

H1N1 Influenza Pandemic Retrospective

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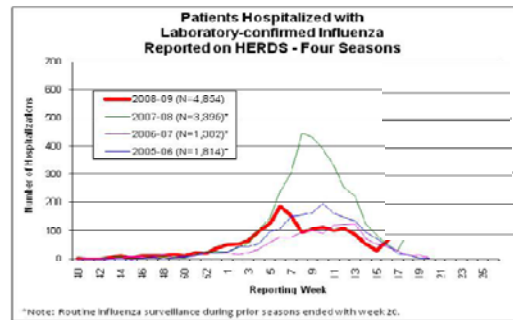
Outline

- Epidemiology of H1N1
- NYSDOH response
- Clinical guidance
- H1N1 Vaccine distribution
- Risk Communication: Media/Educational materials
- Lessons Learned – Continuing Challenges

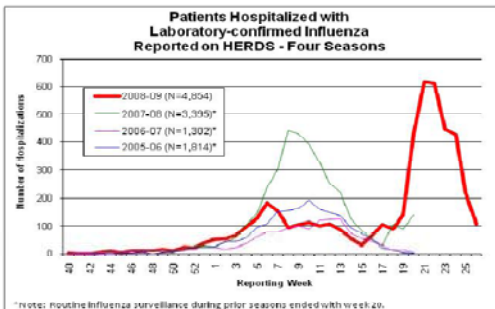
The Pandemic Begins March - Early April 2009

- 2008-2009 Annual Flu Season is winding down in the N. Hemisphere
- 2008-2009 - “mild” seasonal flu
- Something is not quite right...
 - Mexico experiencing outbreaks of respiratory and influenza like illness
 - cases of severe pneumonia and death
- April 12, 2009- Mexico reports: Outbreaks in Veracruz to Pan America Health Organizations

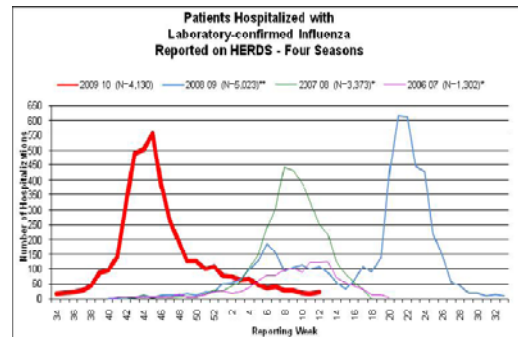
2009 Influenza Season #1 Seasonal Influenza



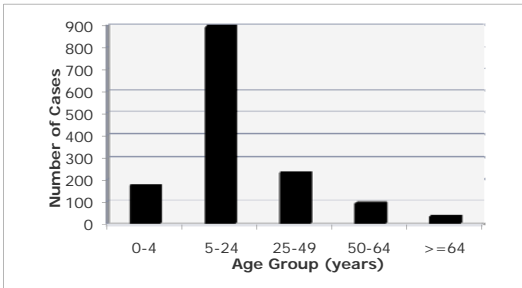
2009 Influenza Season #2 H1N1 First Wave



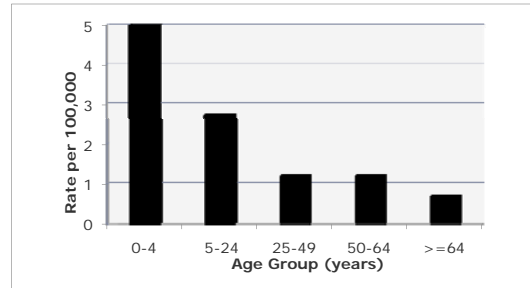
2009 Influenza Season #3 H1N1 Second Wave



