Response to the H1N1 Pandemic: Lessons Learned

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Response to H1N1 Pandemic

- Partnership between the education and public health communities to protect child health
- Unrecognized role schools play in surveillance/detection of infectious disease
- Trial run for the pandemic influenza plans
- Lessons learned to apply to future outbreaks

Public Health

- Public’s health depends on school health services
- Roots of school health are in infectious disease prevention

Schools protect public’s health

- Immunizations
- Screenings
- Indoor air quality
- Healthy environment
- Disaster planning
- Mental health
- Partner with the community
- Health providers
- Medical homes
- SCHIP
- Risk prevention
Lillian Wald 1902
– Improve student health and attendance
– 30 day Intervention: Health education and individual case follow-up

Henry Street Settlement

Outcome:
Markedly increased attendance.

Lena Rogers, 1902
Result: 25 Nurses hired by the NYC Board of Education
September, 1902
Number of students excluded due to communicable disease: 10,567 students

September, 1903
Number of students excluded due to communicable disease: 1,101 students

School's role in preventing Infectious Disease
- Prevention
- Protection
- Education
- Identification of outbreaks
- Social distancing

Surveillance
Systematic observation & collection of data of disease occurrence to detect changes in frequency & distribution
Predict & minimize harm caused by outbreaks epidemics & pandemics
School nurses:
  - Monitor absences
  - Screen
  - Report
Surveillance

- Pertussis
- Varicella (chicken pox)
- MRSA
- Herpes Simplex
- TB
- Anthrax
- Cancer
- Autism
- Asthma – air quality

What was in place?

- Pandemic plans
- Disaster Preparedness Guidelines for School Nurses (2007)
Journal of School Nursing

- Championing School-Located Influenza Immunization
  - February 2009

http://www.nasn.org/portals/0/education/championing_school_located_influenza_immunization.pdf

Vaccine champions

- Major public health role
- 83% school nurses seasonal flu vaccine

Partnerships

- CDC
- Health and Human Services
- Department of Education
- National Association of School Boards
- National Association of School Psychologists
- NACCHO
- NPTA
April 26, 2009

PANDAMANIA!!!!!!!!
Schools

- Scramble for information = overload
- CDC, HHS, Homeland Security, Department of Education Conference Calls
- FERPA Privacy Issues – Emergency
- School nurses called upon as health experts in schools and communities

Schools

- Partner with local departments of health
- School team / health department conference calls
- Bridge the health and education world
- Translation
- Review of CDC guidance
Media

Schools

- Media guidelines

- NPTA and School Psychologists
  - Talking to Children About the Flu (Novel H1N1):
    A Parent Resource

- Frequently asked questions vaccine
  http://www.nasn.org/portals/0/resources/2009_10_08_h1n1_faq.pdf

NPTA and School Psychologists
- Talking to Children About the Flu (Novel H1N1):
A Parent Resource
Partnerships

- CDC
- Health and Human Services
- Department of Education
- National Association of School Boards
- National Association of School Psychologists
- NACCHO
- NPTA
School located vaccine clinics

CDC http://www.cdc.gov/h1n1flu/diagnosis/

• Partners: local health departments, city/state government
• Decrease cases in all groups
• Protect susceptible
• Decrease impact on healthcare system
• Increase capacity to deliver vaccine to community

Challenges

• Scheduling
  – School activities
  – Availability of vaccine
  – Vaccine formulas & contraindications
  – Identifying high risk
  – Flumist contraindications

• Logistics
  – 2 injections
  – Recall
  – Volunteers
  – Consent forms
  – Reimbursement
Challenges

- Complacency
- Anxiety
- Distrust
- Turf wars
- Resentment
- Assumptions
- Revenue
- Liability fears

School health implications

- Personal protective equipment
  - Masks
  - Gloves
- Tissues
- Vaccine storage
- Space
- 55% no pediatric experience

Student: School Nurse Ratios

- Wide disparities
  - Between states
  - Within states
- Mandated ratios
  - 19 states have varying mandates
  - 4 states fund the mandated ratio
- Role
Lessons learned

Requirements for Success

- Leadership
- Teamwork
- Communication
- Trust
- Flexibility

School nurse

- School closure
- Absenteeism
- Early dismissal

(Allen, 2003; Pennington & Delaney, 2008; Wyman 2005)
Requirements for Success

• Local Partnerships
  – Health Departments
  – City governments
  – Private providers (PCPs)
  – Hospital systems
  – Local medical societies

Lessons learned

• School located vaccine clinics work

H1N1 Vaccine outcomes

• 87% of school nurses vaccinated or intend to
• < 50% of health care providers vaccinated

