



SITUATION REPORT • MASSACHUSETTS H1N1 RESPONSE

WEEK ENDING - 9/25/09

Epidemiology, Surveillance and Laboratory

H1N1 influenza

As of September 24, 2009, 1406 confirmed cases of H1N1 have been reported throughout Massachusetts. The Centers for Disease Control and Prevention (CDC) is no longer reporting the national total of confirmed cases of H1N1 and is instead focusing on hospitalized cases and deaths. Nationally, influenza-like illness (ILI) continues to increase and some areas of the US are reporting widespread ILI activity. Please visit the CDC's website for up-to-date information (www.cdc.gov/h1n1). Massachusetts ILI activity is described in the next section of this report.

Table 1. Confirmed H1N1 cases in Massachusetts, as of September 24, 2009

	Age group (N)	Age group (%)	Female (%)	Pregnant (N)	Hospitalized (N)	Hospitalized (%)	Deaths (N)	Seasonal Influenza by Age Group (N)
0-4 years	200	14.2	39.00	0	37	18.50	0	3750
5-12 years	391	27.8	41.94	0	31	7.93	0	7300
13-18 years	290	20.6	47.24	6	20	6.90	1	4407
19-25 years	139	9.89	65.47	18	20	14.39	2	2129
26-44 years	227	16.1	68.72	30	27	11.89	3	2841
45-64 years	141	10	63.12	0	34	24.11	4	1416
65+ years	17	1.21	70.59	0	10	58.82	1	348
Unknown	1	0.07	0	0	0	0	0	142
TOTAL	1406	~~	51.71	54	179	12.73	11	22333

As shown in Table 1 above, school-aged individuals (5-18 years) have been primarily affected by H1N1, with approximately 63% of cases age 18 or younger. The median age of cases is 14 and cases ranged from 0 to 84 years. To date, males and females have been equally impacted by H1N1. Overall, 179 cases have been hospitalized (13%), which is similar to the national hospitalization rate of 11% as of July 10, and 11 cases have died. Of the 11 deaths, 8 had underlying conditions.

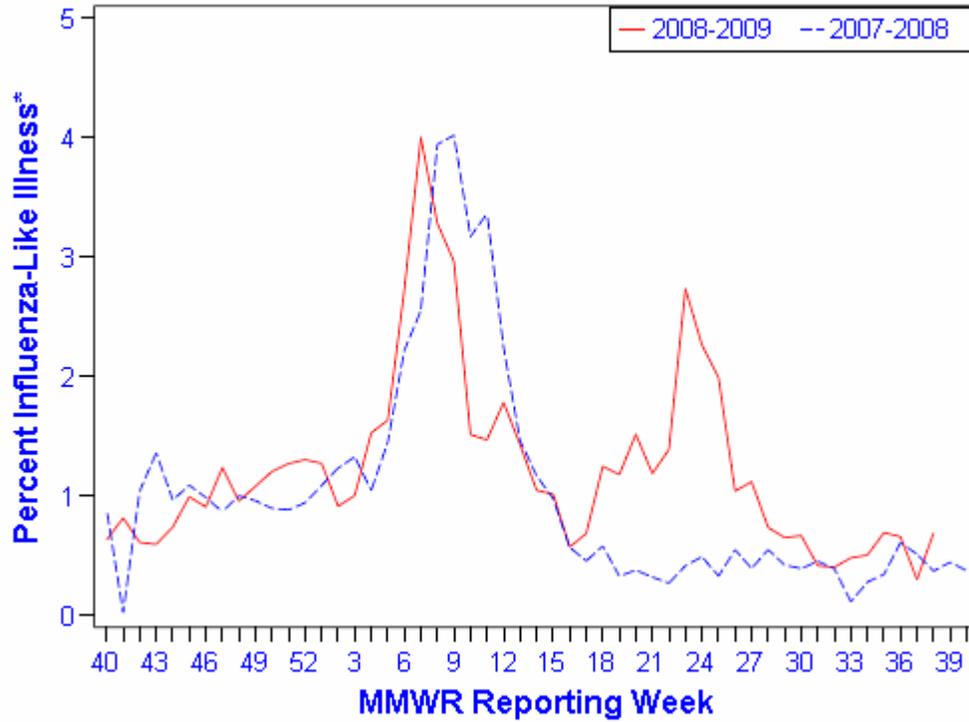
Sentinel provider surveillance: Influenza-like illness activity

Provider offices across the US report the amount of influenza-like illness (ILI) they see in their patients each week during regular flu season. These doctors' offices are called 'sentinel sites'. Here we present Massachusetts sentinel site data. Please note that the data do not represent confirmed influenza cases, only those with ILI. ILI is defined as fever above 100.0² in addition to either cough or sore throat. ILI is a marker of influenza and is used throughout the regular influenza season to monitor influenza since most people are not actually tested for influenza. Although there was an increase in ILI for the week ending September 19 over the previous week, ILI remains within the range of what might be expected at this time of year.

