Planning for Pandemic Influenza

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Safety and Security Department
Seattle Public Schools
A Pandemic Occurs.....

When 3 criteria are met:

1. Novel subtype where people do not have immunities, AND
2. Humans are infected and severe illness is caused, AND
3. Virus spreads easily

- H5N1 meets criteria 1 and 2
<table>
<thead>
<tr>
<th>Phase</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Inter-pandemic Period</strong>&lt;br&gt;No new flu subtypes in humans.&lt;br&gt;Possibly present in animals.&lt;br&gt;Risk to humans is low.</td>
</tr>
<tr>
<td>2</td>
<td><strong>Inter-pandemic Period</strong>&lt;br&gt;No new flu subtypes in humans.&lt;br&gt;A circulating animal flu subtype poses a substantial risk of human disease.</td>
</tr>
</tbody>
</table>
### Phases of an Influenza Pandemic

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>3</td>
<td><strong>Pandemic Alert Period</strong>&lt;br&gt;Human infections with a new subtype.&lt;br&gt;No human-to-human spread, or rare instances of spread to a close contact.</td>
</tr>
<tr>
<td>4</td>
<td><strong>Pandemic Alert Period</strong>&lt;br&gt;Small clusters, limited human-to-human transmission.&lt;br&gt;Spread is highly localized: Virus is not well adapted to humans.</td>
</tr>
<tr>
<td>5</td>
<td><strong>Pandemic Alert Period</strong>&lt;br&gt;Larger clusters, but human-to-human spread still localized: Virus becoming better adapted to humans.</td>
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<td>6</td>
<td><strong>Pandemic Period</strong>&lt;br&gt;Increased and sustained transmission in general population.</td>
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The World Health Organization (WHO) defines six pandemic alert phases

We are currently at Phase 3
Potential Impact of Pandemic Flu in the US and Locally
Who are We?

- 46,000 students
- 7,000 staff
- 97 different home languages
- 93 schools
- Funding issues
- Leadership issues
Who are We?

- Near the Canadian border
- 6,000 persons per day arrive from Asia
- City Emergency Management Office
- County Emergency Management Office
- City/County Public Health Department
Integrating NIMS and School All-Hazard Plans
<table>
<thead>
<tr>
<th>Basic Plan</th>
<th>Mission and responsibilities</th>
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</thead>
<tbody>
<tr>
<td>Appendices</td>
<td>Authorities, terms, and acronyms</td>
</tr>
<tr>
<td>Emergency Support Functions</td>
<td>Policies, planning assumptions, and concept of operations</td>
</tr>
<tr>
<td>Implementing Procedures</td>
<td>Details</td>
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Integrating NIMS and Pandemic Plans
Local Impact: Health Status

In the first 6 weeks of a pandemic:

• 1.2 million people are infected
• 245,000 - 612,000 are clinically ill
• 180,000 - 470,000 outpatient medical visits
• 24,436 – 57,216 people are hospitalized
• Up to 11,500 people are dead
So What Did that Mean to Us?

- Schools may be closed for up to 2 months for health and safety reasons, but we may run out of staff first (and soap)
- Essential functions are different in a pandemic
- Acronyms are different
- Lead agency is different (plans are vague in city emergency plan)
- Pandemic table tops start off slow
- Legislature has not dealt with funding issues for prolonged emergencies
- School staff resist planning - “This is not an emergency.”
Goals in a Pandemic: Public Health

Protecting the Public’s Health

- Limit death and illness
- Preserve continuity of essential government and business functions
- Minimize social disruption
- Minimize economic losses
Goals in a Pandemic - Schools

- Limit death, illness, and emotional trauma
- Preserve continuity of essential business functions
- Minimize social and educational disruption
- Minimize economic losses
### Phases of an Influenza Pandemic and School Incident Management

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Updating Plans: *Pandemic Influenza*

- It is different than other types of planning
- Get ready for lots of questions
- Have the answers or … talk about where the community is in the process
Pandemic Influenza: Prevention/Mitigation

