

2009 H1N1 Influenza

Situation Update – October 1, 2009

Judiciary

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Objectives

- History
- Disease monitoring
- Organization for Planning & Response
- Communications
- Community mitigation
- Medical management
- Vaccination
- Continuity of operations

Where are we now?

- New virus emerged early 2009 in Mexico
- New virus has pieces that came from birds, swine, and humans
- Several pieces are descendants of the 1918 H1N1 Spanish flu virus
- Highest attack rate in children and young adults—5 to 35 y.o.
- Adults born before 1957 seem to be spared
- Continuing activity this summer especially in the southern hemisphere

Past Influenza Pandemics

- Before 1889 – pandemics in 1830, 1847
- 1889-91 – H3N8 – severity index?
- 1918-20 – H1N1 – severity index 5 (out of 5)
 - Variants of this virus circulated till 1957
- 1957 – H2N2 – severity index 2
- 1968 – H3N2 – severity index 1
- 1976 – return of H1N1 – severity index < 1
- H3N2 and this H1N1 circulated together until 2009
- 2009 – a different H1N1 – severity index 2

Influenza surveillance systems

- Monitor test results in state public health lab
- Network of 100 sentinel primary care offices report % of visits for influenza-like illness (ILI) weekly
- 121 hospital EDs (ESSENCE) report % of visits for ILI daily – locally, Sacred Heart Hospital
- Weekly assessment of influenza activity by County Health Departments
- Weekly count of deaths from influenza and/or pneumonia in 23 counties
- Reports of outbreak investigations
- Local systems in some counties (e.g., school absenteeism)

Influenza case and death counts as of 9/19/09

- >2915 confirmed cases in FL
- 724 known hospital admissions in FL; 2 Esc
- 89 deaths (25-64 y.o. highest rates)
- >69 cases in pregnant women; 5 deaths
- Probably capturing 5% of illness this way
- Statewide—>80% flu is 2009 H1N1
- 2009 H1N1 is consistently sensitive to oseltamivir and zanamivir

Percent positive in state lab

- 80% of people being tested for influenza have influenza
- Almost all of those have 2009 H1N1

H1N1 Deaths in Florida to September 19, 2009

Age	Number	Percent	Rate (per million population)	No Underlying Condition	
0-4	3	3.37	2.65	0	(0.00%)
5-24	12	13.48	2.50	8	(66.67%)
25-49	35	39.33	5.65	11	(31.43%)
50-64	33	37.08	9.00	5	(15.15%)
65+	6	6.74	1.81	0	(0.00%)
Total	89	100.0	4.08	24	(26.97%)

Relationships among viruses

- Infection with recent seasonal flu provides no protection against 2009 H1N1
- Vaccination with recent seasonal vaccines also provides no protection against 2009 H1N1
- Older people are more likely to have antibodies against the H1N1 that circulated before 1957
- This may explain the age distribution of the current pandemic

Influenza activity in state

- Outbreaks since May in diverse settings:
 - Summer camps
 - Jails
 - Prisons
 - Detention facilities
 - Child care centers
 - Long-term care hospitals
- There have been outbreaks in schools already

Looking Ahead

- Expect widespread influenza activity in schools —mostly H1N1
 - Expect 1 to 3 months of community influenza activity BEFORE vaccine becomes available
- Excess morbidity and mortality may be seen above seasonal flu rates (36,000 deaths/yr US)
- Plausible scenario: 90,000 excess deaths
- The vaccine will not be 100% effective and will require two doses in children < 10 yr

H1N1 Communications

- Modes of Communications
- Florida Flu Information Line
 - 877.352.3581, 0700-1900 daily Central time
- Website – MyFluSafety.com
- Physician Specialty Referral Line
- Emails and faxes
- Press releases

How is 2009 H1N1 flu spread?

- Same as seasonal flu
- Person-to-person contact
- Coughing or sneezing – aerosols
- Touching contaminated surface and then touching mouth, nose, eyes

What do we mean by “community mitigation”?

- Voluntary measures to reduce person-to-person spread
- Self-isolation of the sick
- Surgical masks on sick people in public
- Sensible, practical methods to reduce face-to-face contact in public and private settings
- Hand-washing
- Cough/sneeze into arm/shoulder—wash hands

What can workplaces do?

- Assess leave policies to ensure they enhance employees' willingness to stay home when ill
- Educate employees
- Ensure access to facilities for hand washing
- Establish regular communication updates to staff
- Develop a 2009 H1N1 Influenza plan
- Establish a relationship with your local health department to ensure you know your roles and responsibilities.

What can the community do?

- Encourage members or attendees not to attend meetings, faith-based services, or public gathering if they are ill.
- Ensure access to facilities for hand washing and that there are adequate supplies of tissues, disinfectants, disposable towels, hand soap and/or hand sanitizers and proper trash receptacles.
- Work with local authorities to become a part of the communication network to help keep the community informed.
- Collaborate with the local health department to ensure those most at risk can access health services.

