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Emergency Medical Services (EMS) Specific Guidance #2

Guidance and Recommendations for Local EMS Agencies and EMS providers for Swine Flu Response
April 27, 2009

As of the date of this memo, the Swine Flu situation remains very fluid and subject to change. Additionally, EMS Authority recognizes that each local EMS agency may have a different approach based upon the number of confirmed or suspected cases within their jurisdiction.

Current Status

The current status of the Swine Flu outbreak is that the Centers for Disease Control (CDC) has confirmed eleven (11) cases of Swine Influenza in California caused by swine influenza (H1N1) viruses. The viruses contain a unique combination of gene segments that have not been reported previously among swine or human influenza viruses in the U.S. or elsewhere. See the Fact Sheet at the end of this document for further information.

Recommendations to Local EMS Agencies

There are a number of strategies that EMS Authority is recommending to local EMS agencies in order to identify potential victims, protect their EMS personnel, provide excellent patient care and participate in California's public health process.

The following recommendations are provided to the local EMS agency Administrator and Medical Director for consideration when addressing the needs of its EMS community during this public health emergency:

- Update local EMS Policies Related to Infection Control Procedures specific to Swine Flu;
- Train all EMS Personnel on Responding to Patients with Influenza-Like Illnesses with "Just In Time Training";
- Place Swine Flu Recommendations and Policies for public distribution and information;
- Local EMS agencies should ensure that all providers, both emergency and non-emergency providers, have sufficient types and quantities of Personal Protective Equipment (PPE) for their personnel to meet the needs of the Swine Flu outbreak;

- Determine if local policies should include enhanced prehospital surveillance, changes in transport considerations or destinations, and recommendations for employers to notify staff of the emerging problem and provide personnel with personal protection information for them and their families;
- Local EMS agencies may need to work with hospitals if they have established specific fever triage sites in temporary structures at the hospital site;
- Ensure a full working relationship with the public health department in the area.

EMS Authority will continue to provide necessary information and guidance to its EMS partners by identifying trends, sharing best practices and disseminating information. Local EMS agencies are encouraged to share their experiences, policies, procedures and other relevant information as we work towards concluding this public health emergency.

Update Local EMS Policies Related to Infection Control Procedures

Local policies related to infection control and emergency preparedness should be updated to reflect the necessary information. Policies related to Pandemic Influenza include:

Emergency Medical Dispatch – When using EMD protocols, further interrogation may be needed for severe respiratory infection [flu-like] symptoms including breathing difficulty and/or fever:

> **Question #1:** Have they recently been in Mexico or been exposed to anyone that has been in Mexico, and how long the person was in Mexico (paying particular attention to those who stayed for 7 days or longer)?
> **Question #2:** Are they febrile or have a fever, and if so, is it higher than 100°F (37.8°C)
> **Questions #3:** Do they have a cough, sore throat or any other respiratory symptoms like difficulty breathing?
>
> Dispatchers should report the responses to these questions to EMS personnel before they arrive on the scene.

Emergency "Influenza-Like-Illness" medical protocol development and distribution in connection with "Just in Time Training."

The most important reminder is that EMS personnel should wash hands frequently with soap and water or alcohol-based hand sanitizer.

In addition, local EMS Agencies may consider the following:

In the most common situation where EMS workers are providing care for patients with Influenza-Like Illness (ILI) who are not known contacts of a laboratory-confirmed swine flu case:

- EMS personnel should request additional information from dispatchers when sent to respiratory, sick person and fever related calls if limited initial information is provided upon dispatch.

- Initial interrogation of the patient from at least 6 feet away to determine if personal protective equipment (PPE) precautions are necessary.

  Consider swine influenza infection in the differential diagnosis of patients with febrile respiratory illness and who **1)** live in San Diego or Imperial counties, California, or Guadalupe County, Texas, or traveled to these counties or **2)** who traveled recently to Mexico or were in contact with persons who had febrile respiratory illness and were in one of the three U.S. counties or Mexico during the 7 days preceding their illness onset.

  If patient has ILI and answers "yes" to question 1 and/or 2 and has ILI signs/symptoms, it is recommended the EMS personnel:
  - Wear a fit-tested N95 respirator, disposable gloves, gown, and eye protection (face shield or goggles).
  - Before and after contact with the patient, clean hands thoroughly with soap and water, or an alcohol-based hand gel.

  If the patient has ILI and answers "no" to questions 1 and 2, the EMS personnel should use standard barrier precautions plus droplet precautions (i.e., wear a surgical or procedure mask for close contact) for procedures that require close contact. Standard precautions include hand hygiene and the use of eye protection if splashing or spraying of blood or body fluids (including respiratory secretions) are anticipated.

- Placing a mask on all patients with suspected symptoms, using non-rebreather masks when oxygen is required.

- Droplet producing procedures should be avoided whenever possible including nebulizers, bag-valve-mask, suctioning or intubation. Use of metered dose inhalers may be used versus nebulized treatments. A clinical decision needs to be made to treat at the scene versus rapid transport to a receiving facility with supportive care enroute. Base Hospital contact may provide the necessary medical direction.

