

2007-2011 Influenza Activity in Massachusetts						
		2007-2008	2008-2009 (Seasonal)	2008-2009 (Pandemic Phase) ¹	2009- 2010	2010-2011
Positive Influenza Culture	Total	841	496	550	713	603
	Type A	418 (50%)	312 (63%)	533 (97%)	711 (>99%)	495 (82%)
	Type B	423 (50%)	183 (37%)	17(3%)	1 (<1%)	106 (18%)
	Unknown	0	1 (<1%)	0	1 (<1%)	2 (<1%)
Positive Influenza PCR ²	Total		17	1,587	904	655
	Type A		17 (100%)	1,548 (98%)	882 (98%)	588 (90%)
	Type B		0	13 (<1%)	5 (<1%)	67 (10%)
	Unknown		0	26 (2%)	17 (2%)	0
Influenza A subtypes ³	H1N1	23 (64%)	69 (92%)	26 (2%)		
	2009 H1N1⁴			1426 (94%)	564 (99%)	89 (51%)
	H3N2	6 (8%)	65 (4%)	3 (1%)	85 (49%)	6 (8%)
Influenza identified by rapid diagnostic testing statewide	Total Cases	16,202	14,262	8,250	13,894	10,304
	Type A	43%	43%	82%	79%	67%
	Type B	34%	29%	2%	1%	18%
	Unknown (A/B)	23%	28%	16%	20%	15%
Total specimens submitted to SLI		344	278	3687	788	470
Antigenically- Characterized Influenza A/H3N2 Specimens	Vaccine Strain	100% (n=8)	100% (n=5)		N/A	100% (n=23)
	Non-vaccine strain	N/A	N/A		N/A	N/A
Antigenically- Characterized Influenza A/H1N1 Specimens	Vaccine Strain	N/A	100% (n=22)		N/A	N/A
	Non-vaccine strain	100% (n=1)	N/A		N/A	N/A
Antigenically- Characterized Influenza A/2009 H1N1 Specimens	Vaccine Strain		100% (n=27) (vaccine in development)		100% (n=13)	100% (n=18)
Antigenically- Characterized Influenza B Specimens	Vaccine Strain	N/A	6% (n=1)		80% (n=4)	100% (n=13)
	Non-vaccine strain	100% (n=10)	94% (n=16)		20% (n=1)	N/A

Age (In years) of cases confirmed by culture/PCR	<10	40%	41%	28%	27%	21%
	10-19	12%	25%	33%	21%	10%
	20-39	21%	19%	22%	25%	24%
	40-64	17%	10%	15%	23%	20%
	≥65	10%	3%	2%	4%	25%
	Unknown	0%	1%	<1%	0%	0%
Age (In years) of cases confirmed by rapid test	<10	30%	38%	37%	43%	35%
	10-19	15%	33%	34%	30%	15%
	20-39	25%	18%	16%	14%	23%
	40-64	20%	8%	10%	10%	15%
	≥65	10%	2%	2%	2%	11%
	Unknown	<1%	1%	1%	1%	1%
Week of greatest number of positive cultures/PCR⁵	3 rd Week of February (MMWR Week 8)	3 rd Week of February (MMWR Week 7)	1 st Week of June (MMWR Week 22)	4 th Week of October (MMWR Week 43)	4 th Week of February (MMWR week 8)	
Week of greatest number of positive rapid diagnostic tests	1 st Week of February (MMWR Week 6)	2 nd Week of February (MMWR Week 6)	3 rd Week of June (MMWR Week 24)	1 st Week of November (MMWR Week 44)	3 rd Week of February (MMWR week 7)	
First positive culture/PCR	10/15/2007	10/29/2008	4/25/2009	10/5/2009	10/26/2010	
Peak for ILI⁶	3 rd Week of February (MMWR week 8)	2 nd Week of February (MMWR Week 6)	1 st Week of June (MMWR Week 22)	1 st Week of November (MMWR week 44)	3 rd Week of February (MMWR week 7)	
% of visits for ILI at peak	4.02%	3.99%	2.73%	9.25%	2.65%	
Known clusters of ILI⁷	32	13	27	60	70	

¹ Pandemic phase of 2008-09 season began in MMWR week 16 (3rd week of April), when 2009 H1N1 was first identified in Massachusetts.

² The Hinton State Laboratory Institute began performing PCR testing for influenza in January of 2009, and 2008-09 season was the first for which PCR results were differentiated from culture results. The few PCR results received from outside laboratories prior to the 2008-09 season were included in numbers for culture results.

³ Includes only culture and PCR results for which subtype information is available.

⁴ The first case of 2009 H1N1 identified in Massachusetts was collected on 4/25/2009 with an onset of symptoms on 4/23/2009.

⁵ All positive tests are classified into MMWR weeks based on date of specimen collection.

⁶ Influenza-like illness, as reported by Massachusetts outpatient surveillance sites (ILINet). ILI=Fever of at least 100°F with cough and/or sore throat.

⁷ Clusters of influenza-like illness are reported by telephone to the immunization program at MDPH. Most clusters are reported by long-term care facilities or other residential facilities, but may include schools, hospitals, and other sites on occasion.