With the Community:

- Review newest World Health Organization (WHO), Centers for Disease Control (CDC), PHD recommendations, PHD plan, and local emergency plans
School closures
Public Health Department

Proactive Measures

School closure authorities
Pandemic Influenza: Prevention/Mitigation

At the District Level:

- Review District Emergency Management Plan and update:
  - Basic Plan: Authorities control and direction
  - Appendices: Continuity of business acronyms
  - ESF # 8: Beyond biological terrorism
  - Implementing Procedures: Surveillance resource management
How is it spread and how do we protect our staff and students? How sure are we of the information we are relaying?
### Isolation & Infection Control Procedures

- **Isolation precaution options:**
  - Standard, contact, droplet, airborne
- **Respiratory hygiene and cough etiquette**

### CDC Division of Healthcare Quality Promotion

- **Precaution recommendations ratings:**
  
<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
<th>Description</th>
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<tbody>
<tr>
<td>1A</td>
<td>Lots of Empirical</td>
<td></td>
</tr>
<tr>
<td>1B</td>
<td>Suggestive Evidence</td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>Strong Theoretical</td>
<td></td>
</tr>
<tr>
<td>NR</td>
<td>No Recommendation; Unresolved Issue</td>
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Pandemic Influenza: Prevention/Mitigation

Isolation Precautions

- Administrative controls 1B
  - Education
  - Adherence to precautions

- Infection control precautions 1B
  - Hand washing, gloves, gowns
  - Environmental controls
  - Use of masks

- Social distancing techniques 1B, II, NR
If a child comes to school ill, when should avian flu be suspected?
Influenza-like Illness (ILI) Surveillance

- Temperatures above 100.4°F
  
  AND

- One or more of the following: cough, sore throat, or shortness of breath
  
  AND

- History of contact with domestic poultry or known or suspected case of H5N1 in an H5N1 affected county within 10 days of symptoms
F. A. Q. #3

What is social distancing?
**Pandemic Influenza: Prevention/Mitigation**

**Authorities**
- Social distancing
  - District closures (snow days vs. labor strike)
  - School closures
  - Libraries, malls, after school day care centers
- Transportation
  - Public
  - Private/contractors
  - School owned
- Isolation and quarantine
- Union contracts
Pandemic Influenza: Prevention/Mitigation

Continuity of Business
- Maintenance of essential services
- Information technology capacity
- Telecommuting
F. A. Q. #4

How long will it take the avian flu to spread throughout the U.S.?
...a newly emerging influenza virus can wreak catastrophic damage worldwide in a matter of months.

Anthony S. Fauci, M.D.
Director, National Institute of Allergy and Infectious Diseases
What is the local government plan related to pandemic events?
Surveillance

- Sentinel program – Absences beyond 10% with respiratory symptoms:
  - Monitored by IT/safety & security & schools
  - Student absences
  - Staff absences
F. A. Q. #9

What is the best way to teach students about avian flu?
Pandemic Influenza: Preparedness

INFLUENZA
FREQUENTLY COMPLICATED WITH
PNEUMONIA
IS PREVALENT AT THIS TIME THROUGHOUT AMERICA.
THIS THEATRE IS CO-OPERATING WITH THE DEPARTMENT OF HEALTH.
YOU MUST DO THE SAME
IF YOU HAVE A COLD AND ARE COUGHING AND
SNEEZING; DO NOT ENTER THIS THEATRE
GO HOME AND GO TO BED UNTIL YOU ARE WELL.

Coughing, Sneezing or Spitting Will Not Be Permitted In The Theatre. In case you must cough or sneeze, do so in your own handkerchief, and if the Coughing or Sneezing Persists Leave The Theatre At Once.

This Theatre has agreed to co-operate with the Department Of Health in disseminating the truth about Influenza, and thus serve a great educational purpose.