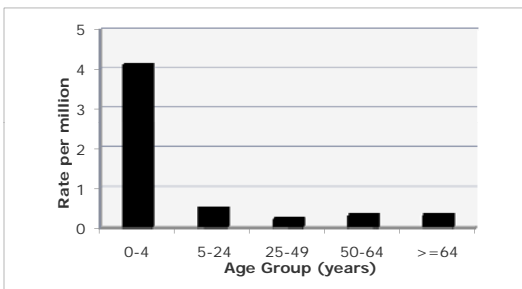
H1N1 Flu Confirmed Cases by Age NYS (excluding NYC), thru 7/25/09



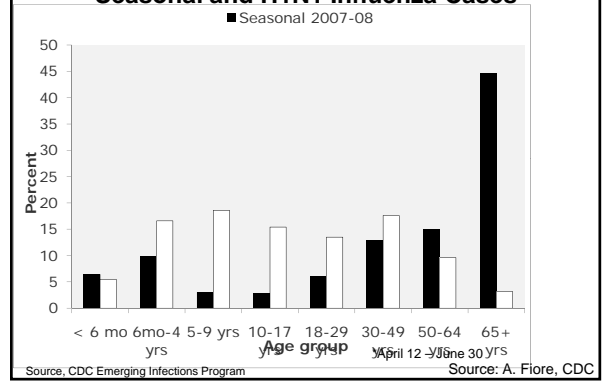
H1N1 Flu Confirmed Case Rate by Age NYS (excluding NYC), thru 7/25/09



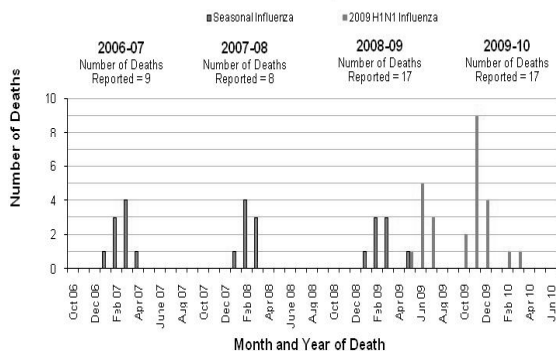
H1N1 Flu Hospitalization Rate by Age NYS (excluding NYC), thru 7/25/09



Age Distribution of Hospitalized Seasonal and H1N1 Influenza Cases



Number of Influenza-Associated Pediatric Deaths by Month and Year of Death: 2006-07 season to present



H1N1 in Pregnancy Study

- Studied 788 pregnant women in the US with 2009 H1N1 influenza with symptom onset from April through August;
- 30 died, 5% of all reported H1N1 influenza deaths. 6-fold increased risk
- 509 hospitalized women, 115 (22.6%) to an ICU.
- Early antiviral treatment appeared to be associated with fewer admissions to an ICU and fewer deaths
- Only 1 death in those treated within 2 days of symptoms.

JAMA 2010;303(15):1517-1525

H1N1 Influenza Epidemiology Key Points

- **Most cases throughout pandemic relatively mild, low mortality overall**
 - Highest hospitalization rate in 0-4 year age group (60.2/100,000)
 - Highest mortality rate in 50-64 year age group (1.77/100,000)
- **Some groups at very high risk**
 - Pregnant women
 - Excess pediatric deaths

NYS DOH Response Process

- **DOH IMS Activated- 4/23/09- 6/25/09 Response (64 days)**
- **DOH IMS Planning- 6/26/09-10/12/09 (109 days)**
- **DOH IMS Response- 10/13/09-2/2/10 (113 days)**
- **286 days IMS activated**

IMS Branch Organization

- | | |
|----------------------------------|---|
| ■ Vaccination | ■ Public Information Risk Communication |
| ■ Epidemiology Surveillance | ■ Informatics |
| ■ Laboratory Surveillance | ■ Legal Issues |
| ■ Healthcare Surge/Triage | ■ Education |
| ■ Healthcare Infection Control | ■ Long Term Care |
| ■ Occupational Health and Safety | ■ Emergency Medical Service |
| ■ Community Mitigation | ■ Border/Tribal Health |
| ■ Clinical Management | ■ Stockpile/Logistics |
| | ■ Planning |