Medical Management

- Influenza is spread person to person-everyone doesn't get ill at once
- The attack rate of 30-40% is over a 2 year period (unknown for 2009 H1N1)
- Persons may return to activities 24 hours after:
 - Cessation of fever (without help of fever reducers); 7 day rule no longer in effect
 - Revised COOP plans for this change

Strategic National Stockpile Antiviral Distribution

- Currently have 25% of FL SNS on hand
- Determining policy for distribution based on eligibility and severity of disease
- Prophylaxis – high risk
- Treatment – hospital, high risk
- Placement issues

Management of Illness in Schools

- Major changes from the spring
- Dismissal (“closure”) is the last option
- Ask parents to keep ill children home
- Identify ill children and isolate them until parent can arrive
- Antivirals recommended for ill and exposed high-risk children.
For antiviral guidance, visit:
<http://www.cdc.gov/h1n1flu/recommendations>
- Stronger measures if virus changes

Treatment recommendations

- Assume people who have fever and cough have influenza, and assume it is 2009 H1N1
 - This may change when other viruses come back in the autumn
- Treatment is recommended for:
 - All hospitalized
 - Those at high risk for seasonal flu complications
 - -Children < 5 y.o; adults ≥ 65 y.o.; chronic illness
- Antiviral prophylaxis
 - High-risk exposed people
- Exposed HCW, emergency responders
- Treat promptly based on clinical diagnosis

Vaccine Distribution Update

- 195 million doses ordered by HHS
- Available in early October incrementally
- Distribute based on priority groups and the type of vaccine available
- Will take weeks to vaccinate initial priority groups
- One dose for adults; two doses for children < 10 yr

What are the priority groups?

- Pregnant women because they are at higher risk of complications and can potentially provide protection to infants who cannot be vaccinated;
- Household contacts and caregivers for children younger than 6 months of age because younger infants are at higher risk of influenza-related complications and cannot be vaccinated. Vaccination of those in close contact with infants less than 6 months old might help protect infants by “cocooning” them from the virus;
- Healthcare and emergency medical services personnel because infections among healthcare workers have been reported and this can be a potential source of infection for vulnerable patients. Also, increased absenteeism in this population could reduce healthcare system capacity;

- All people from 6 months through 24 years of age
 - Children from 6 months through 18 years of age because we have seen many cases of novel H1N1 influenza in children and they are in close contact with each other in school and day care settings, which increases the likelihood of disease spread, and
 - Young adults 19 through 24 years of age because we have seen many cases of novel H1N1 influenza in these healthy young adults and they often live, work, and study in close proximity, and they are a frequently mobile population; and,
- Persons aged 25 through 64 years who have health conditions associated with higher risk of medical complications from influenza.

If vaccine in short supply

Priority groups:

- Pregnant women
- Caregivers of infants < 6 months old
- HCW and EMS with direct pt contact
- Children 6 mo. through 4 years old
- Children 5 through 18 years with chronic medical conditions

If vaccine in short supply

Priority group: Group 2 (US 117M, FM 7)

- HCW and EMS without direct pt contact
- Children 5 through 18 without chronic disease
- Persons 19 through 24 years
- Persons 25 through 64 years at high risk

If vaccine in short supply

Priority group: Group 3

- Persons 25 through 64 without high risk

If vaccine in short supply

Priority group: Group 4

- Persons 65 and over

Some Issues

- PPE for judiciary
 - Current suggestions should be followed
 - Advise ill to stay home
 - If must have ill person appear, place mask on them
 - Keep ill person 6 feet from well individual
 - Have hand washing available or hand sanitizers

What can we hope to accomplish?

- Reduce total number of cases
 - Depends partly on when we get vaccine
 - Assure resources are used most effectively
- Reduce number of deaths
 - Follow best treatment guidelines
- Spread out cases over a longer period
 - Reduce peak impact on health care system
- Delay cases until we get vaccine
 - To get maximum impact of vaccine

Clinical and Ethical Safeguards

- Vaccination is voluntary for all designated priority group members.
- Informed consent is a precondition for participation.
- Eligibility criteria are developed based on impact of the disease on population groups.
- Priority in selection of participants will be based on federal guidance.
- At the vaccination clinic itself, pre-vaccination screening for contraindications should be conducted, the provision of risk/benefit information should be provided, and the patient's informed consent obtained.
- Claim or suit arising out of the administration of the vaccine must be filed solely against the Federal Government (PREP)
- Monitoring and safety procedures for dealing with potential adverse events are assigned for each county health department and an adverse event reporting and referral system is in place.

Continuity of Operations

- Disease will develop from county to county at different times
- Assess if your current plan is reflective of this level of pandemic virulence
- Limited “fear absenteeism” expected
- Anticipate waves of absenteeism
 - COOP updates

Summary

- Fighting 2009 H1N1 flu is a 3 step approach:
 1. Practice everyday prevention
 2. Get vaccinated
 3. Continuity of operations

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