



**Kane County
Health Department**

Novel H1N1 Influenza Pandemic

August 31, 2009



What is Novel H1N1 Influenza?

- Novel H1N1 (referred to as “swine flu” early on) is a new influenza virus that is spreading from person-to-person
- The first cases of human infection with this new flu virus in the U.S. were detected in April 2009 in California and Texas.
- On June 11, 2009, the World Health Organization (WHO) declared that a pandemic of novel H1N1 flu was underway.



What is an influenza pandemic?

- A global outbreak of disease that occurs when a new influenza A virus appears that people have not been exposed to before.
- The pandemic virus can cause serious illness because people do not have immunity to the new virus.



H1N1 Response in the U.S.

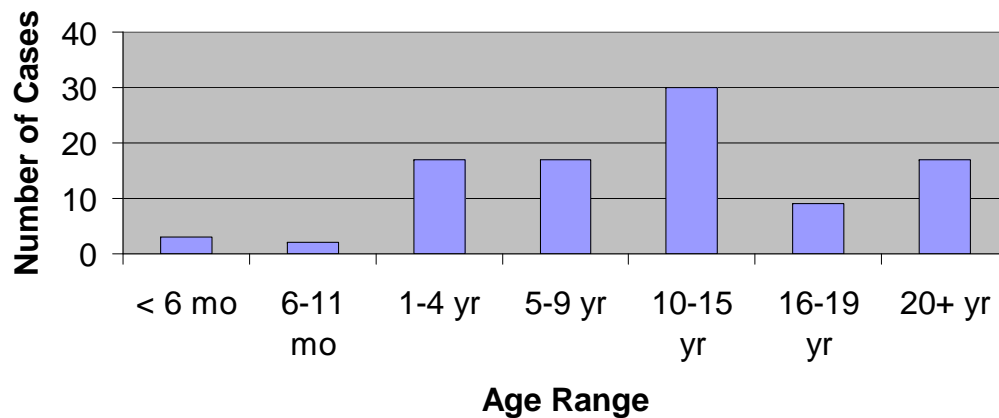
- The US Government declared a national public health emergency in the U.S. in response to the H1N1 outbreak.
- CDC expects that more cases, more hospitalizations, and more deaths from this outbreak may occur over the coming months
 - Seasonal and H1N1 flu this fall
 - Schools back in session
 - Most people do not have immunity



Novel H1N1 Influenza in Kane County

- 96 Cases
- 50 Male / 46 Female
- Mean age 14.3 (range 1 months – 58 years)

**Kane County Novel Influenza H1N1
Age Distribution**



Novel H1N1 Influenza

What happened in the Southern Hemisphere ?

- Novel H1N1 became the dominant strain (80% of people with flu had H1N1)
- Seasonal strains rapidly diminished
- Appears very likely Novel H1N1 will be the dominant influenza virus in the early part of the winter months.



Novel H1N1 Influenza Monitoring (Surveillance)



- U.S. and Illinois Surveillance moving to system similar to seasonal influenza
 - Influenza-Like-Illness activity reported by regions
 - Monitor Emergency Room and Physician visits
- Kane County will be monitoring:
 - School absenteeism across districts
 - Emergency room visits
 - Laboratory testing



How do Influenza viruses change?

Antigenic Drift

- Small changes in the virus.
- New virus strains that may not be recognized by the body's immune system.
- Happens all the time
- Reason for annual flu shots

Antigenic Shift

- An abrupt, major change in the virus, resulting in new proteins.
- Most people have little or no protection against the new virus.
- Happens rarely



Novel H1N1 Influenza - Symptoms

(similar to those associated with seasonal flu)

Fever

Cough

Sore throat

Runny or stuffy nose

Body aches

Headache

Chills

Fatigue

In addition, vomiting (25%) and diarrhea (25%)
(Higher rate than for seasonal flu.)



How the H1N1 flu is spread



- This virus is thought to spread the same way seasonal flu spreads
- Primarily through respiratory droplets
 - Coughing
 - Sneezing
 - Touching respiratory droplets on yourself, another person, or an object, then touching mucus membranes (e.g., mouth, nose, eyes) without washing hands

Preventing the Spread of H1N1

- 3 C's

- Cover Cough
- Clean Hands
- Contain Illness



- Stay home when sick

- people with influenza-like illness remain at home until at least 24 hours after they are free of fever (100° F [37.8°C]), or signs of a fever without the use of fever-reducing medications.



What is KCHD doing to respond to H1N1?

Our emergency response plan addresses:

- Communication campaign
- School recommendations
- Vaccine administration
- Community Outreach





KCHD H1N1 Communication Plan

- Six week campaign starting week of 8/24
- Messages shared with schools, businesses, healthcare, community agencies, etc.
- Use of regular media channels as well as new technology (Facebook, Twitter, etc.)
- KCHD website will continue to be a central source for updated information
 - www.kanehealth.com





H1N1 School Recommendations

- Exclusion Recommendations
 - Those with influenza-like illness (fever $> 100^{\circ}\text{F}$ with a cough and/or sore throat) should stay home at least 24 hours after they are free of a fever (in the absence of fever-reducing medication),
Absenteeism Surveillance
- Absenteeism Surveillance
 - Each district will report absenteeism daily via the internet
- Infection Control
 - 3 C's
 - Maintain clean environment



KCHD Plan for Vaccine Administration



- Seasonal and H1N1 vaccine will be available in many different places
 - Private doctor's offices
 - Hospitals
 - Pharmacy chains
 - Federally Qualified Health Centers



KCHD Plan for Vaccine Administration



- In addition to traditional medical providers...
- Plan for 9 nights of public vaccine clinics across Kane County when H1N1 vaccine becomes available
 - Use pre-existing Kane County plans for large public clinics
 - Partnerships with school districts, law enforcement and medical community



Vaccine Planning Considerations

- Vaccine in production now – clinical trials ongoing to assess safety and efficacy.
- Assumption of late October ship dates for initial quantities
- Quantity available to Kane County at first shipment unknown at this point
- Priority groups may change



Who gets vaccine first?

Priority Groups

- Five target groups
 - pregnant women,
 - persons who live with or provide care for infants aged <6 months (e.g., parents, siblings, and daycare providers),
 - health-care and emergency medical services personnel
 - persons aged 6 months--24 years
 - persons aged 25--64 years who have medical conditions that put them at higher risk for influenza-related complications
- Representative of approximately 159 million persons in the U.S.



If supply of vaccine is smaller than expected...

- pregnant women,
 - persons who live with or provide care for infants aged <6 months (e.g., parents, siblings, and daycare providers),
 - health-care and emergency medical services personnel who have direct contact with patients or infectious material,
 - children aged 6 months--4 years, and
 - children and adolescents aged 5--18 years who have medical conditions that put them at higher risk for influenza-related complications.
- Representative of approximately 42 million persons in the U.S.





KCHD Plan – Community Outreach

- Healthcare Providers – working with 5 hospitals, Dreyer Medical Clinic, Federally Qualified Health Centers and Elgin Mental Health Center
- Homeless Shelters
- Businesses – working with Chambers of Commerce and Rotary Clubs to prepare Kane County businesses

