

H1N1 REVIEW

APRIL 2010



1. What Happened
2. Lessons Learned
3. Next Steps

FluTracker map data current as of 09:34 EDT 25 October

Ads by Google

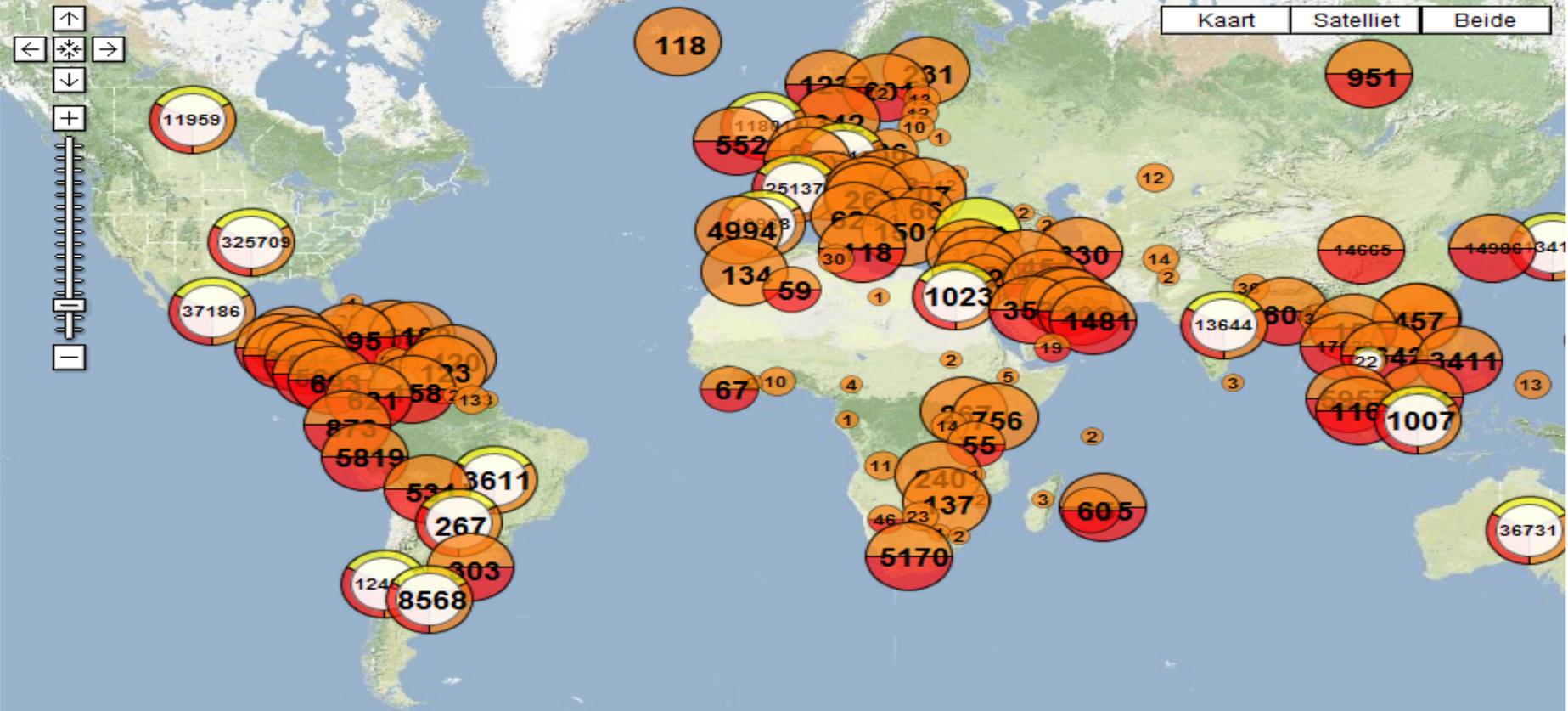
H1N1 Symptoms

H1N1 Flu Map

H1N1 Disease

H1N1 Prevention

Kaart Satelliet Beide



Goals for Addressing a Pandemic

**Coughs and Sneezes
Spread Diseases**



As Dangerous as Poison Gas Shells

**SPREAD OF SPANISH INFLUENZA
MENACES OUR WAR PRODUCTION**

**U. S. Public Health Service Begins Na-
tion-wide Health Campaign.**

- To limit the burden of disease
- To minimize social disruption

April 2009

S	M	T	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

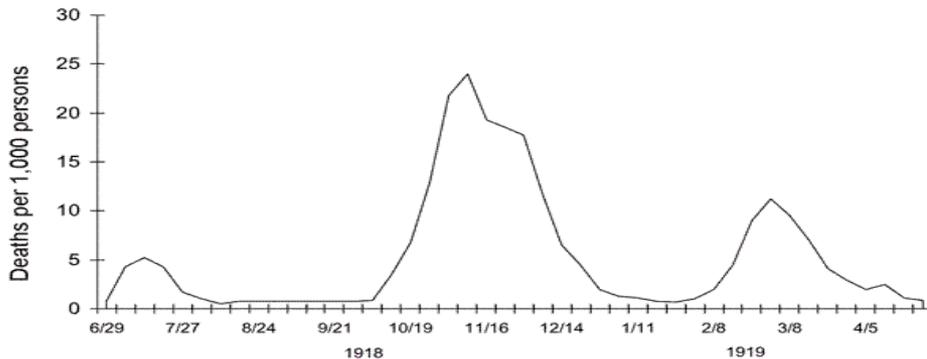
APRIL 23-
APRIL 27

- US CDC announces cases in Texas and CA
- Mexico – 100s of young people hospitalized or dead
- Mainers dust off pandemic plans – all geared for severe pandemic

Features of a Pandemic



- SHIFT in virus subtype
- Shift in highest death rates to YOUNGER populations
- Successive pandemic WAVES
- Higher TRANSMISSIBILITY than seasonal influenza
- Differences in IMPACT in different geographic regions



