



**Novel Influenza A (H1N1):
Role of School Health and Public Health**

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Massachusetts Department of Public Health

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Outline

- Seasonal Influenza
- Pandemic H1N1 Flu Background
- Plans
- Challenges
- New Interim School Guidelines
- Resources

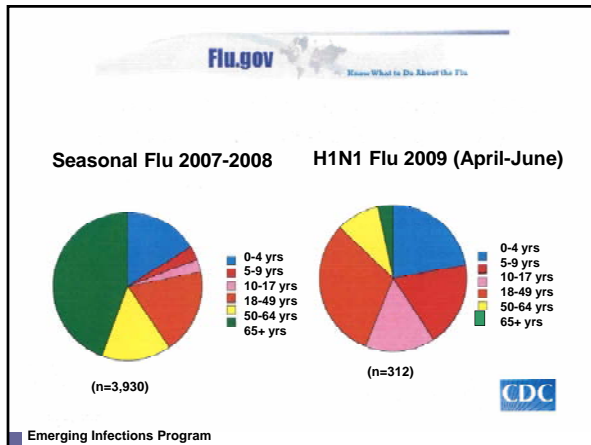
All Hands on Deck!

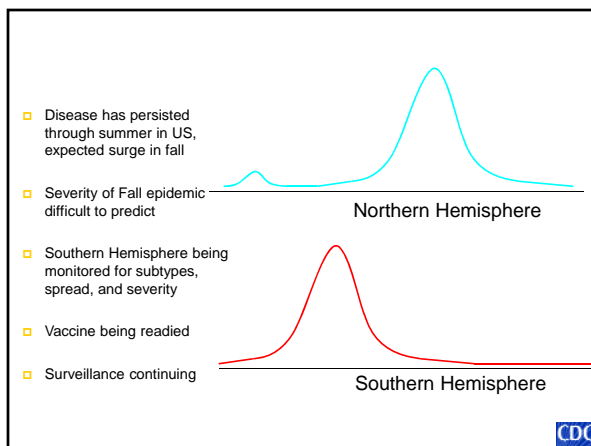
2009 – 2010 Seasonal Flu Vaccine

- National supply expected to be early and adequate
- MDPH to distribute 885,000 doses
 - 10% more than last season
- Flu vaccine will come in multiple shipments starting in August through and continuing thru November 2009
- Vaccinate beginning as soon as vaccine is available to allow time for H1N1 efforts later in the fall and winter
 - School or Community Located Clinics, Primary Care Provider offices and Hospitals
 - To allow time for H1N1 efforts later in the fall and winter

Waning Immunity to Flu Vaccine? Not a Problem!

- No clear evidence exists that immunity declines more rapidly in the elderly
- Infections among the vaccinated elderly might be associated with age-related reduction in ability to respond to vaccine rather than reduced duration of immunity





H1N1 Vaccine: What We Expect

- H1N1 vaccine might be beginning as early as late September, but might be later
 - Initial large shipment with smaller weekly shipments thereafter
 - This is what we know now (August 31, 2009)
 - by the end of October ~1.3 million doses
 - November and later ~420,000 doses per week*
- Limited to 2,600 vax receiving sites

* If demand continues

H1N1 Vaccine: What We Expect

- Different formulations of H1N1 vaccine
 - Approved for different age and risk groups
 - Live and inactivated
 - Injected & nasal spray
- Syringes, alcohol swabs, sharps containers provided with vaccine
- Vaccine record cards
- No band aids or gauze

Front of H1N1 Vaccine Record

Influenza Vaccination Record

Provider:
(name,
address,
phone)

Full name /
Nombre
completo:

Date of birth / Fecha de nacimiento: / /
mm dd yy/aa

Provisional ACIP Recommendations

Initial Target Groups for H1N1 Vaccine

Initial efforts should focus on vaccination of as many as possible in the initial target groups

