Health, AMR, and Valley Medical. Participants on May 10 included sworn and non-sworn on-duty staff in Police, Fire, and OES, as well as vehicle maintenance staff from General Services who work at the Fire Training Center. Using a drive-thru model, more than 750 employees participated in this 4.5 hour exercise, which resulted in dispensing more than 3,200 courses of treatment for employees and their dependents. The exercise tested medical screening and data collection procedures, dispensing and packaging of "pharmaceuticals" (also known as M&Ms), facility layout and set-up, traffic control, and security. The exercise gave Fire and Police the opportunity to establish a unified command. As an added benefit, the exercise also accommodated walk-up participants. San José used \$30,000 from a Metropolitan Medical Response System grant to provide equipment and supplies to support this event.

- ❖ San José has identified two City-owned facilities with large parking lots, close to public transportation, which are good choices for drive-thru PODs. Within a few weeks, these facilities should be ready for review and certification as PODs by the Public Health Department. The City is still completing its analysis of the May 10 exercise, which may lead to the conclusion that more drive-thru sites will be needed, some of which may be commercially owned while others may belong to other agencies.
- ❖ As part of its planning for a heat emergency this summer, San José identified ten Community Centers which can also be used as PODs. Identification of these sites built on last year's response to record high heat. To ensure citywide availability, city staff has identified one Community Center in each Council District, located close to public transportation. Within a few weeks, these Centers should be ready for review and acceptance as PODs by the Public Health Department.
- ❖ Additional work needs to be done in collaboration with County Public Health to identify and address the needs of our most vulnerable populations.

Pharmaceuticals and Supplies – In September 2006, San José used \$700,000 of the 2004 Urban Area Security Initiative (UASI) grant to purchase pharmaceuticals and supplies to prepare for pandemic flu. In May 2007, through Santa Clara County's 2006 State Homeland Security Grant Program (SHSGP), the County agreed to purchase \$80,000 in protective N95 masks for the San José Fire Department. In the next few weeks, using \$200,000 from the 2006 Metropolitan Medical Response System grant, San José will purchase pharmaceuticals to replace outdated supplies. These purchases, which represent a substantial investment from three separate grant sources, are intended to bolster the region's ability to respond to a natural or terrorist event until the Federal stockpile can arrive.

Those who are Ill

The two primary areas under discussion are the redeployment of City employees during an influenza pandemic and the use of City facilities as influenza care centers. These are complex issues with serious human and economic consequences, and so, must be carefully considered.

Redeployment of City Employees – Under California law, every employee of a local or State agency is a Disaster Service Worker in the event of a declared emergency. Disaster Service Workers may be assigned to tasks that would not normally be within their regular scope of duties. During a pandemic, Santa Clara County will need assistance from cities and other organizations to staff public health facilities such as PODs and influenza care centers. As part of the planning process, a communication and training plan will need to be developed to ensure that essential services such as police and fire services are maintained, while at the same time providing public health support when employees and their families may be ill. San José must first identify which employees would be available for redeployment. As a second step, employees must also receive appropriate training for their new roles and responsibilities.

Use of City Facilities as Influenza Care Centers – A majority of people who become ill from flu will be cared for in their own homes. Hospitals will provide critical care for those patients who require ventilators or other sophisticated medical intervention. In order to care for people who need intravenous rehydration or oxygen, Santa Clara County Public Health will be creating influenza care centers as an intermediate step between home and hospital care. City-owned facilities may serve as expedient influenza care centers, though may not be the most desirable solution due to lack of laundry facilities and private baths. There is, however, at least one large facility in San José that could serve this purpose. Other facilities, public and private, may provide more desirable environments. As part of the planning process, the steps and timeline required to return these facilities to their original use needs to be considered. The City and County will continue to work together on this difficult task to determine the best possible solution.

