

This is an Exercise

This document is a simulated situation report to be used only for the Shasta County Pandemic Influenza Functional Exercise on June 18, 2009.

RE: UPDATE ON NOVEL INFLUENZA A (H1N1)/SEASONAL INFLUENZA

Executive Summary

This situation status report is to provide you with information regarding the ongoing rise in case numbers and fatalities resulting from infection with the novel influenza A (H1N1) virus in California, and to request additional assistance with refined surveillance, screening, treatment, and response activities.

As of October 31st, 150 people from Shasta County, have been diagnosed with a laboratory-confirmed influenza A (H1N1), which was previously seen circulating in the spring of 2009. Contrary to those earlier cases identified in California between April and June, current cases are much more severe and are largely being managed in acute care facilities (i.e., ICU and some ventilation required), with the vast majority of assessments and screening taking place county-wide at clinics.

Due to the previous week of activity, it is assumed that these new human swine flu cases have known links and, as a result, common exposures, meaning that we are anticipating additional cases to be identified over the coming days and weeks. A promising feature of this more severe version of H1N1 is that the strain isolates are still sensitive to oseltamivir and zanamivir. It is unclear whether the strain is still resistant to amantadine and rimantadine.

Investigation of these cases is continuing. The California Department of Public Health has **recommended refined surveillance activities** for H1N1 (i.e., limited formal swabbing and testing due to the prevalence of the virus in the community). This decision, however, is causing some concern as seasonal influenza is also considered to be circulating, so there is the dual-issue that without adequate testing, these cases may go unidentified, while some seasonal cases may be screened and triaged as H1N1 cases, and receive a higher level of treatment than might be necessary.

As the World Health Organization (WHO), along with the U.S. Department of Health and Human Services (HHS) declared Phase 6 (Pandemic) earlier in 2009, we are anticipating that authorities will confirm shortly that we are at the outset of the second pandemic wave in world.

CALIFORNIA H1N1 INFLUENZA PANDEMIC: NATIONAL, STATE, AND REGIONAL/LOCAL AGENCY UPDATES

NATIONAL (UPDATED):

The Center for Disease Control (CDC) reports:

- All U.S. states and territories are reporting outbreaks of laboratory-confirmed H1N1 influenza with sustained, community-level human-to-human transmission.
- CDC estimates that an H1N1 vaccine will be shipped to states beginning in mid-to-late November 2009.

CALIFORNIA (UPDATED)

The California Department of Public Health (CDPH) reports:

- Hospitals, community clinics and medical offices report a significant increase in patients presenting with influenza-like-illnesses. Hospitals report that critical care beds are full, there are shortages of ventilators and personal protective equipment and they are starting to triage and prioritize patients for admission. Ongoing surges of “worried well” clients are also hampering efforts to adequately deal with true pandemic patients.
- Long-term care facilities have also stopped accepting patients who have a suspected diagnosis of influenza, and are placing restrictions on visitor access in an attempt to limit the spread of H1N1 into their facilities.
- All health care providers are reporting increased absenteeism.
- Many local health departments have activated, or plan to activate, government authorized alternate care sites and triage centers. Media messaging efforts will need to ramp up to increase the public’s awareness and use of these facilities instead of visiting overcrowded hospitals and clinics.
- State and commercial laboratories report an increased number of laboratory specimens for processing. They are unable to process the volume of samples, and are triaging and prioritizing specimens. As a result, the State is in the process of drafting refined surveillance and testing guidelines, which will recommend an overall reduction in the testing of H1N1 as it is predominant in most regions of California.
- Tribal clinics are requesting assistance from local health departments as case numbers increase.
- Community-based care providers, pharmacists, and local public health departments are reporting an increase in asymptomatic persons requesting antibiotics, antivirals, vaccine and current influenza information.

- Pharmacies are also reporting bulk purchases of over-the-counter flu and cold medicines, and home care supplies. Supply chain delays have left some pharmacies unable to meet demand for antiviral medications and antibiotics.
- The antiviral situation also remains a stressor for regional and local units as demand is currently beyond capacity and resources. While additional stores of antivirals are being mobilized by the federal government, miscommunication regarding the use and focus of the antiviral strategy (i.e., priority for treatment or priority on prophylaxis) is resulting in delays in distribution and confusion over access.

The Emergency Medical Services Authority (EMSA) reports:

- A mild increase in absenteeism from emergency medical service providers statewide causing delays in patient transport.
- Calls to the 911 system, however, have dramatically increased.

The California Department of Mental Health (DMH) reports:

- Local mental health entities are beginning to see an increase in the number of calls requesting information and assistance for psycho-social issues and anxiety over the pandemic wave.

The Medical Examiner reports:

- County Coroners are reporting that they are receiving some calls from concerned relatives of suspected H1N1 deaths whose bodies are temporarily being stored in the home out of fear that they will not be processed according to faith/cultural considerations.
- Federal Disaster Mortuary Operational Response Team (DMORT) assistance was requested under the Governor's Oct 20th declaration of emergency.

The Cal-EMA Law Duty Officer (LDO) reports:

- An increase in requests for security and response to minor incidents of civil unrest, theft/looting, and property damage at health care facilities statewide; law enforcement officials suspect that anxiety over access to antivirals may have been a major reason for the disturbances.

ADDITIONAL INFORMATION (UPDATED):

Food Supplies and Medications:

- The California Grocers Association (CGA) reports the public is beginning to buy and hoard large quantities of food, other necessities, and cold/flu medications.
- There are minor delays in re-supply due to some absenteeism in the transportation industry.