- If bag-valve-masks are needed, use those with HEPA filters whenever possible.

- The determination of transport options for ILI patients should be based on local policy with modifications as determined by the local Medical Director.

- Alert receiving hospital personnel of the possibility of an infectious patient as soon as possible and deliver to the designated Fever Triage station of a hospital or hold suspected infectious patients in the ambulance until their destination in the hospital is known, rather than immediately moving them into the emergency room.

- Perform a thorough cleaning of the stretcher and all equipment that has come in contact with or been within 6 feet with an approved disinfectant, upon completion of the call.

In the event that EMS personnel are providing care for a laboratory-confirmed swine flu case, or an ill close contact of a laboratory-confirmed swine flu case, precautions should include:

- Wear a fit-tested N95 respirator, disposable gloves, gown, and eye protection (face shield or goggles).
- Before and after contact with the patient, clean hands thoroughly with soap and water or an alcohol-based hand gel.

The worst cases of flu that have presented so far have been mostly adults from ages 25 to 45, but patients of all ages have been infected, so the same precautions should be used for all patients.

Train all EMS Personnel on Responding to Patients with Influenza-Like Illnesses with "Just In Time Training"

Local EMS agencies should ensure that EMTs and paramedics receive "Just In Time" Training (15-30 minutes), prior to going on shift, covering the following topics related to the current public health emergency for swine flu:

- What is swine flu? What is the current status of its incidence in California?
- Case Definition of "Influenza-Like Illness" (ILI)
- How EMS personnel should approach the care of ILI patients
- Personal Protective Equipment (PPE) availability and appropriate use
- Any EMS specific situational guidance recommendations
- Local surveillance and reporting of ILI for Public Health and EMS
- Any Changes to local EMS policy for transport versus non-transport related to ILI

Place Swine Flu Recommendations and Policies for public distribution and information

Local EMS agencies should communicate with providers their expectations regarding response to Swine Flu:

- Place local policies and information on LEMSA website;
- Place information on your hospital information network (ie ReddiNet or EMSystem).

Local EMS Agencies should ensure that all providers, both emergency and non-emergency providers, have sufficient types and quantities of Personal Protective Equipment (PPE) for their personnel to meet the needs of the Swine Flu outbreak

EMS Authority is recommending that LEMSAs, if they have not done so already, assess the status of all EMS providers related to the types and quantities of PPE. This PPE should meet any local requirements and recommendations for this situation. Additionally, it should at a minimum include the EMS Authority policy on PPE – EMSA #216 (June 2005): *PPE For Ambulance Personnel in California Guidelines*

Local EMS agencies should communicate daily with hospitals and local county health departments; and monitor news reports and government resources for changing situations, such as:

http://www.emsa.ca.gov/about/Swine_Flu_Guidance.asp
http://www.cdph.ca.gov/Pages/default.aspx
http://www.cdc.gov/swineflu/

Key Facts about Swine Influenza (Swine Flu)

What is Swine Influenza (Swine flu)?
Swine Influenza is typically a respiratory disease of pigs; however, swine flu has expanded to human-to-human transmission. Swine flu is a type of Influenza-Like Illness (ILI).

Can humans catch swine flu?
Documented human-to-human transmission of swine flu is now occurring in California.

What are the symptoms of swine flu in humans?
The symptoms of swine flu in people are expected to be similar to the symptoms of regular human seasonal influenza and include fever (greater than 100.0° F or 37.8 ° C), AND cough and sore throat, and lack of appetite. Some people with swine flu also have reported runny nose, nausea, vomiting, and diarrhea.

How does swine flu spread?
Human-to-human transmission of swine flu predominantly occurs through direct droplet transmission. This is thought to occur in the same way as seasonal flu, which is mainly person-to-person transmission through coughing or sneezing of infected people. People may become infected by touching something with flu viruses on it and then touching their mouth or nose (moist mucous membranes).

How can human infections with swine influenza be diagnosed?
To diagnose swine influenza A infection, a respiratory specimen would generally need to be collected within the first 4 to 5 days of illness (when an infected person is most likely to be shedding virus); however, some persons, especially children, may shed virus for 10 days or longer. Identification as a swine flu influenza A virus requires sending the specimen to a laboratory for testing.

What medications are available to treat swine flu infections in humans?
At this time, CDC recommends the use of Tamiflu (oseltamivir phosphate) or Relenza (zanamivir) as part of the treatment and/or reduction of severity of infection with swine influenza viruses. More information on treatment recommendations can be found at www.cdc.gov/flu/swine/recommendations.htm.

Is the H1N1 swine flu virus the same as human H1N1 viruses?
No. The H1N1 swine flu viruses are antigenically very different from human H1N1 viruses and, therefore, vaccines for human seasonal flu do not provide protection from this H1N1 set of swine flu viruses.

Is there a vaccine for swine flu?
There is no vaccine to protect humans from swine flu at this time.

How can I protect myself?
Maintain a barrier between yourself and the patient. The first barrier is a distance of 6 feet or more to determine if the patient has ILI; however, if the 6 foot barrier must be broken then respiratory personal protective equipment (PPE) should be donned.