City and County Response to Bioterrorism and Pandemic Influenza

*Marty Fenstersheib, MD, MPH
Santa Clara County Health Officer*

*Kim Shunk, Director
Office of Emergency Services
City of San Jose*

What Will Be Covered Today

- Bioterrorism and what the City/County responsibilities are to protect people from getting sick
- Pandemic influenza and what The City/County responsibilities are to take care of people who get sick
- What City and County are doing now and ways to continue coordinating these efforts to protect the public's health

Biologic Emergencies/Disasters

Bioterrorism	Infectious Disease

History of Bioterrorism

- **1754**
During the French and Indian wars, it's suspected British forces distribute smallpox-laden blankets to native American Indians who were loyal to the French
- **1984**
The Rajneeshee cult, followers of Baghwan Sri Rajneesh, contaminates salad bars in an Oregon town with salmonella. More than 750 people become seriously ill
- **1995**
The Aum Shinrikyo cult releases the nerve agent sarin in Tokyo subways, killing 12 and sickening thousands
- **2001**
Letters containing anthrax spores mailed to NBC News, Sen. Tom Daschle and N.Y. Gov. George Pataki. One person dies after contracting anthrax at American Media in Florida

Potential Bioterrorism Agents

Agent/Diseases	Intervention	Mortality Without Treatment	Time to Dispense
Anthrax (Inhalational)	Antibiotics (+ Vaccine)	90%	Within 36-48 hours
Small Pox	Vaccine	30%	6-10 days
Plague (pneumonic form)	Antibiotics	Nearly 100%	Within 48 hours
Tularemia	Antibiotics	30-60%	24 hours
Botulism			No Prophylaxis
Viral Hemorrhagic Fever			No Prophylaxis

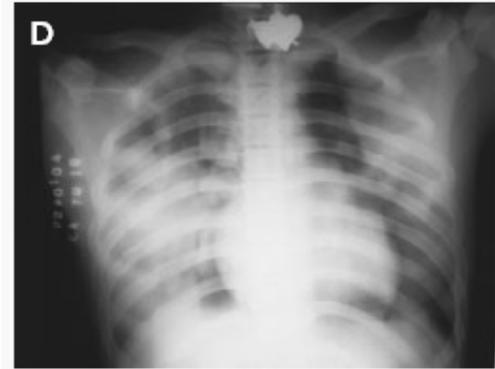
Smallpox

- Contagious person-to-person spread, can be fatal
- Vaccine most effective within **3 days of exposure**
- **No** treatment
- Only prevention is vaccination



Inhalational Anthrax

- **NOT** spread person-to-person
- Incubation as little as 48 hours
- Without treatment, **highly fatal!**
- Prevention most effect within the first **2-3 days of exposure**



Bioterrorism and Mass Prophylaxis

- Points of Dispensing (PODs), also called Medication Centers, dispense medicine or vaccine to WELL people in the general public after exposure to a biological agent

POD Site Requirements

- Must accommodate large influx of people (*2 million county-wide*)
- Must have ample parking & easy access by mass transit
- Must have basic resources such as chairs, tables, fax & internet
- Other desirable features: warehouse, cafeteria, break rooms
- Staff (*Just-in-time and pre-event training needed*)



Reaching All Sectors

Current Methods of dispensing include:

- Stationary PODs
- Drive-through sites
- Mobile Units
- Others



Medication/vaccine dispensing challenges include limitations related to:

- Language
- Individual mobility
- Transportation
- Security

Responsibility	City	County
Mass Prophylaxis Plan		■
Activation		■
Nominate sites	■	■
Traffic & Security	■	
Procurement of Supplies	■	■
Volunteer coordination	■	■

City/County Responsibilities

BIOTERRORISM

City Of San Jose

Bioterrorism Response

- Two city-owned sites have been identified which meet the needs of drive-through Medication Centers/PODs
- Ten Community Centers have been identified as appropriate fixed dispensing sites



PEDESTRIAN
MEDICATION
PICK UP

WALK IN

Priority Prophylaxis for First Responders

*May 10, 2007, San Jose Metropolitan
Medical Task Force conducted
a priority prophylaxis exercise
for first responders*

- 3,200 courses of medication dispensed in 4.5 hours
- 750 employees participated
- Drive-through model utilized