- Pregnant women
- Household contacts of infants < 6 months of age
- Health care and emergency medical service personnel
- Children and young adults 6 months through 24 years of age
- Persons 25 through 64 years of age with high risk conditions*

In MA: 3.4 million

*chronic pulmonary, cardiac, renal, hepatic, metabolic, hematological disorders, immunosuppression

Chronic medical conditions that confer a higher risk for flu-related complications:

- Pulmonary (including asthma)
- Cardiovascular (except hypertension)
- Renal, hepatic, cognitive, hematologic, neurologic/neuromuscular, or metabolic disorders (incl. diabetes mellitus)
- Immunosuppression (incl. that caused by medications or by HIV)

Provisional ACIP Recommendations

If Further Prioritization is Needed for H1N1 Vaccine

If vaccine demand exceeds availability, subgroups within initial target groups should be prioritized where feasible

- Pregnant women
- Household contacts of infants < 6 months of age
- Health care and emergency medical service personnel with direct patient contact
- Children and young adults 6 months through 4 years of age
- Children 6 months through 4 years of age
- Children with chronic medical conditions 5 to 19 years of age

In MA: 840,000

When H1N1 Vaccine Supply Increases*

When vaccine is sufficient at the state and local level to vaccinate initial target populations, expand vaccination to

- Healthy adults 25 through 64 years of age

In MA: 2 million

* In consultation with state and local health departments

H1N1 Vaccine and Those 65 Years and Older*

- Vaccination of those 65 years and older can begin once vaccination programs are capable of meeting the demand for the younger age groups
 - Have some immunity to novel H1N1
 - Very few cases in this group, but disease more severe
- Vaccination with seasonal influenza for this group should begin as soon as it is available in **AUGUST**

In MA: 860,000

* This recommendation may need to be re-assessed:

- as new epidemiologic and clinical information warrants
- in the context of global vaccine needs.

Operation PanVax

Goals:

- Maximize the number of Massachusetts residents who are protected against H1N1 by expanding the current infrastructure for vaccine distribution and administration.
- Ensure fair and equitable access to H1N1 vaccine.

Operation PanVax (continued)

- State responsible for vaccine allocation and distribution
- Local public and private sector responsible for vaccine administration
 - School-Located Clinics
 - School Based Health Centers (SBHCs)
 - Local Boards of Health
 - Emergency Dispensing Sites (EDS)

Operation PanVax (continued)

Many partners and vaccinators needed

- Providers (primary care and specialists)
- Local and regional public health
- Schools & SBHC(s)
- Hospitals
- Community vaccinators
- Commercial vaccinators
- Home Health
- Pharmacists
- Occupational health
- Medical Reserve Corps & CERT teams

Operation PanVax (continued)

- In order to receive H1N1 vaccine, providers must register with MDPH Vaccine Program
 - Including providers already enrolled
- MDPH to begin registering providers September 1
 - <http://www.mass.gov/dph/h1n1registration>
- Registration will enable, *but not guarantee*, a provider to receive H1N1 vaccine
 - School-located clinics do not have to register – they will get vaccine through their LBOH

Operation PanVax (continued)

- Allocations will be based on:
 - Number of doses of each formulation available
 - Federally-determined priority groups
 - Provider capacity to vaccinate priority groups
- Weekly reporting requirements include:
 - Total number vaccinated by age group
 - Total number of 1st and 2nd doses

H1N1 Vaccine Distribution

- Limited to 2,600 vax receiving sites
- Need hospitals, provider networks to consolidate
 - Identify one entity to:
 - Register
 - Receive, store and distribute vaccine
 - Report vaccine usage

Monitoring Vaccine Safety

- Vaccine Adverse Event Reporting System (1-800-822-7967, <http://vaers.hhs.gov/contact.htm>) for signal detection
- Network of managed care organizations representing approximately 3% of the U.S. population, the Vaccine Safety Datalink (VSD) to test signals
- Active surveillance for Guillain Barre Syndrome through states participating in Emerging Infections Program