HELP US TO KEEP CHICAGO THE HEALTHIEST CITY IN THE WORLD

JOHN DILL ROBERTSON
COMMISSIONER OF HEALTH
Pandemic Influenza: Preparedness

Education

- Staff

The Center for Health and Health Care in Schools

School Health Issues: Flu Season and Schools

Flu is a communicable illness that may spread in many homes and communities. Schools can help educate students, their families, and school staff about how to reduce the chance of getting the flu as well as reduce the likelihood of spreading flu to others. Additional information from the experts is available from the links below.

FIVE FAST FLU FACTS

From the Centers for Disease Control and Prevention

- Headache
- Fever
- Body aches
- Fatigue
- Dry cough

- Flu is spread when a person who has the flu coughs, sneezes, or speaks and sends the flu virus into the air. The virus enters the nose, throat or mouth of a person who breathes or sneezes into it.

- If you get the flu, drink plenty of liquids, and avoid alcohol and tobacco.

- Antiviral drugs may help you get better faster. The best way to prevent the flu is to get a flu vaccine. Over-the-counter medicines may relieve symptoms of the flu. These include aspirin. Antiviral drugs work best when given to children or adults within 48 hours of the symptoms starting. However, they do not prevent the flu. They are not recommended for children under 2 years.

- In addition to flu shots, these Behaviors can help you avoid getting sick:
  - Wash hands often with soap and warm water.
  - Cover coughs or sneezes with your upper arm.
  - Stay home when you have the flu.
  - Avoid close contact with flu patients.

The Center for Health and Health Care in Schools

Cover Your Cough

Make Bubbles Not Germs.
Pandemic Influenza: Preparedness

Education
- Staff
- Students:
  - Posters
Pandemic Influenza: Preparedness

Education
- Staff
- Students:
  - Posters
  - Curricula

The #1 product for teaching handwashing, isolation techniques, aseptic techniques, and general infection control
Pandemic Influenza: Preparedness

Education
- Staff
- Students
- Parents/volunteers
- Vendors/agencies
Pandemic Influenza: Preparedness

- Education
- Resource management
- Simulations and drills:
  - Table top
  - Functional exercises
F. A. Q. #10

How is mortality and morbidity predicted for the avian flu?
### Formula for Estimating Health Impacts
(per 1000 persons)

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<thead>
<tr>
<th></th>
<th>Health risk</th>
<th>Students</th>
<th>Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outpatient visits</strong></td>
<td>High</td>
<td>289 - 403</td>
<td>70 - 149</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>165 - 230</td>
<td>40 - 85</td>
</tr>
<tr>
<td><strong>Hospitalizations</strong></td>
<td>High</td>
<td>2.1 - 9.0</td>
<td>0.9 - 5.1</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0.2 - 2.9</td>
<td>0.18 - 2.8</td>
</tr>
<tr>
<td><strong>Deaths</strong></td>
<td>High</td>
<td>0.13 - 7.65</td>
<td>0.1 - 5.7</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>0.014 - 0.13</td>
<td>0.025 - 0.09</td>
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F. A. Q. #12

How does the district predict how many staff might be affected?
## Estimated Health Impacts

for a District of 50,000 students and 7,000 staff

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<th>5% High-risk students</th>
<th>Other staff</th>
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<td>Outpatient visits</td>
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<td>8,560 11,933</td>
<td>280 595</td>
<td>256.9 639.8</td>
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<td>Hospitalizations</td>
<td>10 145</td>
<td>14.25 160.25</td>
<td>1.3 19.6</td>
<td>1.73 21.21</td>
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<td>Deaths</td>
<td>0.7 6.5</td>
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F. A. Q. #18

What are essential services for schools and school districts?
Resource Management

- Human resources
  - Flex time
  - Telecommuting
  - Reassignment of staff to essential services:
    - Retraining
    - Union contracts

- Personal protective equipment
- Vaccination priority list
F. A. Q. #20

What can the schools do to help the community during a pandemic?
Pandemic Influenza

If schools and day care centers are closed, who will take care of our responder’s children?

- Develop a volunteer roster to help support their families