2007 Golden Guardian Exercise

- This year's exercise will focus on response to a bioterrorism attack
- Will provide opportunity for Cities to test their Medication Centers/PODs
- San Jose is providing evaluators for the Public Health component



Medication Centers/PODs

- Schools and University Campuses
- County Facilities & Public Health Clinics
- Community Centers
- City Facilities
- Corporate Sites



Bioterrorism Response Summary

- Prevention of sickness for well people exposed to deadly disease
- County/City joint efforts to identify necessary POD sites are well under way
- Several models for dispensing exist
- Greatest challenges:
 - Reaching vulnerable populations
 - Reaching all exposed residents with preventative medication in the short time frame necessary

Pandemic Flu: The Basics

Terms To Define

- **Seasonal Influenza**
- **Avian Influenza**
- **Pandemic Influenza**

Pandemic Influenza Response

- Influenza Care Centers (ICCs) are alternative medical care sites caring for sick people
- Medication Centers/PODs will **NOT** initially be needed in a pandemic

What We Won't Have

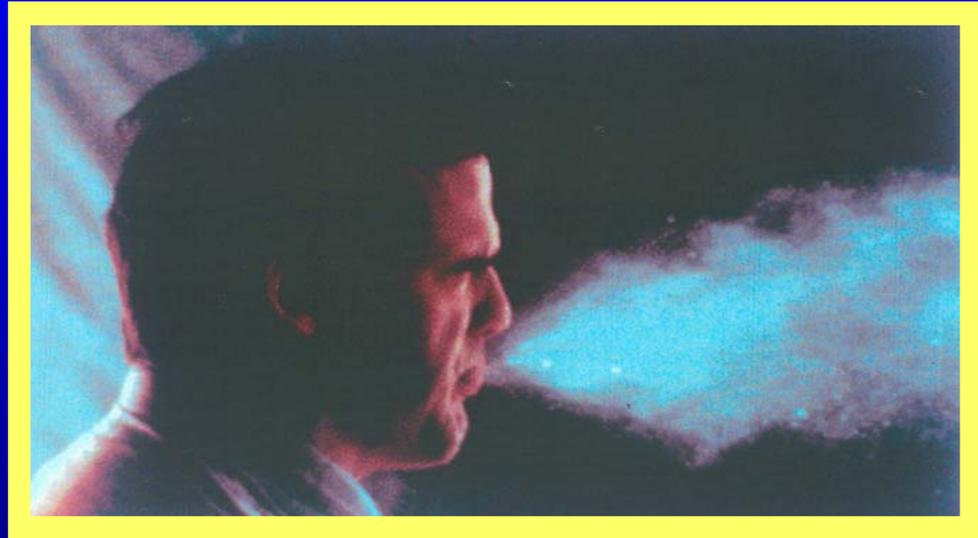
There will not be many options for preventing illness
No vaccine and limited antiviral (Tami flu)

What We Will Have

Prevention options for the WELL: personal protective equipment (PPE) and education regarding prevention, social distancing, homecare/self care will be available

Influenza Virus

- **Transmission via close contact via large droplets i.e., coughing, sneezing, talking**
- **Incubation: 1-4 days (average 2 days)**
- **Communicability: 3-8 days (1 day before to 3-7 days after symptoms)**



Seasonal Influenza

- Influenza illness seen in the winter months for which there is a vaccine available
- 37,000 die nationally from flu-related illnesses, usually from pneumonia

GET YOUR SEASONAL FLU VACCINE!