IMS Products

- **39 Situation Reports Developed**
- **IMS Conference Calls Conducted - 85**
- **DOH Management Calls Conducted - 18**
- **County Health Department Calls Conducted - 22**
- **MAC Meetings Conducted - 6**

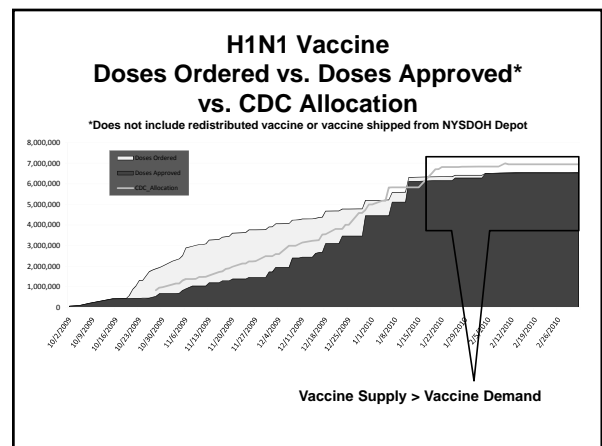
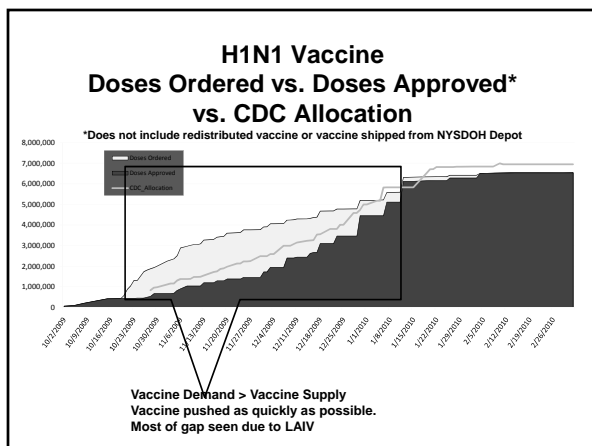
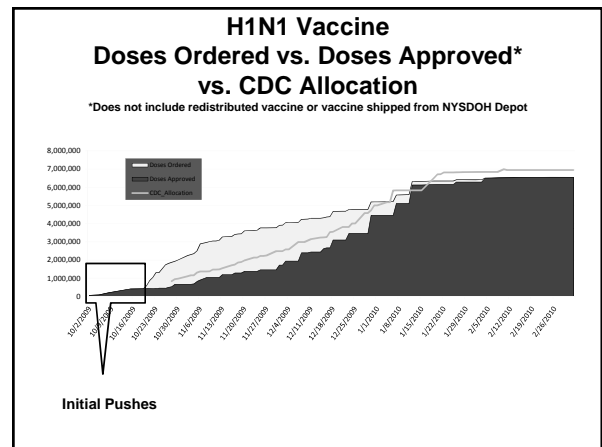
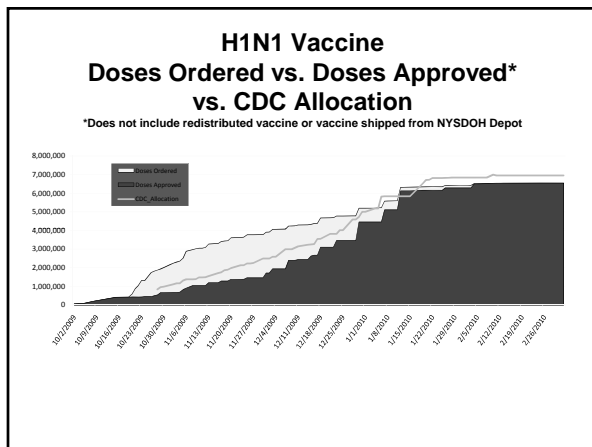
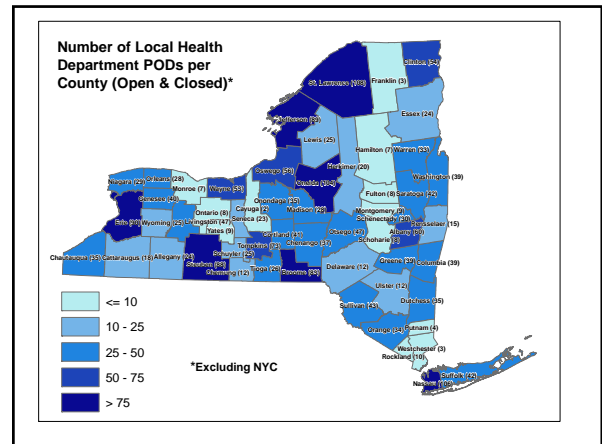
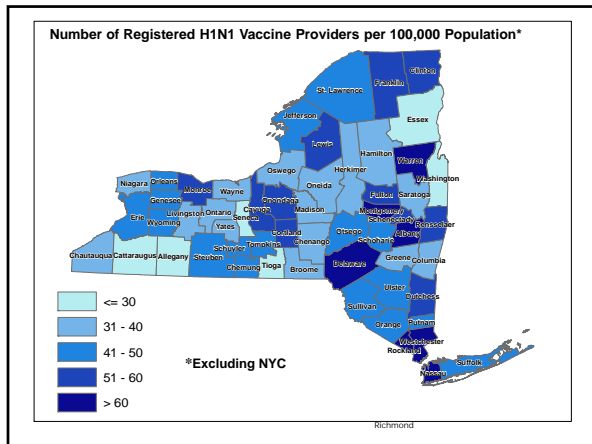
Health Commerce System (HCS)

