



MAIC Meeting 6/18/19

Influenza Season 2018-2019

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Massachusetts Department of Public Health
June 18, 2019

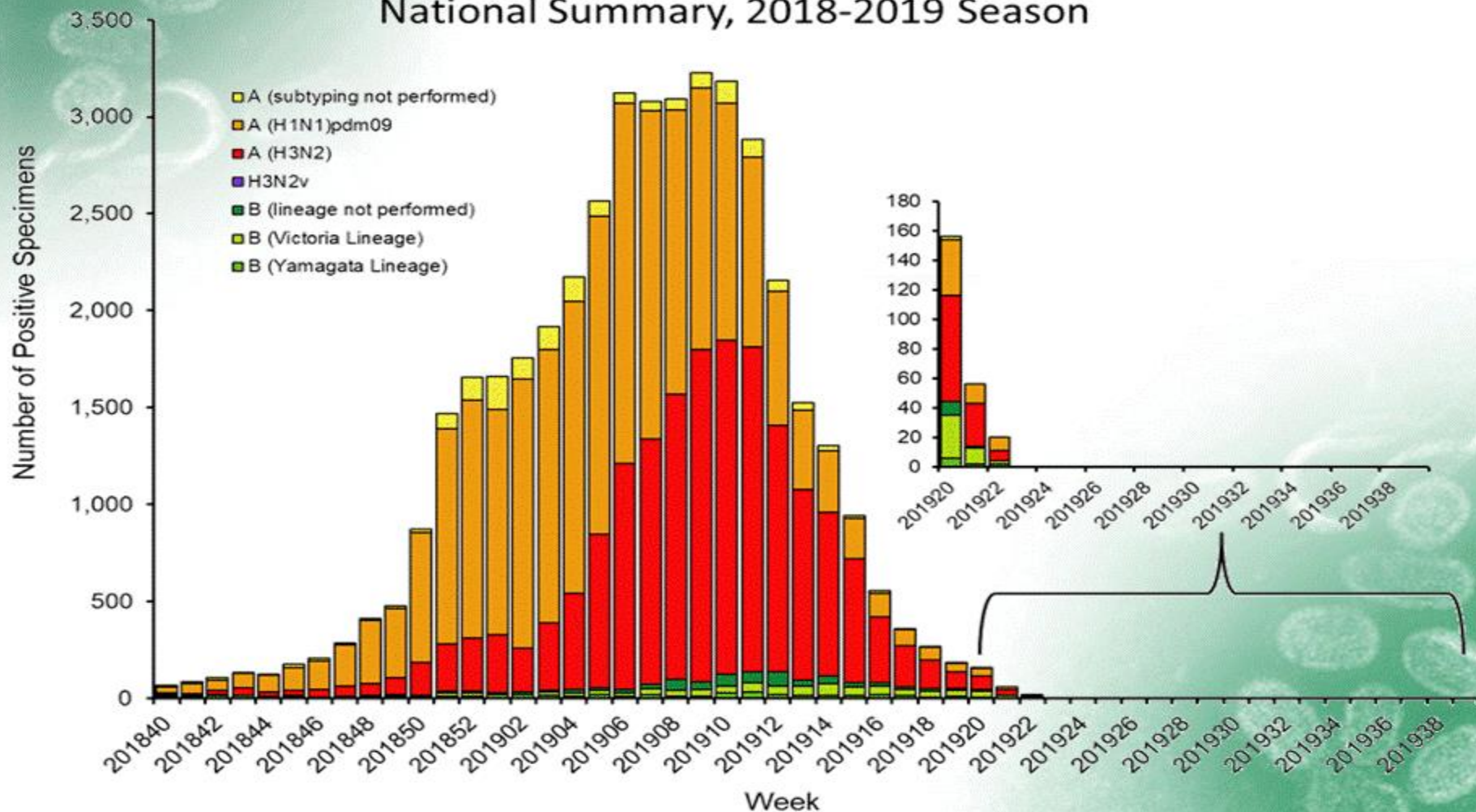


Influenza Season 2018-2019

- Influenza A(H1N1)pdm09 viruses predominated nationally for the season, but influenza A(H3) viruses were more commonly reported since late February.
- A slightly longer season than usual (remained above baseline) but not as severe as last season.
- There were 114 pediatric deaths reported this season. (Massachusetts reported 4 pediatric flu deaths.)