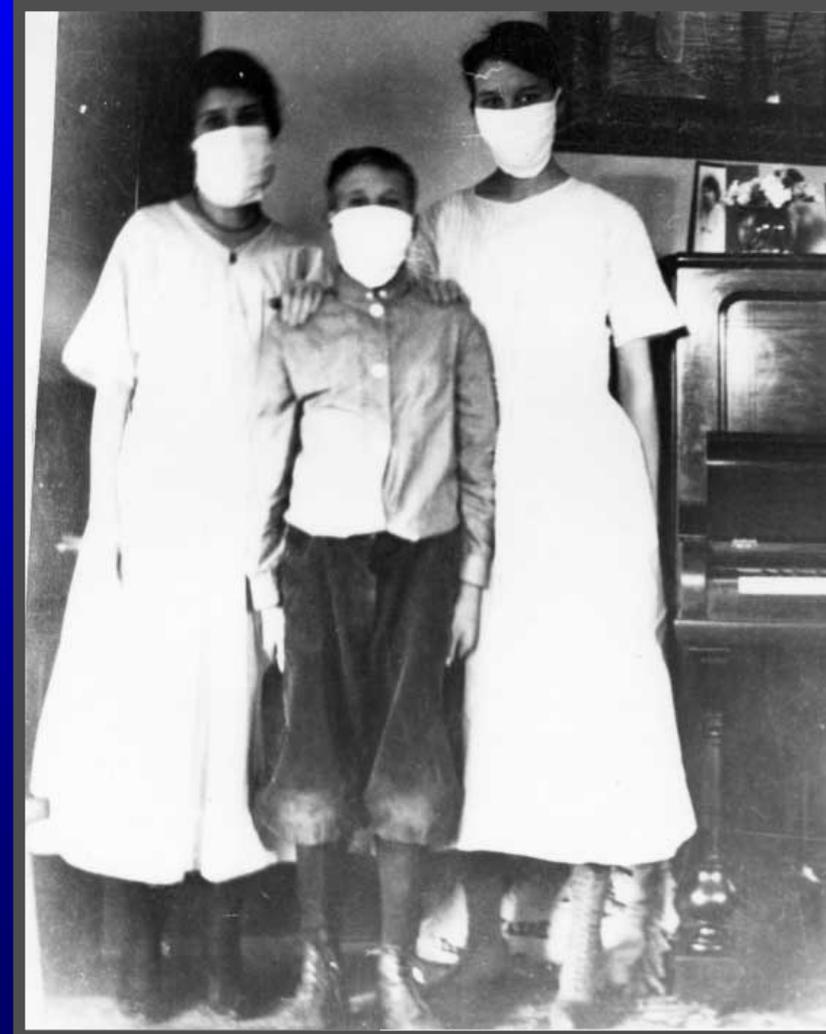
Avian Influenza (Bird Flu)



- Currently, the only Pandemic in the world is in the birds...millions have died; some are carriers
- Occasionally infects humans, not the natural host
319 human cases to date/192 deaths

Pandemic Influenza

- Novel influenza strain, to which human population has no or little immunity
- Efficient human-to-human transmission
- Pandemic literally means Global Spread



Influenza Pandemics 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

Not A Typical Health Emergency

- Longer duration than other emergencies
(waves of illness over 3-4 months... lasting 1-2 years)
- ALL segments of population affected including healthcare workers and first responders, and other essential service workers
- Simultaneous, rapid spread of disease worldwide
- Significant economic and social consequences