September 9, 2009-Present

- **142 notifications of the availability of H1N1 related documents (194,000 e-mails)**
- **Vaccine Campaign - 26 separate transmission by direct emails to 5,000 registered providers, 2 separate transmission to 64,000 registered medical providers (250,000 emails)**
- **57 H1N1 related documents were posted on HCS resulting in 692,739 downloads and 5,941,646 access transactions.**
- **Vaccine registration/order history - 162,232 access transactions.**

H1N1 Clinical Guidance Issued by NYSDOH

- **General clinical guidance on H1N1 diagnosis, prophylaxis and treatment;**
- **Subsequent updates;**
- **Checklist for provider offices on preparedness to deal with H1N1 patients/issues;**
- **Advisory on peramivir;**
- **Advisory on update on antiviral medication issues (early treatment, compounding, mixing with liquids, IV zanamivir, IV peramivir, dosing errors);**
- **One-pager for OB/GYN physicians to encourage consideration of prophylaxis/presumptive treatment and vaccination of pregnant women;**
- **Infection Control guidance for facilities.**



H1N1 Vaccine Doses Administered as a Percentage of Doses Shipped

- Adult Practices - 19%
- Family Practices - 23%
- OB/GYN Practices - 19%
- Pediatric Practices - 27%

Reported doses administered

Doses approved

2009 H1N1 INFLUENZA Public Information and Risk Communication



Public Information Goals

- Use risk communication best practices to ensure accurate, consistent, timely messages
 - Acknowledge uncertainty
 - Honest, open and transparent
 - Many voices, one message



Media Relations

- 43 press releases issued between April 2009 and January 2010
- Weekly flu activity updates on website
- Number of Press calls
- Number of Briefings
- Dr. Daines radio and TV interviews
- Satellite media tours
- Media events

Media Events

- H1N1 Preparedness Town Hall Meetings
- Buffalo, Rochester, Syracuse, Lake Placid, Westchester County, Long Island
- Dr. Daines' flu shot



H1N1 patient education pieces

- One-pager for pregnant women;
- Patient fact sheet for flu prevention;
- Patients fact sheet for home care;
- Fact sheets on antivirals;
- Fact sheet on H1N1 testing parameters.