April 2009

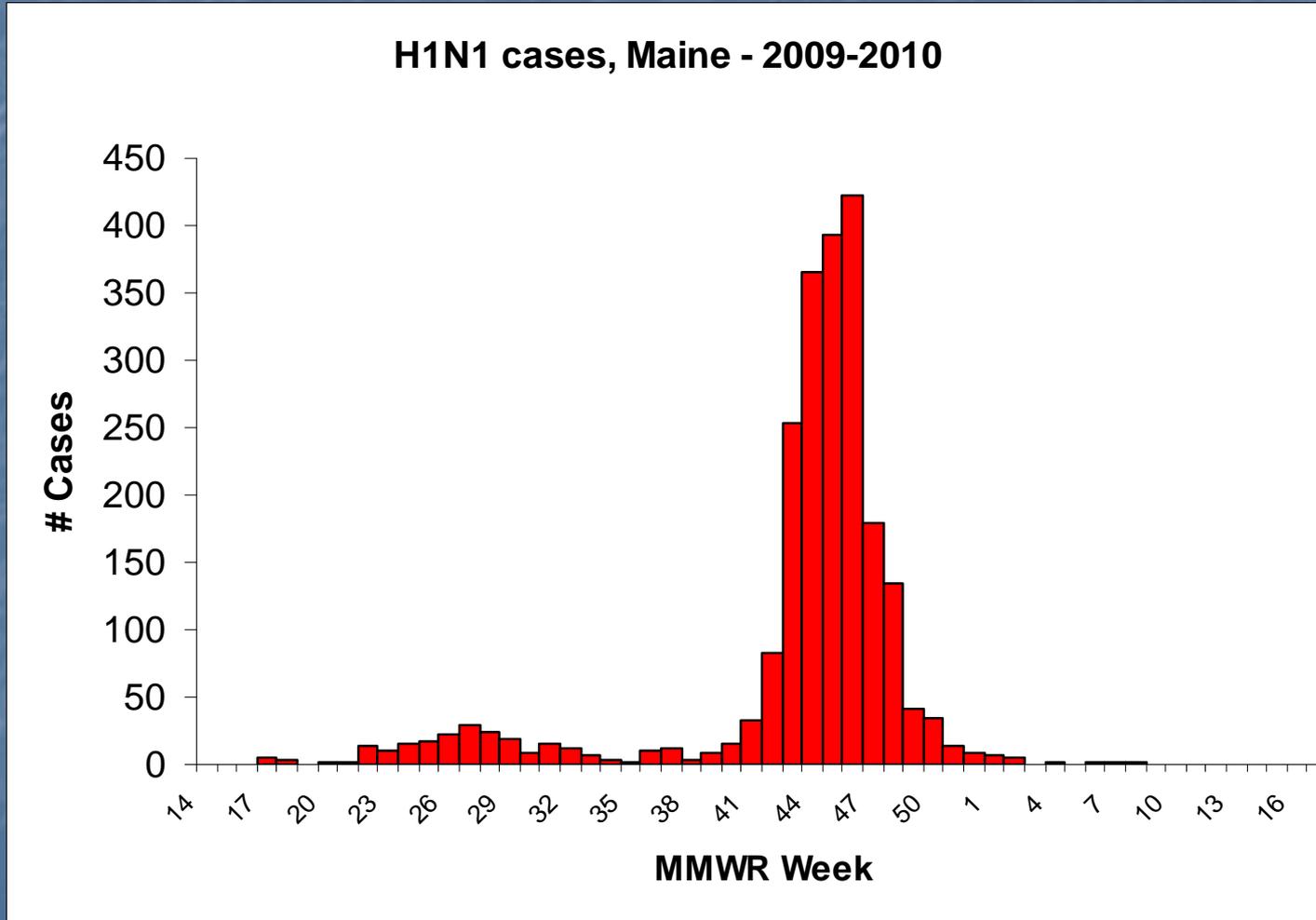
S	M	T	W	Th	F	Sa
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5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

WEDNESDAY APRIL 29, 2009

- First identified cases in Maine – York and Kennebec Counties

- 1 school and 2 day cares closed

DISEASE SURGE IN MAINE



H1N1 IN MAINE

APRIL 2009 – MARCH 2010

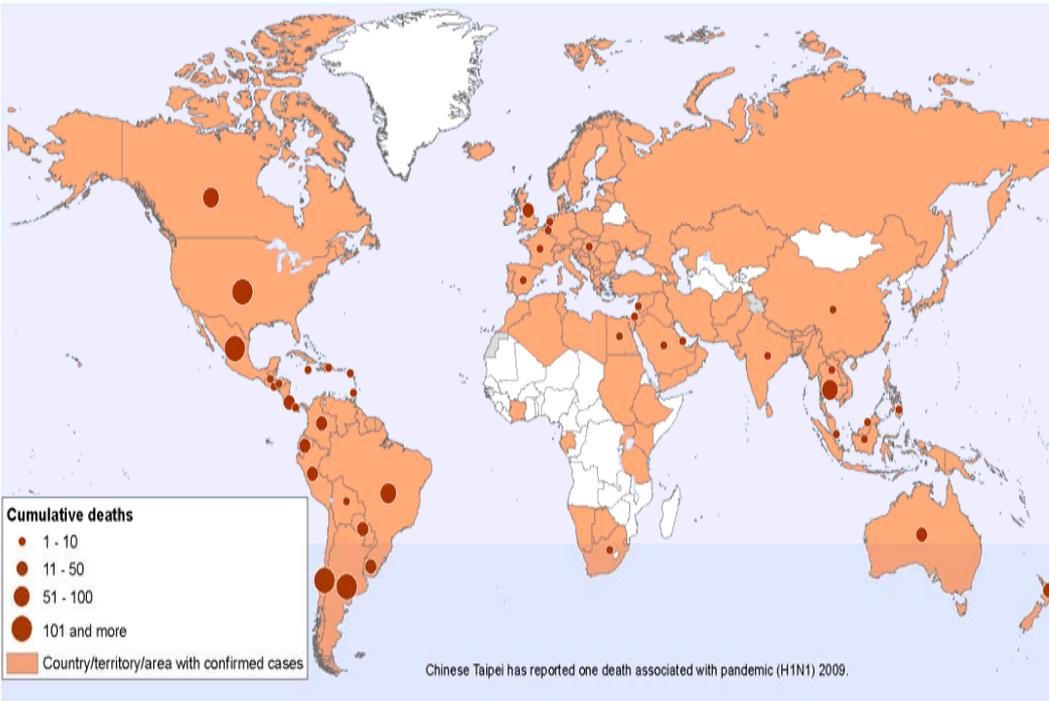
- 200 schools w outbreaks w high absenteeism (>15%)
- 40 summer residential camps w outbreaks
- 250 Mainers hospitalized, mostly children and young adults
- 21 adults died (August – January)