¹ <http://www.cdc.gov/h1n1flu/update.htm>

² Per CDC definition for influenza-like illness: <http://www.cdc.gov/h1n1flu/casedef.htm>

Figure 1: Percentage of ILI visits reported by MA sentinel provider sites



*Influenza-like illness (ILI, defined by fever >100F and cough and/or sore throat), as reported by Massachusetts sentinel surveillance sites.

Table 2 below shows a geographical distribution of reported ILI in Massachusetts. Sites in the western and central regions as well as inner metro Boston are reporting slightly elevated levels of ILI over other sites.

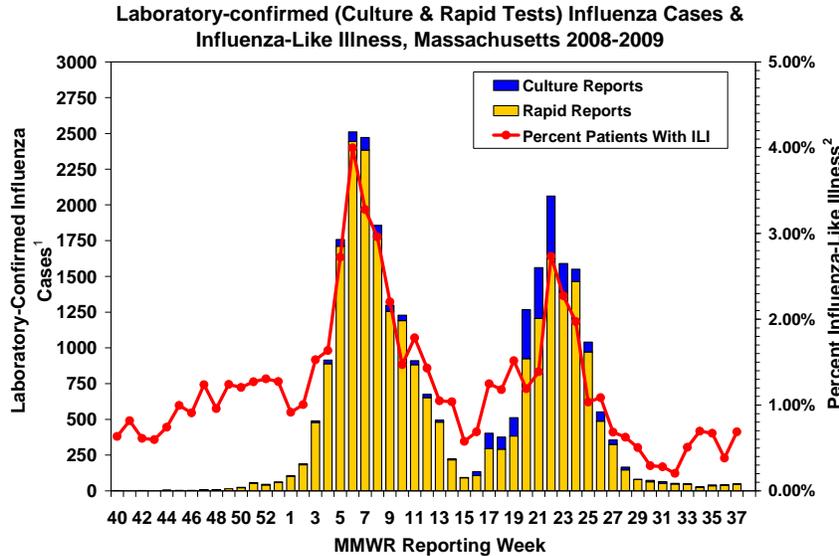
Table 2: Percent ILI reported weekly by Massachusetts sentinel sites

	2008-2009			2007-2008		
	%ILI	Report. Sites	Total enroll.	%ILI	Report. Sites	Total enroll.
Boston	0.00	1	5	0.00	3	5
Central	1.16	3	8	0.00	1	8
Inner Metro Boston	1.09	2	2	0.11	1	4
Northeast	0.35	4	9	1.08	1	6
Outer Metro Boston	~	~	2	~	~	2
Southeast	0.21	1	6	~	~	4
West	1.22	6	10	0.24	5	10

Laboratory testing for influenza

The William A. Hinton State Laboratory Institute (HSLI) has been doing confirmatory testing of H1N1 since mid-April, which is typically the late part of the influenza season. The number of 'confirmed' cases does not reflect the overall incidence of H1N1 flu because the majority of cases are not actually tested. This is true during seasonal flu as well. Below are three charts reflecting laboratory data. Figure 3 includes all laboratory-confirmed cases of influenza, both at SLI and at providers' offices and laboratories around the state. Figure 4 and Table 3 include only specimens submitted to and tested at SLI.

Figure 3: ILI and Laboratory-Confirmed Cases by Week



1. Influenza cases confirmed via viral culture or rapid test by specimen collection date.
2. Influenza-like illness (ILI, defined as fever >100°F and cough and/or sore throat), as reported by Massachusetts sentinel surveillance sites by CDC week date.

Figure 4 and Table 3 summarize the testing conducted at the HSLI since April 19, 2009. The HSLI discontinued testing for influenza type B as of May 24, after no positive specimens were seen for two weeks. There have been no positive specimens for seasonal influenza A since early June. 35% of all specimens tested at the HSLI since April 19 have been novel influenza A (H1N1) 2009 virus. Complete strain surveillance testing for influenza A/H1, A/H3, B and influenza A (H1N1) 2009 virus will be reinstated beginning the first week of October.