A Tale of Two Cities

Philadelphia and St. Louis

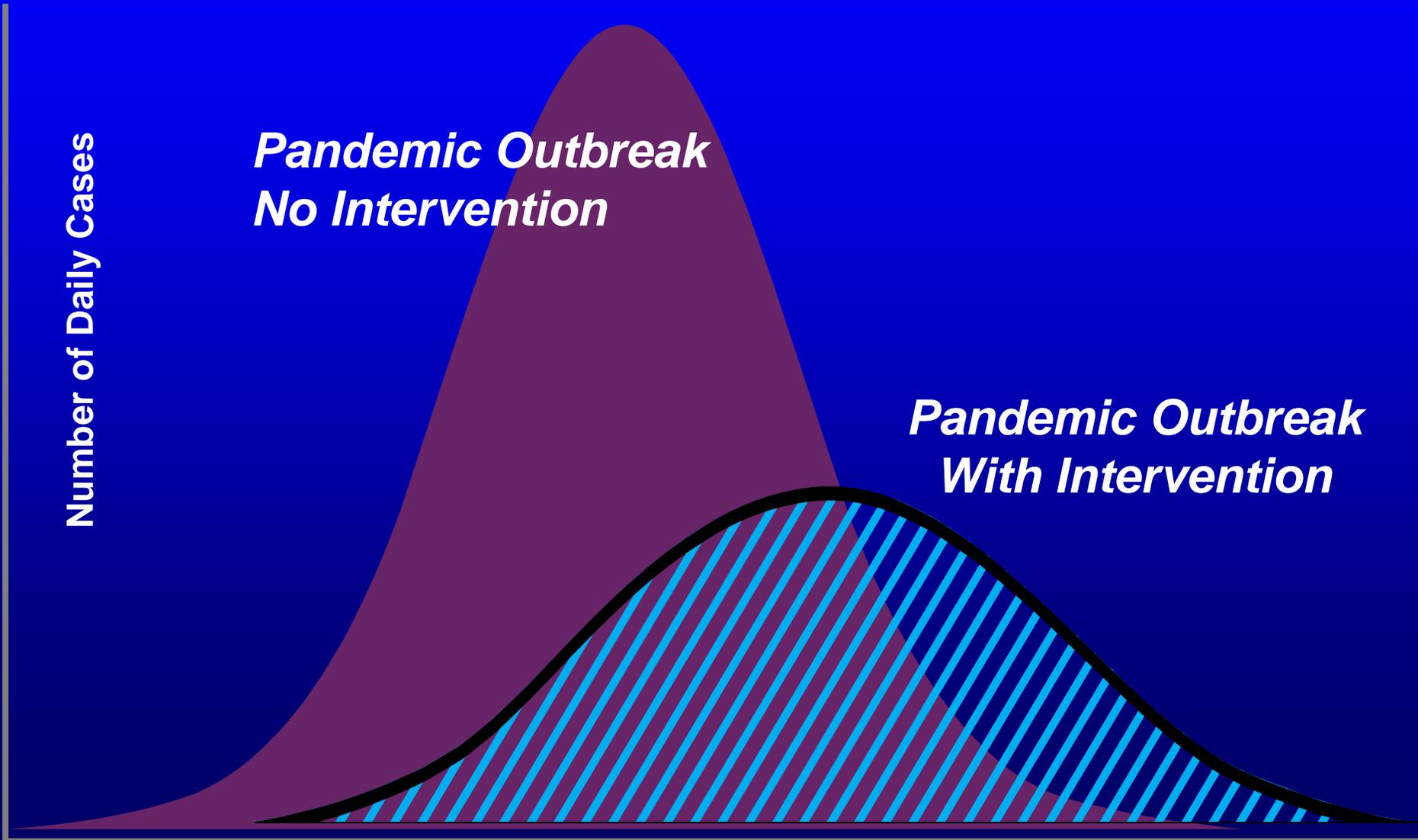
Philadelphia

- Excess death rate of 719 people for every 100,000
- City allowed large public gatherings, including a citywide parade in support of a *World War I* loan drive, to go on as planned
- In four months, more than 12,000 Philadelphians died

St. Louis

- Excess deaths in St. Louis were 347 per 100,000 people
- St. Louis officials began to react 2 weeks before Philadelphia
- Registered flu cases with the health department. Police enforced shutdown of schools, churches and gathering places
- Early Intervention Saved Thousands of Lives