Progression of H1N1

Pandemic (H1N1) 2009

Status as of 06 August 2009

Countries, territories and areas with lab confirmed cases and number of deaths as reported to WHO



April, 2009:
2 countries

Summer, 2009:
200+ countries

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Public Health Information
and Geographic Information Systems (GIS)
World Health Organization



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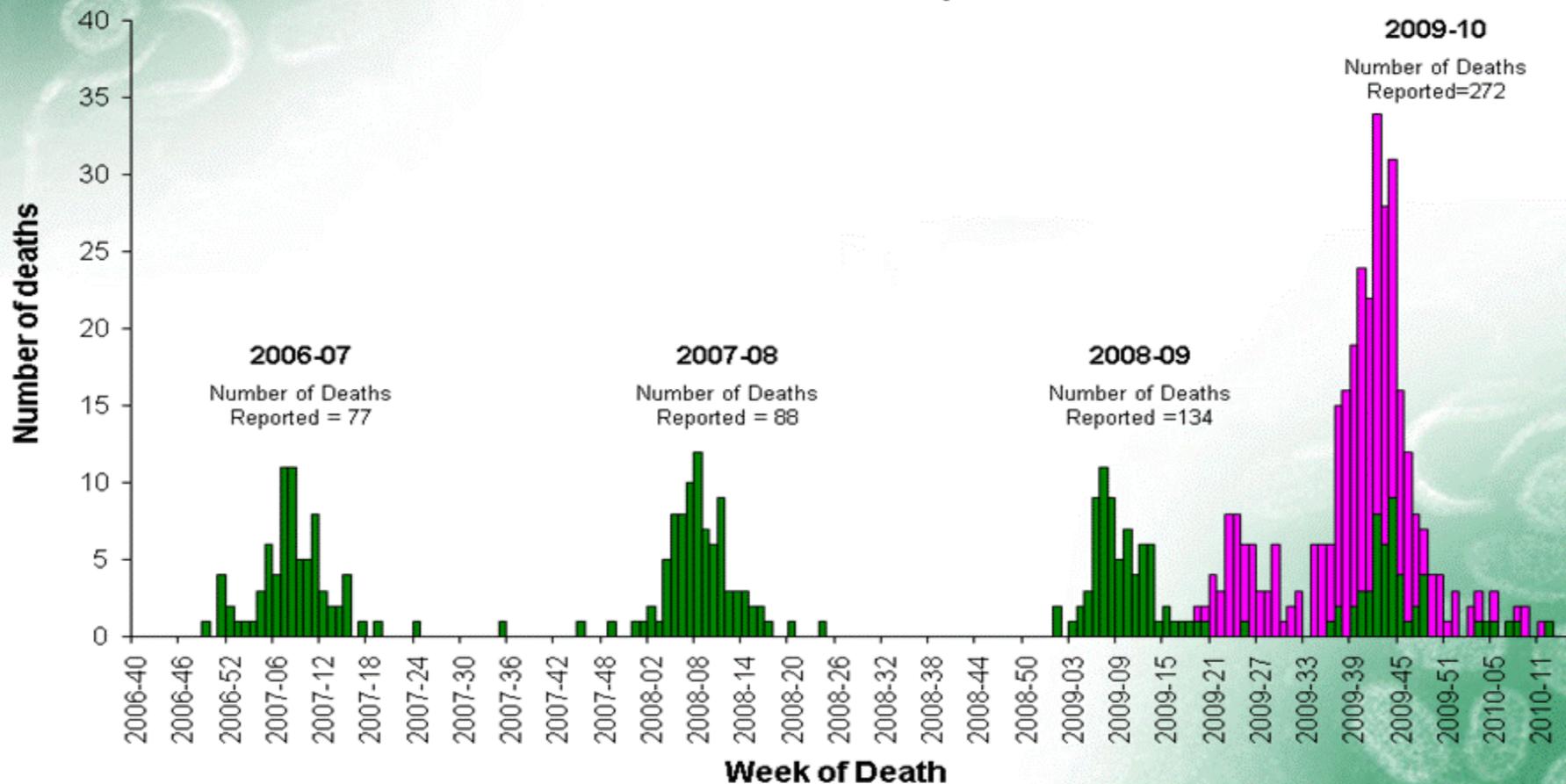
Map produced: 10 August 2009 14:00 GMT

SEASONAL FLU vs H1N1 FLU

- Seasonal Flu: ~90% of deaths among those 65+
- H1N1 Flu: ~90% of deaths among those younger than 65

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Number of Influenza-Associated Pediatric Deaths by Week of Death: 2006-07 season to present



U.S. CDC ESTIMATES H1N1 APRIL 2009 – MARCH 2010

- Cases
 - 60 million
 - 19 million children (32%)
- Hospitalizations
 - 270,000 total
 - 86,000 children (32%)
- Deaths in U.S.
 - 12,500 total
 - 1,300 children (10%)
 - Preliminary data: ~6% of all deaths in pregnant women (but they are 1% of population)

