#### H1N1 Influenza Update

EMERGENCY MEDICAL SERVICES AUTHORITY April 30, 2009



# What is Swine Influenza (Swine flu)?

- Type of Influenza A (H1N1)
- Swine Influenza is typically a respiratory disease of pigs
- Swine flu has expanded to human-to-human transmission
- Swine flu is a type of:
  - Influenza-Like Illness (ILI)



#### What is the current Status?

- Centers for Disease Control (CDC) has confirmed seven (7) cases of Swine Influenza in CA caused by swine influenza (H1N1) viruses
- Viruses contain a unique combination of gene segments that have not been reported previously among swine or human influenza viruses in United States



#### Where is the Incidence Swine Flu?

- According to the CDC as of April 27, 2009 documented human-tohuman transmission of swine flu have now occurred in:
  - California
  - Texas
  - Ohio
  - New York
  - Mexico
  - Eastern Canada
  - New Zealand





## What is happening nationally with swine flu?

- According to the CDC as of April 27, 2009, of the confirmed cases of swine influenza A (H1N1) virus infection
  - Only two confirmed case-patients were hospitalized
  - None have died in the United States.



## What is happening internationally with swine flu?

- Mexican health officials have reported several hundred suspect cases, including several deaths associated with confirmed swine influenza A (H1N1) virus infection.
- In Mexico, many patients have experienced rapidly progressive pneumonia, respiratory failure requiring mechanical ventilation & acute respiratory distress syndrome (ARDS)



#### **Comparison of Cases**

- Therefore, the experience of these two countries has been markedly different to date
- Getting better information to explain these differences is a high priority for the ongoing investigation



#### What is a good way to get realtime information?

- News services are in the business to sensationalize & caution should be taken with all information
- The Centers for Disease Control (CDC) has created a page for daily updates



## 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 & include:
  - fever (greater than 100.0° F or 37.8 ° C), AND
  - cough & sore throat
  - lack of appetite
- Internationally, some people with swine flu also have reported runny nose, nausea, vomiting, & diarrhea



## 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)
  - 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.





#### Is the H1N1 swine flu virus the same as human H1N1 viruses?

- No, H1N1 swine flu viruses are antigenically very different from human H1N1 viruses
- Vaccines for human seasonal flu do not provide protection from this H1N1 set of swine flu viruses



#### 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 & then touching their mouth or nose (moist mucous membranes).



# What should I do if I think I may be sick?

- Stay home & reduce the spread of infectious diseases
- Utilize barrier protection
- Utilize personal protective equipment (PPE)





## How can I limit the spread of contact transmission?

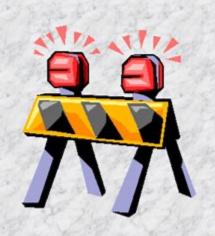
- Good hand hygiene or hand washing
- Create a barrier between yourself and the virus
- Remove the virus whenever possible through good cleansing of surfaces







- The first barrier is distance
  - If you are sick, stay home
  - If you suspect someone of having the virus then protect yourself with person protective equipment (PPE) prior to entering their 6 foot radius.





# What is person protective equipment (PPE)?

■ Personal protective equipment, commonly referred to as "PPE", is equipment worn to minimize exposure to a variety of hazards





# What is PPE for medical providers regarding droplet precautions?

- Wear a fit-tested N95 respirator, disposable gloves, gown, & eye protection (face shield or goggles)
- Place a surgical mask on the patient & utilize devices to reduce secretion distribution
- Before & after contact with respiratory infected people:
  - clean hands thoroughly with soap & water or an alcohol-based hand gel.



#### What is good hand hygiene?

■ Washing hand for more than 15 seconds with soap & water or apply an alcohol-based cleanser rubbing hands until dry





# When should you wash your hands with soap & water?

Wash your hands with plain soap & water or with antimicrobial soap & water if:

- your hands are visibly soiled (dirty)
- hands are <u>visibly contaminated</u> with blood or body fluids
- hands come in contact with respiratory secretions
- before eating
- after using the restroom



## Are alcohol-based handrubs effective?

More than 20 published studies have shown that alcohol-based handrubs are more effective than either plain soap or antibacterial soaps in reducing the number of live bacteria on the hands





# Won't frequent use of alcohol dry out my skin?

- No! In fact, studies have proven that nurses who routinely cleaned their hands between patients by using a modern alcohol-based handrub had less skin irritation and dryness than nurses who washed their hands with soap and water
- Modern alcohol-based handrubs contain skin conditioners (emollients) that help prevent the drying effects of alcohol

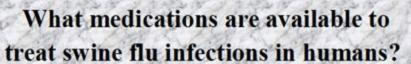


#### Do I need a prescription for hand cleansers?

■ Most over-thecounter skin cleansers will remove bacteria and viruses if used as directed







- At this time, CDC recommends the use of:
  - Tamiflu (oseltamivir phosphate) or
  - Relenza (zanamivir)
  - As part of the treatment &/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 there a vaccine for swine flu?

■ There is no vaccine to protect humans from swine flu at this time





#### How can I reduce the spread of infectious diseases?

- Good hand washing
- Universal precautions at all times
- Respiratory droplet precautions
  - When an airborne illness is suspected





#### Notice

- The H1N1 Influenza A virus outbreak is a dynamic and changing condition.
- The Centers for Disease Control and Prevention (www.cdc.gov) has the update information and serves as an excellent resource for current information.
- In the distribution of this PowerPoint, please do not distribute personal changes.