Pandemic Impact With and Without Intervention



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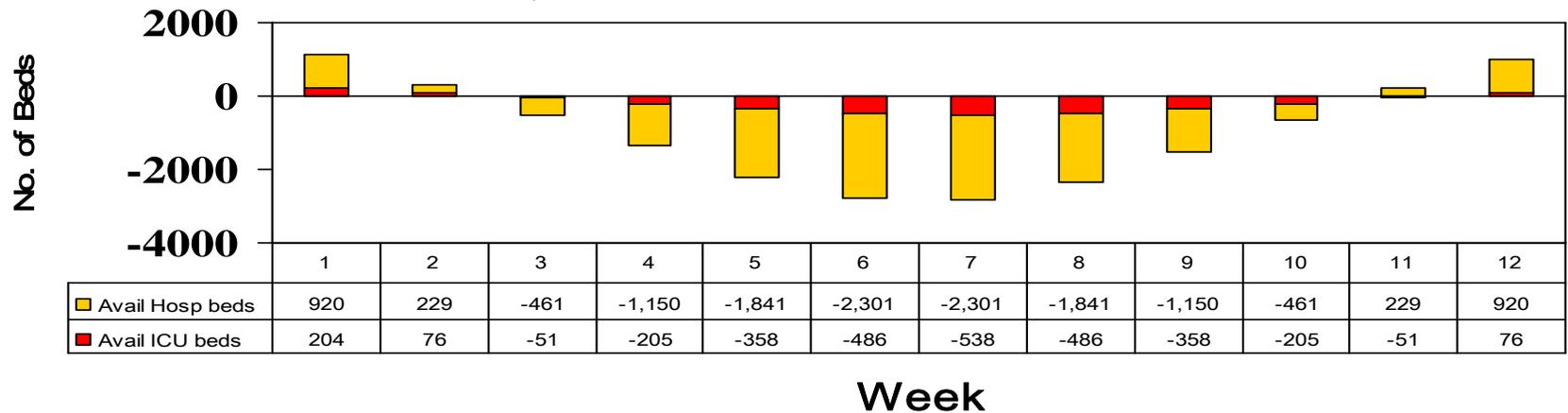
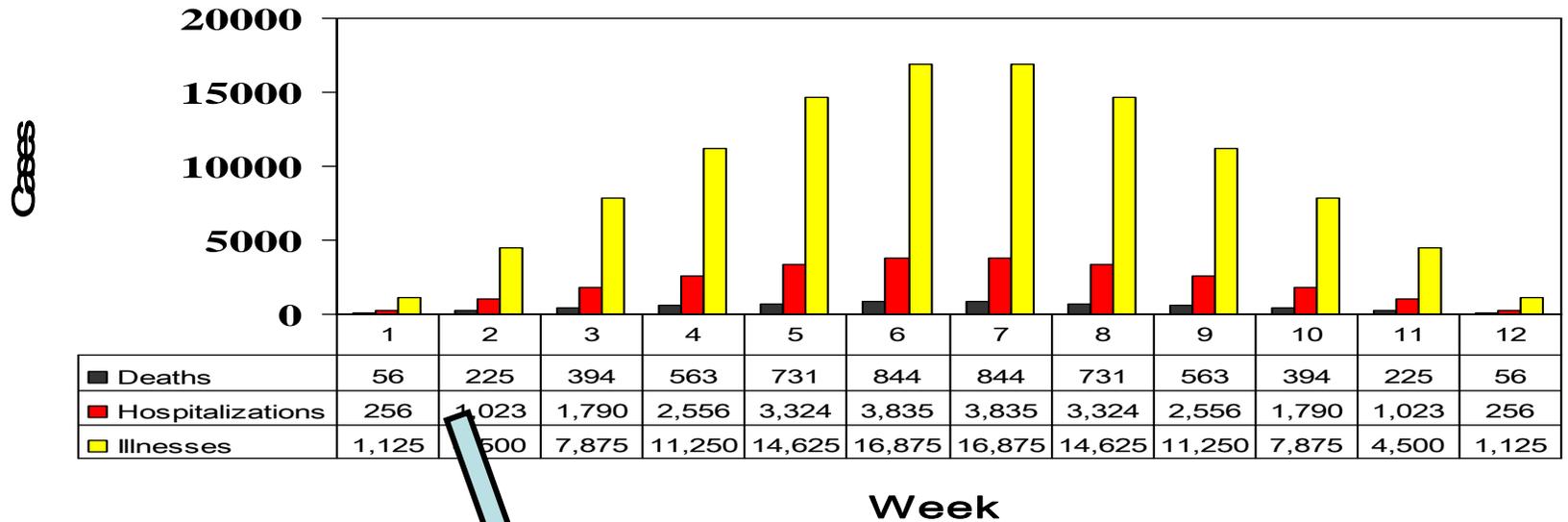