H1N1 VACCINE

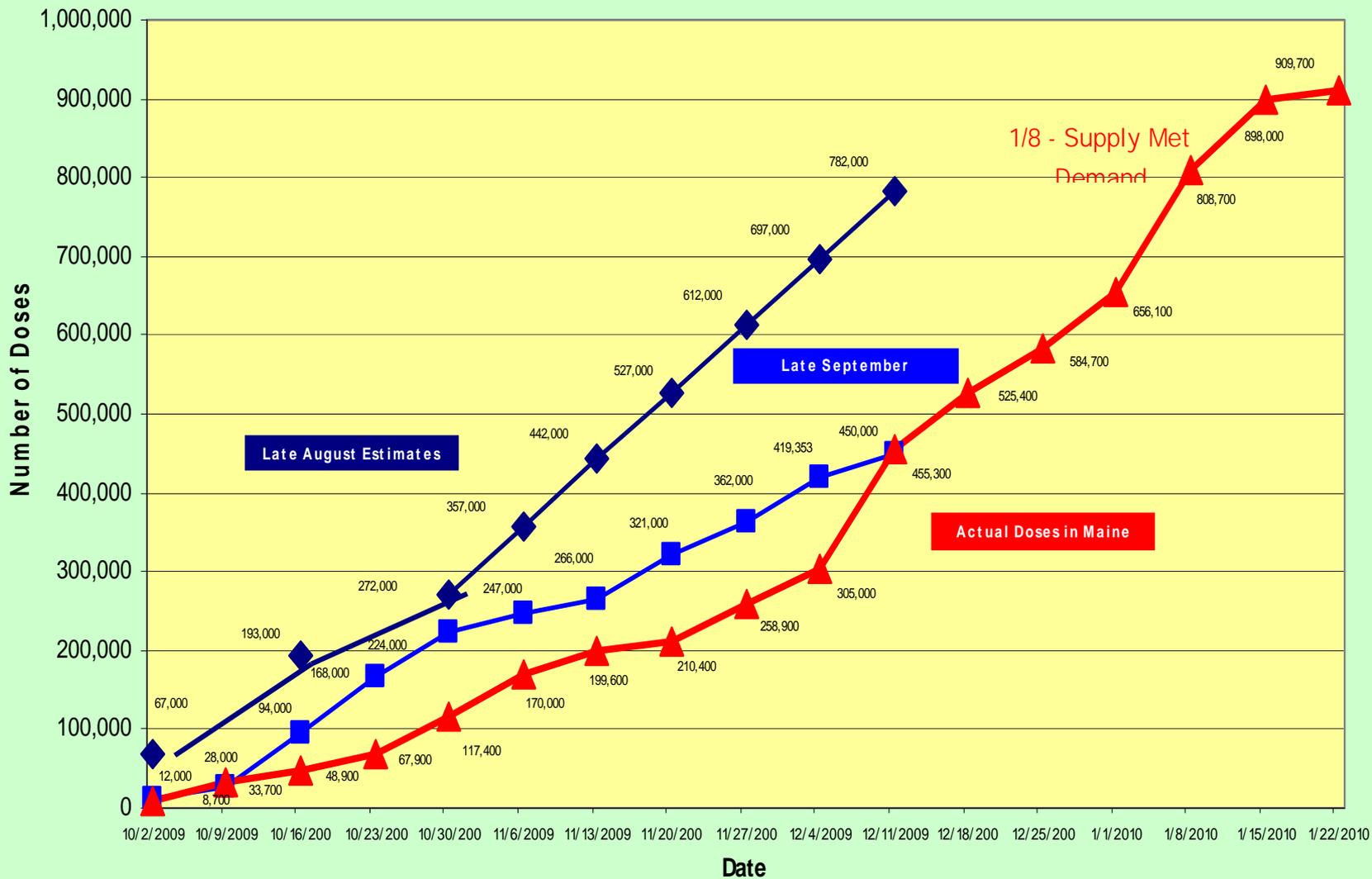
- 5 manufacturers of vaccine
- 4 off shore
- 9 formulations of vaccine

HIGH PRIORITY FOR VACCINE

- *Pregnant women
- *Children 6 mos to 25 years
- *Adults with chronic conditions 25 – 65 years
- *Caregivers/Household contacts of < 6 mos
- Health care workers, inc EMS

*At risk for severe disease

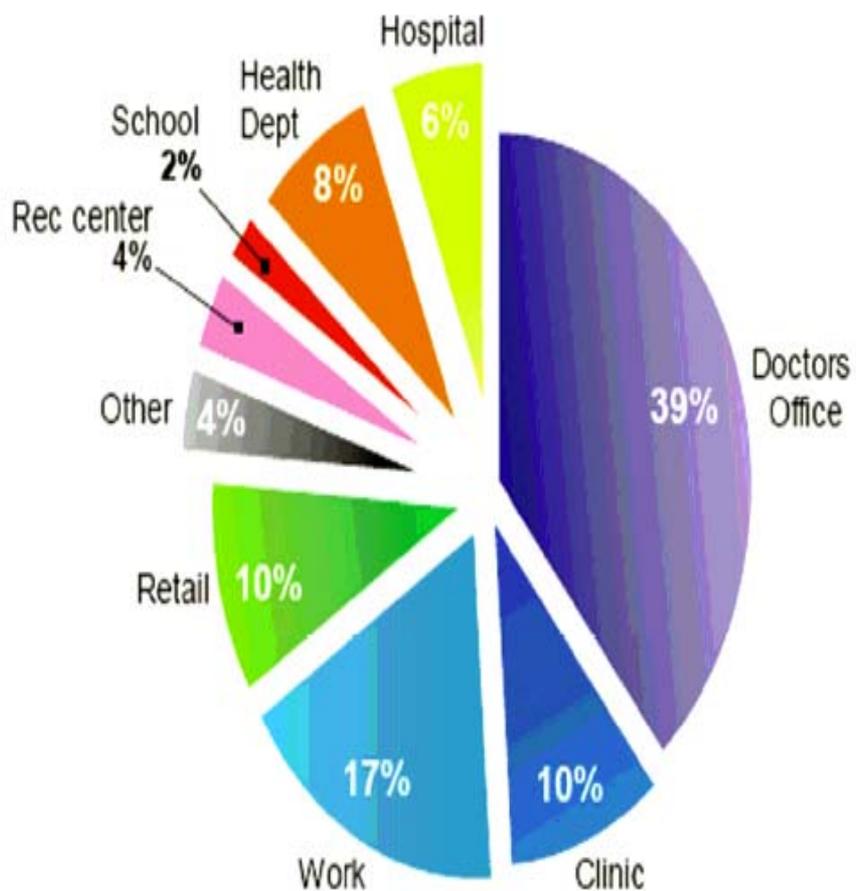
Expected and Actual H1N1 Vaccine Doses in Maine as of January 22, 2010



PRIORITY GROUPS DURING LIMITED SUPPLY MAINE OCTOBER – DECEMBER 2009

	Oct. 29	Nov. 5	Nov. 12	Dec. 4	Dec. 11	Dec. 17
Pregnant Women	X	X	X	X	X	X
6mos-18yr	X	X	X	X	X	X
HCW (inpatient)	X	X	X	X	X	x
Highest Risk Adults		X	X	X	X	X
18-64yr Underlying Conditions			X	X	X	X
Caregivers of <6mos			X	X	X	X
18-25yr				X	X	X
HCW (any patient contact)					X	X
All						X

VENUES FOR VACCINATION: WHERE VACCINE RECIPIENTS WERE IMMUNIZED, 2005–2006



- 39% at a doctor's office/HMO
- 17% at their place of employment
- 10% at a clinic or community health center
- 10% at a retail setting (grocery or drug store)
- 8% at a health department
- 6% at a hospital or emergency department
- 4% at a senior/recreation center
- 4% at a site classified as "other"
- 2% at a school