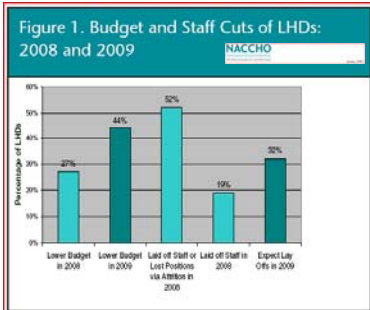
What We Don't Know

- Demand for vaccine
- Willingness/ability of traditional and non-traditional providers to administer vaccine
 - School-Located Clinics
 - School Based Health Clinics (SBHC)
- Reimbursement for administration costs in various settings
- H1N1 vaccine and study outcome

Public Health Planning Efforts

- Reaching out to private providers (defined broadly) to assess interest in providing H1N1 vaccine
- Retail sector, pharmacists may be involved
- Medical Reserve Corps and CERT teams
- Emergency regulations to expand vaccinator pool
- Planning large scale clinics
 - Especially important for school-age children given limited private sector capacity

Challenges: Reduced public health infrastructure



School-Located Vaccination Clinics



School Demographics (Massachusetts)

- 1,440,000 children between 6 months and 18 years of age
- 1.1 million children (grades K – 12)
- 2,100 school nurses (approx. number)
- 3,000 school buildings (public, private and charter)



School Vaccination Clinic Throughput



Calculation for **one nurse**

- 20 students per hour = 55,000 hours
- $\frac{55,000 \text{ hours}}{2,100 \text{ nurses}} = 26.19 \text{ hours per nurse}$

School Vaccination Clinic Options

- During School Day
- Before and After School
- Saturdays
- Other Options ?

Collaboration is Key

- Local Boards of Health
- Medical Reserve Corps
- Community Emergency Preparedness Volunteer Teams
- Other
 - Licensed Volunteers
 - Local Nursing Programs
 - Pharmacists
 - Dentists
 - Paramedics

School Challenges

- **Decrease in school nurse coverage**
- **Some school nurses are also public health nurses and hours were cut or eliminated**
- **A few school administrators did not support the school nurse's role, during the spring H1N1 outbreak in some school districts**
 - Some school nurses were challenged while trying to follow the CDC guidelines for school/work exclusion

Interim School Guidelines: K-12

CDC (August 5, 2009)

Recommendations may need to be revised as more information becomes available (cont)

- ❑ CDC recommends focus on early identification of ill students and staff, staying home when ill, and good cough and hand hygiene etiquette.
- ❑ Students, faculty or staff who appear to have Influenza-like illness at arrival or become ill during the day should be isolated promptly and sent home.

Interim School Guidelines: K-12

CDC (August 5, 2009)

Recommendations may need to be revised as more information becomes available (Cont.)

Students, faculty or staff with influenza-like illness (fever with a cough or sore throat) should keep away from others as much as possible. Stay home and not attend school or go into the community (except to see medical care or for other necessities) for at least 24 hours after fever is gone. Fever should be gone without the use of a fever-reducing medicine.

Interim School Guidelines: K-12

CDC (August 5, 2009)

Recommendations may need to be revised as more information becomes available (Cont)

- ❑ Do not use aspirin or aspirin-containing products on anyone \leq 18 years of age due to Reye syndrome.
- ❑ Parents/guardians and faculty should monitor their school-aged children every day for symptoms

Interim School Guidelines: K-12

CDC (August 5, 2009)

Recommendations may need to be revised as more information becomes available (Cont)

- Communication between school administrators and local public health officials on reporting cases in school is key

- Schools can focus on educational activities aimed at promoting ways to reduce the spread of influenza (i.e. hand washing and cough etiquette)

Interim School Guidelines: K-12

CDC (August 5, 2009)

Recommendations may need to be revised as more information becomes available (Cont)

- New focus is on keeping schools open while providing guidelines to decrease transmission
 - Hand washing and cough etiquette
 - Keeping ill students home
 - Identifying those at high risk and would benefit from early evaluation if ill

Special situation. Although there are not many schools where all or most students are at high risk (for example, schools for medically fragile children or for pregnant students) a community might decide to dismiss such a school to better protect these high-risk students.