Impact To The Health Care System

**25-35% of total population will become ill In Santa Clara County
450,000 to 620,000**

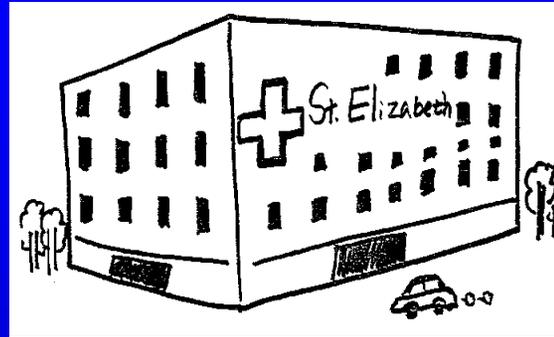
- Extreme staffing and bed shortages
- Shortage of key supplies and critical equipment (ventilators)
- Vast numbers of ill taken care of at home by family members
- Demand will outpace supply for months
- Vaccines not available for 6-8 months
- Antivirals in very short supply
- Morgues, medical examiner and mortuary services overwhelmed

Surge and Capacity Challenges



Levels of Care

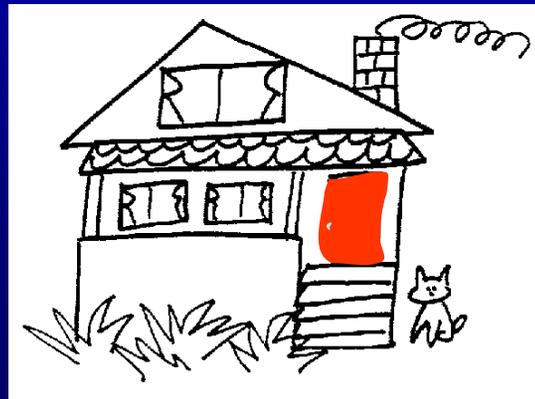
Hospital Care



Influenza Care Centers



At Home Care



Meeting The Shortage

- 2500 additional beds will be needed. Medical Mass Care Plan is designed around the establishment of 6 Influenza Care Centers (ICCs)
- Each ICC designed to accommodate up to 450 patients
- Provide intermediate level of care (*IV hydration, oxygen therapy*)





Medical Staffing ICCs

- Staff for ICC will come from Medical Volunteers from MVDR and Public Disaster Service Workers (DSWs)



M

V

DR

Medical Volunteers for
Disaster Response



MEDICAL VOLUNTEERS
for **DISASTER RESPONSE**

ICC Facility Requirements

Substantial square footage with VERY large open areas



Sites geographically distributed around the county

City/County Responsibilities

Responsibility	City	County
Medical Mass Care Plan		■
Activation		■
Identify & designate ICC sites	■	■
Community Preparedness	■	■
Traffic & Security	■	
Procurement of Supplies	■	■

PANDEMIC INFLUENZA

ICC Preparedness

Fiscal Year 2007, the BOS provided funding for pandemic influenza preparedness efforts including:

- ICC equipment and supplies
- Public awareness

Additional funds are also being provided in fiscal year 2008

ICC and City Facilities

- City-owned facilities could serve as ICCs
- Facilities would need:
 - Adequate sanitation facilities
 - Kitchen facilities
 - Laundry facilities

City Support of ICC Preparedness

- San Jose has dedicated \$700,000 of Urban Area Security Initiative funds to purchase pharmaceuticals and other supplies for ICCs
- San José's Metropolitan Medical Response System has replaced \$200,000 of pharmaceuticals for CBRNE and other public health crises
- By working with the County's Homeland Security Program, \$80,000 worth of N95 masks will be purchased for San Jose Fire

Disaster Service Workers

California Government Code

Designates all public employees as

Disaster Service

Workers who are:

- Required to report to work in an emergency or disaster
- Expected to make every effort to fulfill emergency action assignments



Redeployment Of City Employees

- City DSWs will be available to assist in the staffing of essential services for Public Health and other County agencies as needed
- San Jose will first identify workers necessary for the city's essential services before making employees available to the county for re-deployment

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T H A N K Y O U