Source: Centers for Disease Control and Prevention -
Influenza Vaccine Supply Surveys 2005-06 (Gallup Results)

MAINE SCHOOL H1N1 VACCINATION

- 143 School Districts participating
 - 197,000 students offered vaccine in schools
 - Preliminary coverage rates ranging from ~15 – 100%, with most being 40 – 60%
- >70%: Cape Elizabeth, Dedham, East Machias, Gould Academy, Hyde, Long Island, Indian Island, NYA, RSU 30 (Lee), RSU 82 (Jackman), Union 108 (Danforth), Union 93 (Blue Hill)
- <25%: AOS 95 (Ft Kent/Allagash), Bangor Christian, Biddeford, RSU 3 (Unity), RSU 6 (Standish), RSU (Ellsworth), RSU 31 (Howland), RSU 36 (Livermore Falls), RSU 42 (Mars Hill), RSU 54 (Skowhegan), RSU 57 (Waterboro), SAD 24 (Van Buren)
- Seasonal flu and LAIV often both offered
 - Vaccine effectiveness and programmatic studies are underway with US CDC

MAINE LEADS THE NATION IN H1N1 VACCINE RATES

- Children
 - 60% vs 35% in U.S. (2nd)
- Seniors
 - 40% vs 22% U.S. (1st)
- High Risk Adults 25 – 64 yrs old
 - 35% vs 25% U.S. (1st)
- All people 6 mos and older:
 - 37% vs 23% U.S. (1st)

Seasonal Flu Vaccine Rates 2009-2010

- Children
 - 57% vs 40% in U.S.
- Seniors
 - 73% vs 68% U.S.
- High Risk Adults 25 – 64 yrs old
 - 44% vs 36% U.S.
- All people 6 mos and older:
 - 48% vs 40% U.S.