- Medical suppliers (vendors) are beginning to project delays in the coming weeks in resupply at healthcare facilities due to supply chain and transportation disruptions as the pandemic wave progresses.

Public Utilities:

- Public utilities and the California Independent System Operator (CAL ISO) report all systems (e.g. water, sewer, electricity) are currently functioning normally; however, they project possible future disruptions as anticipated rates of absenteeism increase across the workforce.
- Communication system providers (e.g., landlines, cell phones, internet services) report high system use leading to intermittent system interruption; in addition, there have been reports of cellular and landline busy signals or dropped calls, and an inability to access the Internet at peak times. Radio and satellite communications systems are functioning with a high volume of traffic but there are no reports of service disruption at this time.

EMERGENCY OPERATION CENTER (EOC) ACTIVATIONS:

- Emergency Operations Centers and Command Centers remain activated at the operational area, local, regional and State levels.

As of October 31st, 2009:

- State Operations Center (SOC): Activated
- State Operations Center (SOC) Joint Information Center: activated
- Inland, Coastal, and Southern Regional Emergency Operations Centers: activated
- CDPH/EMSA/DHCS Joint Emergency Operations Center (JEOC): activated
- Operational Area EOCs: activated statewide
- Local EOCs: activated statewide
- Hospital and Clinic Command Centers: activated statewide

BACKGROUND (UPDATED to reflect change of dates):

June 11th, 2009:

- The World Health Organization (WHO) declared Pandemic, Phase 6 defined as “efficient and sustained human to human transmission” due to human outbreaks of H1N1 influenza in around the world. However, due to the low severity of the virus, and the ebbing of case numbers in North America at the end of June, it was assumed that the first wave of the pandemic had taken place, with an expectation that the virus would return later in 2009.

July-September 2009:

- A number of recovery and reporting processes took place, particularly to gain a better understanding of the H1N1 virus during the first wave, and how response efforts handled outbreaks across the U.S.

- During this time, case numbers increased and then began to subside in other regions of the world, particularly in the Southern Hemisphere (e.g., South Pacific, Middle East, and Africa).
- The Centers for Disease Control and Prevention (CDC) and CDPH recommended that increased surveillance be reduced, but that activities would likely ramp up into the fall of 2009, along with increased public education, and non-pharmaceutical community mitigation efforts should H1N1 return.

Late September 2009:

- CDC reported outbreaks of illness and deaths in Florida, New York, Ohio, and Texas. * All State, regional and local Emergency Operations Centers were activated.

Early October, 2009:

- CDPH's laboratory confirmed the first case of Wave #2 human H1N1 influenza in California.
- State authorities are notified that a pandemic vaccine (H1N1) will not be ready for shipment until late-November; initial doses may be designated for administration to critical infrastructure personnel initially.
- State stockpiles of antiviral medications were distributed to local health departments.

October 15, 2009:

- Clusters of severe influenza-like-illness and laboratory confirmed H1N1 cases were reported in multiple counties across California.
- The public health and healthcare system became heavily impacted with numbers of ill and worried well.
- It is anticipated that absenteeism rates of 25% will be the norm during Wave #2.

October 20, 2009:

- Governor Schwarzenegger proclaimed a State of Emergency in California.

Clinical Characteristics of Swine Flu in California and the U.S.

Case investigations have made possible an early profile of the clinical characteristics of the swine flu. The following information is derived from approximately 15,000 laboratory-confirmed or probable cases in the California as of October 31st, 2009, along with county-specific data collected by Shasta County Public Health:

- The overall cumulative clinical attack rate in the second wave is 25%.
- Patient screening and treatment data in Shasta County in Week 1 of the second wave includes:
 - 1,524 outpatient visits
 - 41 hospital admissions
 - 6 ICU patients
 - 13 patients requiring ventilation
 - 1 deaths
- Compared to annual, non-pandemic data, we have seen a 30 % increase in outpatient visits during Week 1; it is anticipated that there will be a 50% increase in outpatient visits in Week 2.

The case definition remains the same:

Influenza-like-illness (ILI) is defined as fever (temperature of 100°F [37.8°C] or greater) and a cough and/or a sore throat in the absence of a KNOWN cause other than influenza.

Additional clinical findings from Wave #1 include:

- Patients with uncomplicated disease due to confirmed novel influenza A (H1N1) virus infection have experienced:
 - fever,
 - chills,
 - headache,
 - upper respiratory tract symptoms (cough, sore throat, rhinorrhea, shortness of breath),
 - muscle pain,
 - joint pain,
 - fatigue,
 - vomiting, or
 - diarrhea.

Use of antivirals for swine flu

Healthcare providers are asked to **use antivirals for treatment of severely ill H1N1 flu cases or those at high risk of complications** from flu (<5 year olds, chronic medical conditions, pregnant and >65) **(or limited prophylaxis) only according to the specific guidance** provided by SCPH and the California Department of Public Health (CDPH) **to help prevent the development of resistance to oseltamivir and zanamivir.**

Infection Control Precautions in the Healthcare Setting

Healthcare workers providing care for patients with H1N1 flu illness should use the following infection control precautions:

- Personal protective equipment: fit-tested disposable N95 respirator [if unavailable, wear a medical (surgical) mask], disposable gloves, gown, and eye protection (face shield or goggles).
- When completed, place all PPE in a biohazard bag for appropriate disposal.
- Wash hands thoroughly with soap and water or alcohol-based hand gel.
- Suspect swine influenza patients (ill close contact of a laboratory-confirmed or probable swine influenza case) should be asked to don a surgical mask and should be placed promptly in an airborne infection isolation room, if available, or in a single room with a door that closes.

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