Figure 4: Influenza positive tests reported to CDC by HSLI, April-September 2009

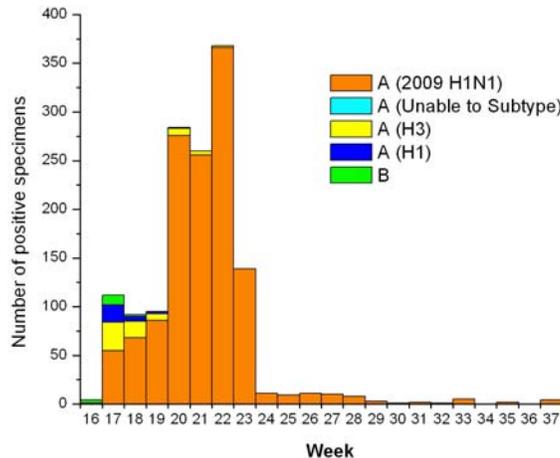


Table 3: Weekly Summary of HSLI Influenza Surveillance Test Results

Influenza Surveillance William A. Hinton State Laboratory Institute								
MMWR Week: (Specimen Collected)	Seasonal Influenza A H1/N1	Seasonal Influenza A H3/N2	Influenza B	Swine-Origin Influenza A H1N1	Negative for Influenza	% Swine-Origin Influenza A H1N1	% Seasonal Influenza	Total Tested
35 (8/30-9/05/09)	0	0	NT	2	8	20	0	10
36 (9/06-9/12/09)	0	0	NT	0	10	0	0	10
37 (9/13-9/19/09)	0	0	NT	4	17	19	0	21
Total	0	0	0	6	35	15	0	41

The immunization epidemiologists received and responded to 117 calls related to influenza from Sept.18 through Sept. 24, 2009, which is up slightly from the 115 calls received the previous week. Commonly received questions included the following: the general public looking for thimerosal-free seasonal flu and H1N1 vaccine (some of these callers are open to further discussion about vaccine safety and true risk/benefits of vaccination); the general public looking for seasonal flu vaccine clinics for themselves and where to vaccinate their kids if their pediatricians do not have vaccine; businesses/employers inquiring about providing vaccine to their employees on-site; clinicians looking for guidance or approval for testing for H1N1.

The current ILI activity level in MA, based on the sentinel provider system described above, is “local.” The activity the last two weeks was also local.

As explained in last week’s report, in response to the updated CDC requests for weekly influenza surveillance reporting, MDPH has implemented a new surveillance system for laboratory-confirmed influenza hospitalizations and deaths. Currently, MDPH receives information from 9 hospitals in MA (accounting for 23% of hospital beds in the state). The data, broken down by age group, is reported weekly to CDC and will be one of the tools used nationally to gauge changes in severity of disease due to of influenza.

Vaccination

There has been some confusion lately regarding vaccine distribution and administration; therefore, we have put together some questions and answers to help clarify.

Roles of local health/hospitals as vaccine receipt sites

Local health departments are asked to register as vaccine sites for all public clinics (generally local health, schools). In limited circumstances, DPH may ask a local health department or hospital to receive and distribute vaccine for individual local providers. This will be done on a case by case basis and will be voluntary on the part of the health

department or hospital. To the extent possible, DPH will identify local health departments or hospitals that may be asked to serve as distribution points by October 15.

Clarification of emergency medical services providers included within the target group while vaccine is in limited supply

Until there is sufficient H1N1 vaccine for everyone, the EMS target group for H1N1 vaccination will include only Emergency Medical Technicians/Paramedics involved in direct patient care who are members of an Ambulance Service that is licensed as such by the state.

Paramedic participation in vaccination clinics

The DPH Public Health Council has approved emergency amendments to the Drug Control Program regulations, effective September 14, 2009, that authorize paramedics to administer seasonal and H1N1 flu vaccine through their paramedic-licensed ambulance service and its medical director, in accordance with an OEMS Special Protocol and training.

This authorization will allow Paramedics to administer both H1N1 and seasonal flu vaccines, working at flu clinics in communities through their ambulance service. The purpose of the emergency amendments is to expand the pool of vaccinators available to work at community flu clinics to vaccinate the public against flu. Paramedics may only work at these flu clinics pursuant to a request made to their ambulance service by the requesting community. No paramedic may administer flu vaccine independent of his or her ambulance service.

Per ASTHO earlier this week, CDC anticipates Project Areas will be able to place their first orders for the 2009 H1N1 vaccine on Wednesday, September 30, 2009. At that time, CDC expects up to 3 million doses of LAIV to be available. Some injectable vaccine in 15 microgram pre-filled syringes licensed for use in children age 4 years and up may also be available for ordering at that time. During the first two weeks in October 2009, CDC anticipates Project Areas will be able to place orders for 15 microgram pre-filled syringes licensed for use in children age 4 and older, multidose vials, and as well as additional LAIV. CDC anticipates additional information on vaccine amounts will be distributed to the Implementation Leads early next week.