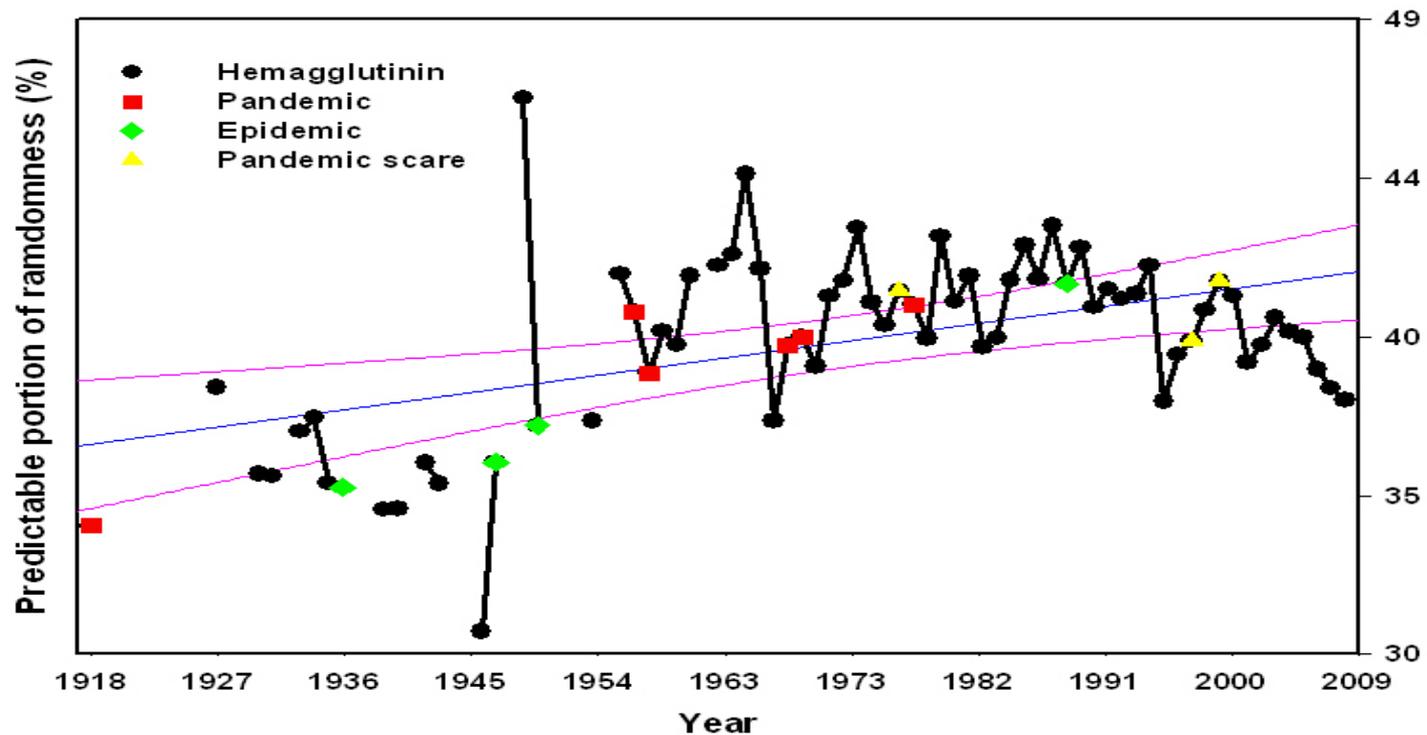
LESSONS LEARNED



**MASSIVE UNPREDICTABILITY IS
ABSOLUTELY CERTAIN, MAYBE**



THE MOST PREDICTABLE THING ABOUT INFLUENZA IS ITS UNPREDICTABILITY



THE MOST PREDICTABLE THING
ABOUT THE INFLUENZA VACCINE
SUPPLY IS ITS UNPREDICTABILITY

CANCELED



IT TAKES A VILLAGE TO VACCINATE



Be Prepared



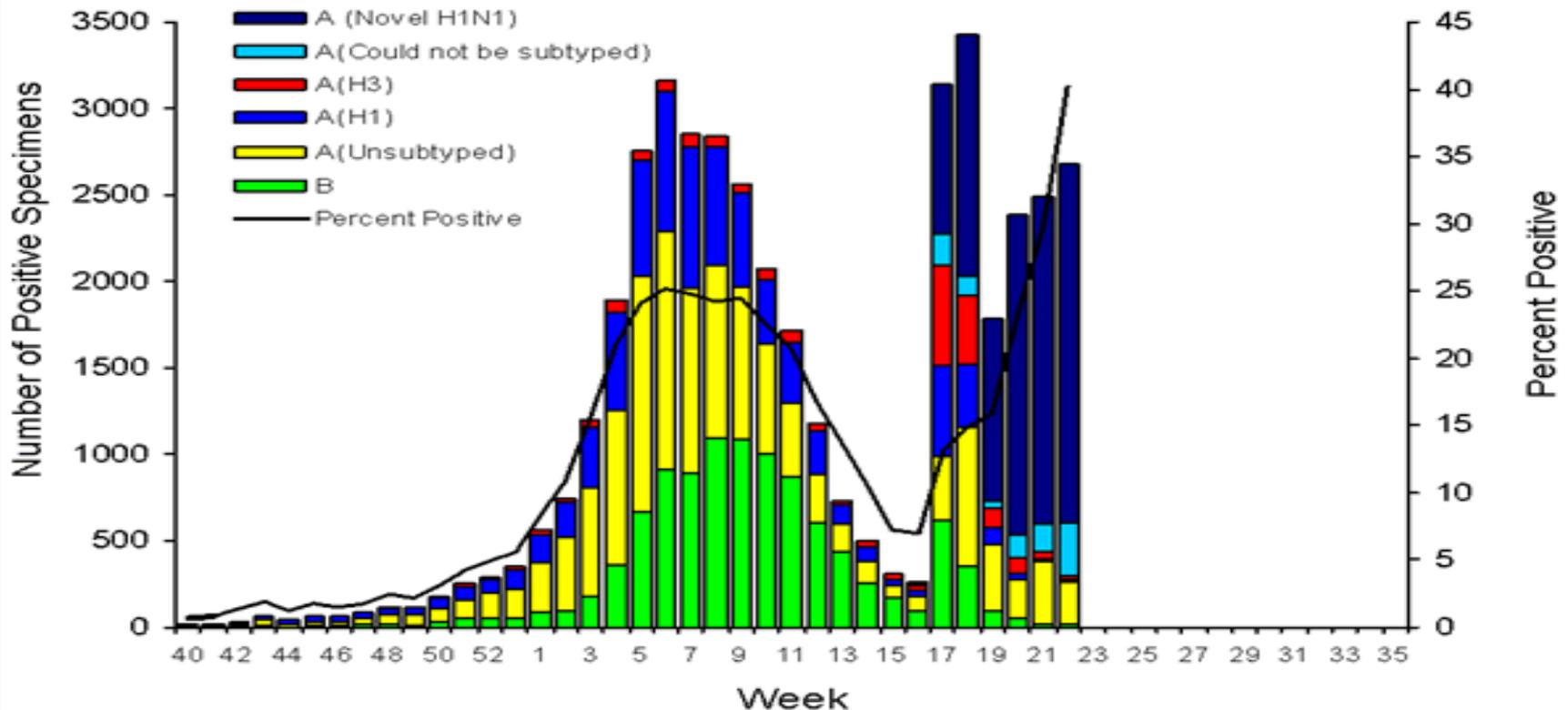


DRAFT NEXT STEPS

Surveillance

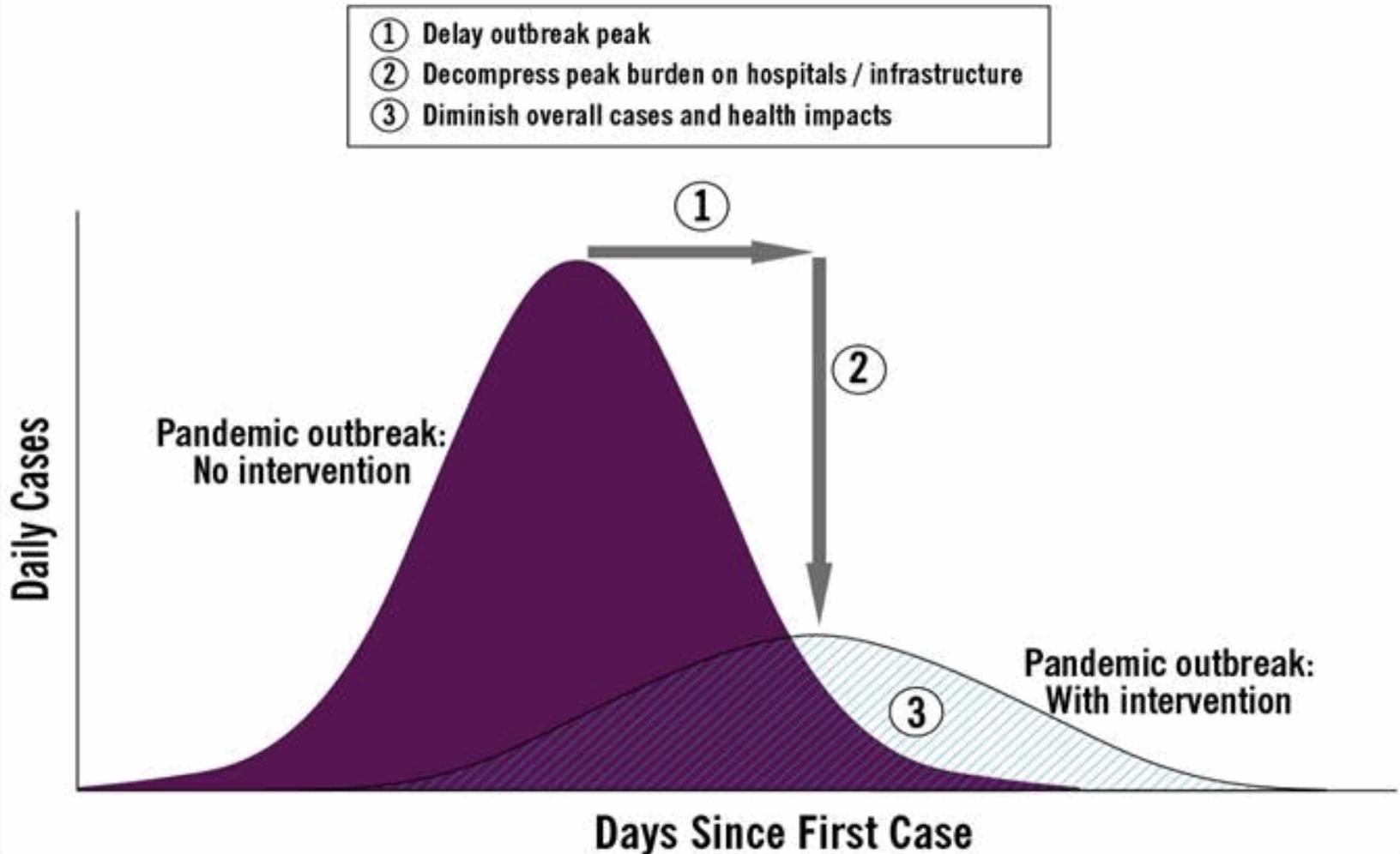
Privacy issues

Influenza Positive Tests Reported to CDC by U.S. WHO/NREVSS Collaborating Laboratories, National Summary, 2008-09