H1N1 **Advice for Women who are Pregnant**

KNOW what to do about the FLU!

If you are expecting, you may be wondering "what if I get H1N1 influenza (the 'flu')?" Pregnant women should take the same steps to avoid getting sick as everyone else. However, because of the flu's potential to cause serious complications in pregnant women, it is important to take extra steps to protect yourself and your baby.

For the best protection of all – get the H1N1 flu vaccine as soon as possible. Pregnant women are a priority group for getting the H1N1 flu vaccine. This is because pregnant women experience about 40% more complications from the flu than non-pregnant women. In addition, pregnant women are more likely to get hospitalized or die from the flu than non-pregnant women.

Why get vaccinated now? (ask the antibody challenge!)
 You may be used to thinking that you can't get pregnant until you've had your period. But that's not true. You can get pregnant in the first few weeks of your period. So if you're pregnant or you think you might be, you should get vaccinated as soon as possible. This is because you can get pregnant in the first few weeks of your period. So if you're pregnant or you think you might be, you should get vaccinated as soon as possible.

To further protect yourself, your baby and family
 Take these everyday steps to help prevent the spread of germs and reduce your risk of getting the flu:

- Cover your nose and mouth with a tissue when you cough or sneeze. Or sneeze into your elbow.
- Throw the tissue away after you use it.
- Avoid touching your face, especially your nose, mouth and eyes.
- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Try to avoid close contact with sick people. If you are pregnant and you live in close contact with someone who has the flu, ask your doctor about whether to prevent the flu.
- Make a plan to care for sick family members.
- Stock up on household health and emergency supplies, such as water, antibiotics ("antibiotics"), and other supplies.

Watch for the symptoms
 Symptoms of the flu are the same as those of seasonal flu and include:


- Fever
- Cough
- Sore throat
- Body aches
- Headaches
- Chills and shivers and
- Fatigue (tiredness)

If there is a flu-like illness currently, pay extra attention to how you are feeling. If you get sick with the flu symptoms, stay home and contact your doctor and get tested as soon as possible. Your doctor will determine if testing or treatment is needed.

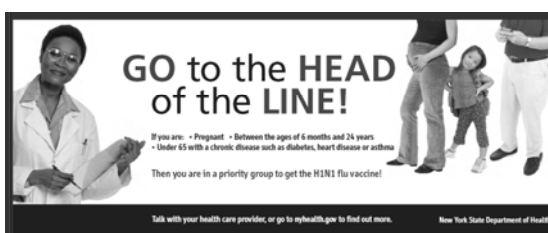
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Educational Materials

- Action steps for employers
- School Action Kit
- 20 new fact sheets
- 3 new posters
- Go to the Head of the Line bus card
- Pre-event materials updated



Bus Poster Campaign



Mass Media Campaign

- Radio ads
 - "Peak Flu Season"
 - "H1N1 Available to All"
 - "Get a healthy start in 2010"
 - "Health Care Worker—Right Thing to Do"
 - "Pregnant Woman—Why I'm Getting Vaccinated"
 - "Know what to do about the flu"
- TV ads
 - "Spread the Word, Not the Virus"
 - "Your H1N1 vaccination protects us all"
 - "Stay healthy in the workplace"
 - "Know what to do about the flu"

New Media

Follow HEALTHNYGOV now! 

- Twitter account
 - Media outlets among followers
- Facebook/spreadthewordnotthevirus
 - About 300 fans to date
- YouTube posting for TV Public Service Announcements

Lessons Learned -- Continuing Challenges

- For the next influenza pandemic:
 - Manage expectations about vaccine supply;
 - Improve vaccine manufacturing;
 - Develop better triage mechanisms for sick persons.
- For seasonal influenza:
 - Move to universal influenza vaccination;
 - Increase health care system capacity to deliver routine immunizations.
- For overall public health preparedness
 - Preserve the workforce, partnerships, etc. built during the pandemic response.