**Treatment-Related
(health care utilization, coordination with hospitals and providers)**

IOM releases "**Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations: A Letter Report**" and the Report Brief "Standards of Care for Use in Disaster Situations." The committee's report articulates current concepts and guidance that can assist state and local public health officials, healthcare facilities, and professionals in the development of systematic and comprehensive policies and protocols for crisis standards of care in disasters in which resources are scarce. Both the report and brief are available on ASTHO's Secure Website or by following this link: <http://www.instituteofmedicine.org/CMS/3740/72417/73609.aspx>

Updated and new guidance that was released by CDC this week with regards to antiviral medications are listed below:

[Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season](#)

[Update: Questions & Answers: Antiviral Drugs, 2009-2010 Flu Season](#)

[2009-2010 Influenza Season: Information for Pharmacists](#)

The following advisory was received from Roche regarding Tamiflu Suspension Dosing



Tamiflu Suspension
Dosing Advisory 09.2

Public Information

DPH Communications continued activities on several components of our **FluFacts: What You Need to Know** public information campaign:

- Continued production of a 30-minute H1N1 informational program for cable TV, which will be available on Comcast InDemand and cable access stations statewide. The show will feature a Q&A format, with questions being answered by Commissioner Auerbach; Medical Director Dr. Lauren Smith, State Epidemiologist Dr. Al DeMaria, and Harold Cox, DPH Senior Consultant and Associate Dean, Boston University School of Public Health
- A series of PSA transit ads are being finalized and will be on display in regional transit systems statewide in the coming weeks.
- Planning has begun for Phase II of the FluFacts campaign. Messaging will incorporate several components from Phase I, along with new information which has become available such as vaccine distribution and availability.
- FluFacts: What You Need to Know TV and radio spots will be launched across the entire state next week, followed by the Cable Show and transit ads in two weeks

Additional communications activities include:

- We continue to regularly update the H1N1 blog. Recent posts include the [weekly update](#) and information about the [CDC's H1N1 Preparedness Guide for Small Businesses](#)
- The majority of calls from the media this week have been centered on flu clinics in schools and vaccine availability.
- Jordan Coriza, Director of Ethnic Media Engagement, was interviewed by Globo International, a Portuguese TV station, this week. The interview, which focused on flu prevention, will air in 42 countries this fall.

Mass211 received a total of 79 calls last week, which is up from 67 calls the previous week.

DPH is aware that there has been some confusion about the appropriate use of Mass 211 versus the State Epidemiology line. In general, phone calls regarding basic flu information for the general public should be directed to Mass 211. All clinical questions should be directed to call the State Epidemiology line at 617 983-6800 or toll-free at 888-658-2850.

All Mass211 call takers have been trained by DPH staff to answer questions regarding the upcoming flu season and H1N1.

Updates to Policies and Guidance Documents

DPH posted numerous materials at www.mass.gov/flu including:

- The 60-second [Flu Facts: What You Need To Know PSA](#) that is currently running on various TV outlets
- A link to the new [CDC guidance](#) for H1N1 planning for small businesses

- A [Vaccinator Training Schedule](#) and [Handling Instructions for the 2009 H1N1 Vaccine](#) for Health Care Professionals

In addition, this week we finalized the translation of numerous documents for the website. These include:

- The H1N1 Fact Sheet in [Thai](#), [Korean](#), [Arabic](#), [Haitian Creole](#), [Khmer](#), [Swahili](#), [Russian](#), [Portuguese](#), [Vietnamese](#), [Spanish](#), [Amharic](#), and [French](#)
- The Welcome Letter from the Commissioner in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Vietnamese](#) and [Spanish](#)
- Coping With Stress is now available in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Spanish](#) and [Vietnamese](#)
- Frequently Asked Questions About Vaccine Safety was added in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Spanish](#) and [Vietnamese](#)
- The Flu Symptoms Checklist can now be downloaded in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Khmer](#), [Russian](#), [Spanish](#), and [Vietnamese](#).
- Staying at Home with the Flu: Instructions For Those Who Are Sick and Their Close Contacts is available in [Chinese](#), [French](#), [Haitian Creole](#), [Portuguese](#), [Russian](#), [Somalian](#), [Spanish](#), [Swahili](#), and [Vietnamese](#).

Several of the materials that were sent to school administrators in the beginning of September have also been translated into numerous languages and added to the website. These include:

- An FAQ for Parents in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Spanish](#) and [Vietnamese](#).
- The Letter to Parents of Children in Early Education and Care Programs is now available for download in [Portuguese](#) and [Spanish](#), as is the FAQ for Parents About Flu in Childcare Settings ([Portuguese](#), [Spanish](#)) and the Flu Prevention Poster for Parents ([Portuguese](#), [Spanish](#)).
- A Letter To Parents, to be distributed by school administrators, is now available in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Spanish](#) and [Vietnamese](#)
- Talking With Your Kids has also been made available in [Chinese](#), [Haitian Creole](#), [Portuguese](#), [Spanish](#) and [Vietnamese](#).

Lastly, a variety of Podcasts are now available in [Chinese \(Mandarin\)](#), [French](#), [Haitian Creole](#), [Portuguese](#) and [Spanish](#). Vietnamese will also be available soon.