Mitigation

Figure 1. Goals of Community Mitigation



Mitigation

- Prevention
 - Annual reminder campaigns
 - Social marketing strategies

A man in a light blue shirt and yellow tie is shown in profile, blowing a large cloud of dark particles or dust. The background is black, making the white text and the man's face stand out.

Don't be the office sprinkler.

Mitigation



- Early Detection
 - Lab Testing – communicate reasons for testing
 - Surveillance vs clinical management

Mitigation



- Protection – PPE
 - Outreach to US DHHS on:
 - conflicting guidelines
 - non-permissive federal stockpile access (EMS)
 - poor quality of equipment

Mitigation



- Treatment
 - Statewide Nurse Triage Hot Line
 - Prescribing barriers
- Alternate care sites
 - Hospital plans need improvement
 - Protocol 36

Vaccination



- Fall 2010 Flu Campaign
- Maine CDC to provide vaccine for:
 - all children
 - school employees (in school-located clinics)
 - pregnant women (and significant others)
 - nursing home staff/residents
 - Municipal health depts and tribal health centers
 - Uninsured/underinsured in any setting

Vaccination



- Some lessons to be addressed in Fall 2010 School Campaign
 - PCP's to receive vaccine same timeframe as schools
 - Communication channels with schools and PCP's
 - Schools as vaccine distribution sites
 - School clinic dates in Maine CDC database
 - Scheduling of clinics

Vaccination (con't)

EMPLOYEE INFORMED CONSENT FOR H1N1 INFLUENZA VACCINE

Why should you get vaccinated?

2009 H1N1 influenza (swine flu) is a contagious disease which spreads from person to person through coughing or sneezing, by people with influenza. Sometimes people may become infected by touching something - such as a surface or object - with their hands and then touching their mouth or nose.

The symptoms of H1N1 influenza can include:

- Fever
- Cough
- Sore throat
- Runny or stuffy nose
- Soreness
- Fatigue
- Headache
- Chills
- Diarrhea
- Vomiting
- Stomach pain

People may be infected and have respiratory symptoms without a fever.

Complications of H1N1 influenza may worsen underlying chronic medical conditions including:

- Upper Respiratory Tract Disease (colds, sinus infection, sore throat)
- Lower Respiratory Tract Disease (pneumonia, asthma)
- Cardiac
- Musculoskeletal
- Neurological

H1N1 influenza vaccine is recommended for people who are at risk of complications from influenza and for people who can spread influenza to those at high risk. People at high risk for complications from H1N1 influenza include:

- Pregnant women
- Household contacts and caregivers for children younger than 6 months of age
- Healthcare and emergency medical services personnel
- All people from 6 months through 64 years of age
- Persons aged 65 through 64 years who have health conditions associated with higher risk of medical complications from influenza including:
 - asthma
 - diabetes
 - suppressed immune system
 - heart disease
 - kidney disease
 - neurologic disorder
 - neurological disorder

Potential Adverse Effects/Negative Outcomes of Receiving Vaccine

Potential side effects from the H1N1 vaccine include:

- Fever
- Muscle aches
- Headache
- Soreness, redness, tenderness and/or swelling where the shot is given
- Nausea

If these problems occur, they usually begin soon after the shot and last 1-2 days.

Life-threatening allergic reactions to vaccines are very rare. If they do occur, it is usually within a few minutes to a few hours after the shot is given. Signs of serious allergic reaction (allergy) include:

- Swelling of the face, lips, throat, tongue, or other parts of the body
- Difficulty breathing
- Rash or hives
- Dizziness
- Fainting
- Stomach pain
- Difficulty swallowing
- Itching
- Swelling of the lips or eyes
- Wheezing

If you have a severe egg allergy, allergy to any vaccine component or you've had a severe reaction after a previous dose of influenza vaccine, you should tell your health care professional. You should also talk with your health care professional if you have ever had Guillain-Barre Syndrome (GBS) or are currently ill.

A vaccine. See any medicines (such as over-the-counter medicines, such as allergy medicine) The risk of a reaction causing serious health or death, is extremely small.

Informed Consent

I have read the above information (or it has been explained to me and/or my responsible party) and I understand the potential adverse effects and negative outcomes. Understanding the benefits, potential negative outcomes and side effects of receiving the H1N1 influenza vaccine:

Initial appropriate response:

I GIVE one-time permission to administer the H1N1 influenza vaccination, unless medically contraindicated.

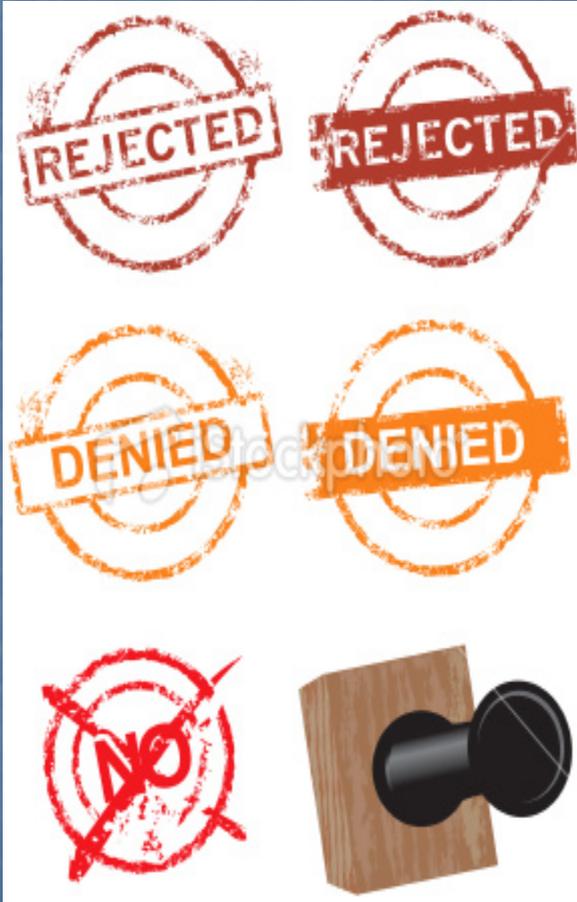
I deny (DO NOT GIVE) permission to administer the H1N1 influenza vaccination.