• Adults - 37% vaccinated or intend to
  – 61% not vaccinated & do not intend to
  – 45% of >65 years vaccinated or intend to

• Children 53% vaccinated or intend to
  – 29% of children vaccinated at school
  – 46% at a health care provider
  – 22% at a health clinic
**Lessons learned**

- Principal is key to teacher support & promotion
- Staff willingness to participate imperative
- Planning with community partners (public health, volunteers, PTA) crucial
- Name tags on young students
- Translators needed
- Consent forms on school and/or district websites
- Point person for parent questions

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**Lessons learned**

- Letters jointly signed by administrators, community partners, & school nurses
- Parent notification if child NOT vaccinated
- Be flexible

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**Infection control**
Hand washing

Decreases absenteeism

Hand washing before and after eating, upon arrival to class

(Kimel, 1996; Weismuller, Grasska, Alexander, White, & Kramer, 2007; White, Shinder, Shinder, & Dyer, 2001).

Clean building

- Lunch tables cleaned thoroughly before & after each lunch session
- Classroom surfaces in the school thoroughly cleaned each night
- Doorknobs and rails cleaned after students enter the school mornings
- Gym equipment cleaned at determined intervals

Absentee rates

**Captain Samuel Douglass School**

<table>
<thead>
<tr>
<th>Month</th>
<th>Absentee Rate</th>
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<tbody>
<tr>
<td>Sept. 08</td>
<td>3.1%</td>
</tr>
<tr>
<td>Oct. 08</td>
<td>3.2%</td>
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<td>Nov. 08</td>
<td>3.8%</td>
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<tr>
<td>Sept 09</td>
<td>3%</td>
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<tr>
<td>Oct. 09</td>
<td>5%</td>
</tr>
<tr>
<td>Nov. 09</td>
<td>5%</td>
</tr>
<tr>
<td>Dec. 09</td>
<td>3.9%</td>
</tr>
</tbody>
</table>
Dear Parents:

We have been in contact with the State of New Hampshire Department of Health and Human Services as we have been informed of several students with influenza like illness or probable H1N1. The coordinator notified me late yesterday afternoon that we may have a “cluster” and they recommend that any new or further cases should be tested. This would mean that the parent should notify the physician of the child’s symptoms and that the state is “recommending testing due to this possible cluster”.

If you have any questions you may call the Health Office or your physician may call the State DHHS, Mary Lee Greeves at 603-357-3510 x 705. 
http://www.cdc.gov/h1n1flu/sick.htm

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October 13, 2009

Dear Parents:

We have been informed of confirmed cases of influenza (probable H1N1) at both RMMS and CSDA. A Fact Sheet from the New Hampshire Department of Health and Human services can be found on the school website. It contains further information on exposure, symptoms, treatment and how to protect you and your family.

The best way to avoid infections is hand washing, cleaning surfaces, coughing into your elbow and staying home if you are sick. Remember, your child must be fever free for 24 hours (not on Tylenol or Motrin) before returning to school. If your child does have a fever and flu-like symptoms please call to let us know at school. Your physician can also provide guidance.

Please see the school website for any further updates.

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DHHS Announces Activation of H1N1 Flu Public Inquiry Line

10/27/2009

603-271-4051

Concord, NH – The New Hampshire Department of Health and Human Services is announcing the activation of New Hampshire’s H1N1 Flu Public Inquiry Line. DHHS is urging residents with questions about the H1N1 influenza virus, the H1N1 vaccine, and any other questions related to H1N1 to contact 2-1-1 NH by dialing 2-1-1.

“People have questions about the H1N1 virus and the status of the supply of H1N1 vaccine. We are activating the public inquiry line because we want to be sure people have access to good information are getting answers to their questions and are taking the proper steps to prevent the spread of the virus,” which is why we are activating the public inquiry line,” said Gov. John Lynch. ……..
Communication with parents

Key Facts about Swine Influenza (Swine Flu)

What is Swine Influenza?
Swine Influenza (swine flu) is a respiratory disease of pigs caused by type A influenza virus that regularly causes outbreaks of influenza in pigs. Swine flu viruses cause high levels of illness and low death rates in pigs. Swine influenza viruses may circulate among swine throughout the year, but most outbreaks occur during the late fall and winter months similar to outbreaks in humans. The classical swine flu virus (an influenza type A H1N1 virus) was first isolated from a pig in 1930.

Lessons learned

• Involve all key players in disaster planning
• Media training
• Out of school lessons

Remaining challenges

• Budgets – cost shifting
• Paid Sick Leave
• Erosion of public health
• Privacy laws
• School food programs
• Electronic school records
• Caregivers definition
• Ongoing collaboration
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