School Cleaning

□ **ROUTINE** Cleaning is sufficient!

- For safe and effective use of these products:
 - Check with local authority prior to using
 - Always follow label instructions
 - Pay special attention to the product's dilution rate (if applicable) and contact time

School Cleaning: What to Clean

- First line of defense is to wash your hands frequently with soap and water or use an alcohol-based cleaner.
- Registered disinfectant products are for use on hard, non-porous surfaces, such as door knobs, handles, tables, floors, etc.

Vaccine Administration Considerations for Schools

- Storage capacity
- Administering according to recommended age groups
- Reporting doses administered early
 - Data collection on vaccine administered at other locations
 - Tracking all doses administered to all students/staff
- Insurance reimbursement for administration
 - Currently, not with schools, however the Commissioner is working with insurance plans around this issue
- Time and learning

Vaccine Administration Considerations for Schools

- School nurses will collaborate with their LBOH
 - Not all nurses are comfortable immunizing children and babies
- Medical Reserve Corps may be available to assist
 - Many schools will have the same clinic hours and there may not be enough volunteers
- Clinics held during school day will need to hire “per diem” (substitute nurses) for daily health issues in the schools
 - Examples: nebulizer treatments, diabetic students, daily medications etc.

Current Planning & Activities

- **Joint letter to school officials & school health staff** from DPH, DESE commissioners summarizing guidance, emphasizing key messages
- Development of **tool kit** for schools
 - Joint letter to parents
 - Flu symptom check list
 - Flu FAQ
 - Availability in multiple languages
- **Focus group** with superintendents
- **Joint conference call** with school officials, local boards of health to review guidance, answer questions



Consent Forms

- The CDC is creating a generic consent form for H1N1 that may be used in the school setting. Other H1N1 tools for schools can be found at:

<http://www.flu.gov/plan/school/>

- Seasonal Influenza tools may be found on the NACCHO website:

<http://www.naccho.org/toolbox/>

How do you reach out to parents?

- School web-site
- Blast faxes
- Reverse 911
- Blast emails
- School newsletter
- Local cable television
- Beginning of the year emergency information

MDPH Staff Resources Available To Guide You

- MDPH School Health Unit Advisors
- MDPH Epidemiology/Immunization Program Staff 617-983-6800
- MDPH Infectious Disease Response Nurses
- MDPH Health Educators

Other Resources

- MDPH H1N1 website
<http://www.mass.gov/dph/swineflu>
- MDPH School Health website
<http://www.mass.gov/dph/schoolhealth>
- CDC website
<http://www.cdc.gov/h1n1flu/>

Flu
What You Can Do

About Flu Care at Home

When you care for a family member who has the flu, it is helpful to have some guidelines. The Massachusetts Department of Public Health (MDPH), in some agency that promotes healthy people and healthy communities, designed this booklet to help you:

- Prepare for seasonal and pandemic flu,
- Reduce the risk that you and others in your home will get the flu,
- Care for someone at home who has the flu, and
- Know when to get medical advice and medical care.

This booklet provides information about caring for family members with the flu. It also applies to care that you may provide to other household members or others in your community.

What is the Flu?

Seasonal flu is caused by influenza viruses that infect people every year in New England. The season usually begins in December and lasts until April.

The most common symptoms are:

- Sudden onset of fever
- Tiredness or weakness
- Body aches
- Dry cough

Pandemic flu can occur when a new influenza virus develops that people do not have any immunity to, which means they are not able to fight off this new virus. The new virus can spread easily from person to person, and cause many people around the world to get the flu. This is called a flu pandemic. There have been three pandemics in the last hundred years, but we know when another pandemic may occur.

Massachusetts Department of Public Health
OFFICE OF THE ATTORNEY GENERAL
Division of Health Care Regulation

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Questions?