Employee Signature: _____ Date: _____ Expires: 6/30/2010

Company Representative Signature/Title (if required by policy): _____ Date: _____

- Liability issues addressed
- One standardized consent form with ImmPact data-sharing waiver, insurance information, etc
- Messages for parents
- ImmPact
- Parent volunteers

VACCINATION



- Roster billing glitches
 - Financing of H1N1 Vaccine Efforts (federal funds focused on uninsured)
- Two choices:
- Invoice method to all partners
 - RFP

Vaccination



- Vaccinator Workforce
 - Vaccine clinic organizers
 - Maine CDC vaccinator strike team-more PHN's!
 - Medical Response Teams in each district

VACCINATION



- Vaccine to PCP's, First Responders, and others
 - Communicate on the priority groups and why
 - Improved planning for vaccinating critical infrastructure
- Vaccine and Sharps Disposal Planning
- ImmPact – speed vs data and billing advantages

Communication



- More segmentation
- Outreach to HCP's (including pharmacists) to register for HAN
- No major announcements without press conference!
- Unified communications – Maine CDC, DOE, RRC's
- Local leaders to help support messages

Pandemic Planning



- Updated Pandemic Plans – State, District/County, Hospital, etc.
 - Scalable
 - Role definition – EMA, DL's, RRC's, EMS, HMP's
- Modified NIMS/ICS – education
- Back up DL for every county EOC
- Advisory board for pan flu planning
- Change Management

Hope for the best and...

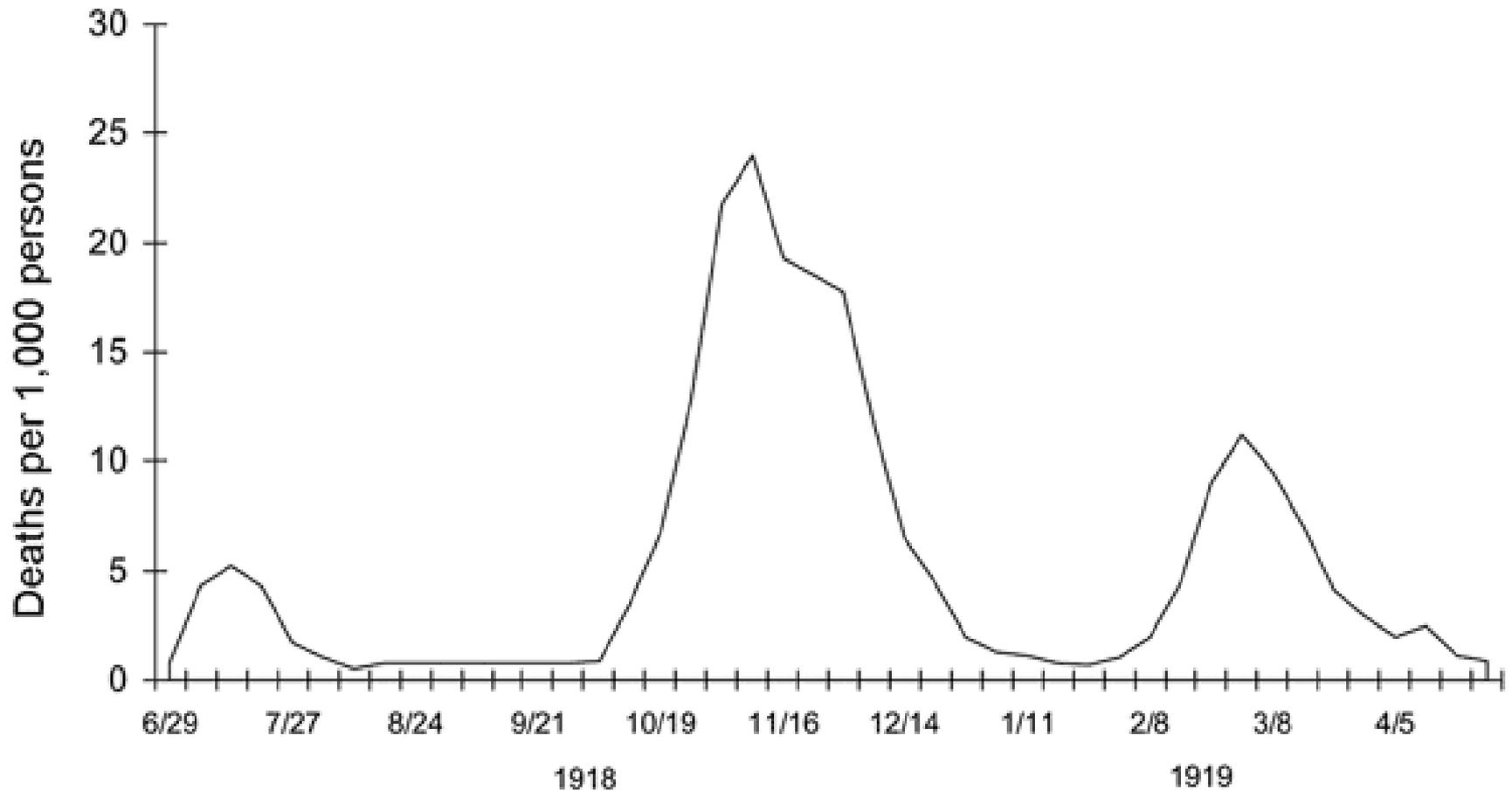


...prepare for the worst



Influenza epidemics are lived forward and understood backward.

(paraphrasing Kierkegaard)



SHARED RESPONSIBILITY



QUESTIONS?

- Flu.questions@maine.gov
- www.maine flu.gov
- www.maine public health.gov for PPT too