A Weekly Influenza Surveillance Report Prepared by the Influenza Division

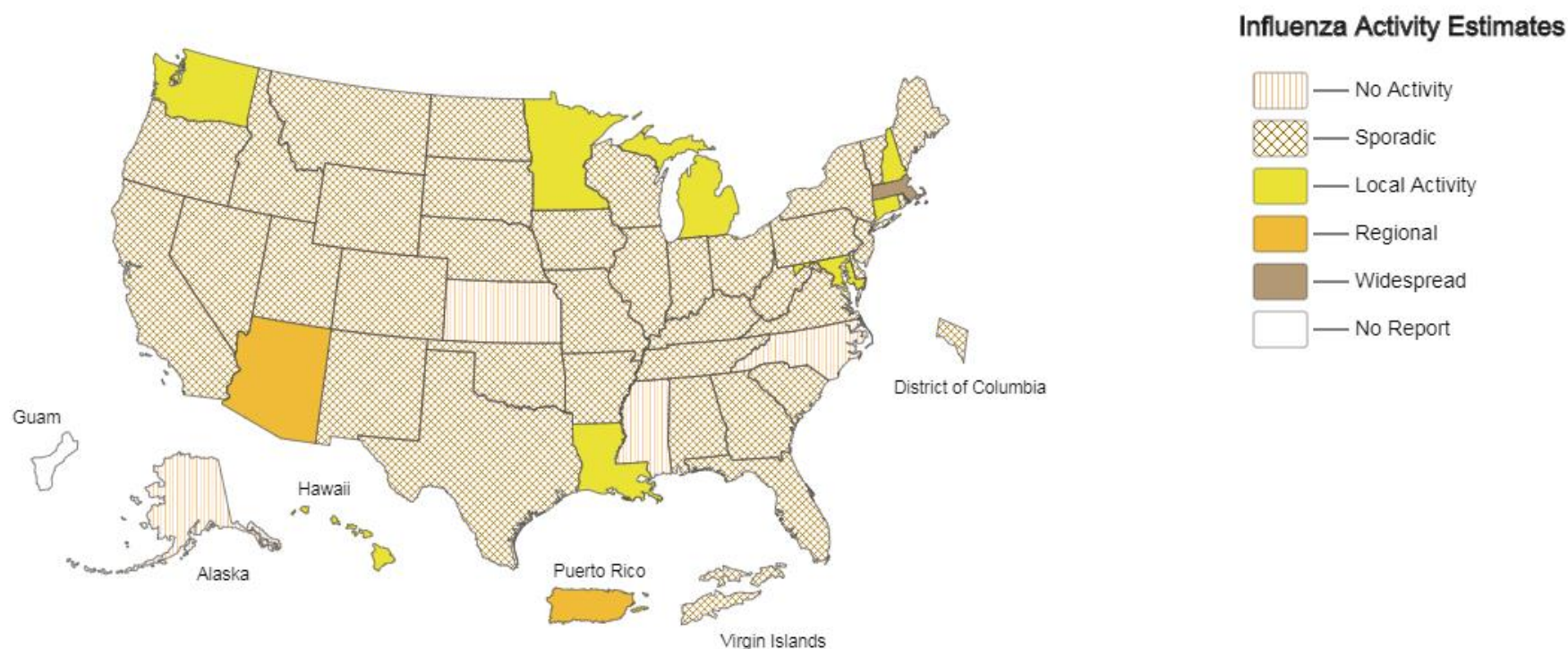
Influenza Positive Tests Reported to CDC by U.S. Public Health Laboratories, National Summary, 2018-2019 Season



A Weekly Influenza Surveillance Report Prepared by the Influenza Division

Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists*

Week Ending May 18, 2019 - Week 20



*This map indicates geographic spread and does not measure the severity of influenza activity.

2018-2019 U.S. Flu Season: Preliminary Burden Estimates

CDC estimates that, from **October 1, 2018**, through **May 4, 2019**, there have been:

37.4 million – 42.9 million
flu **illnesses**



17.3 million – 20.1 million
flu **medical visits**



531,000 – 647,000
flu **hospitalizations**



36,400 – 61,200
flu **deaths**

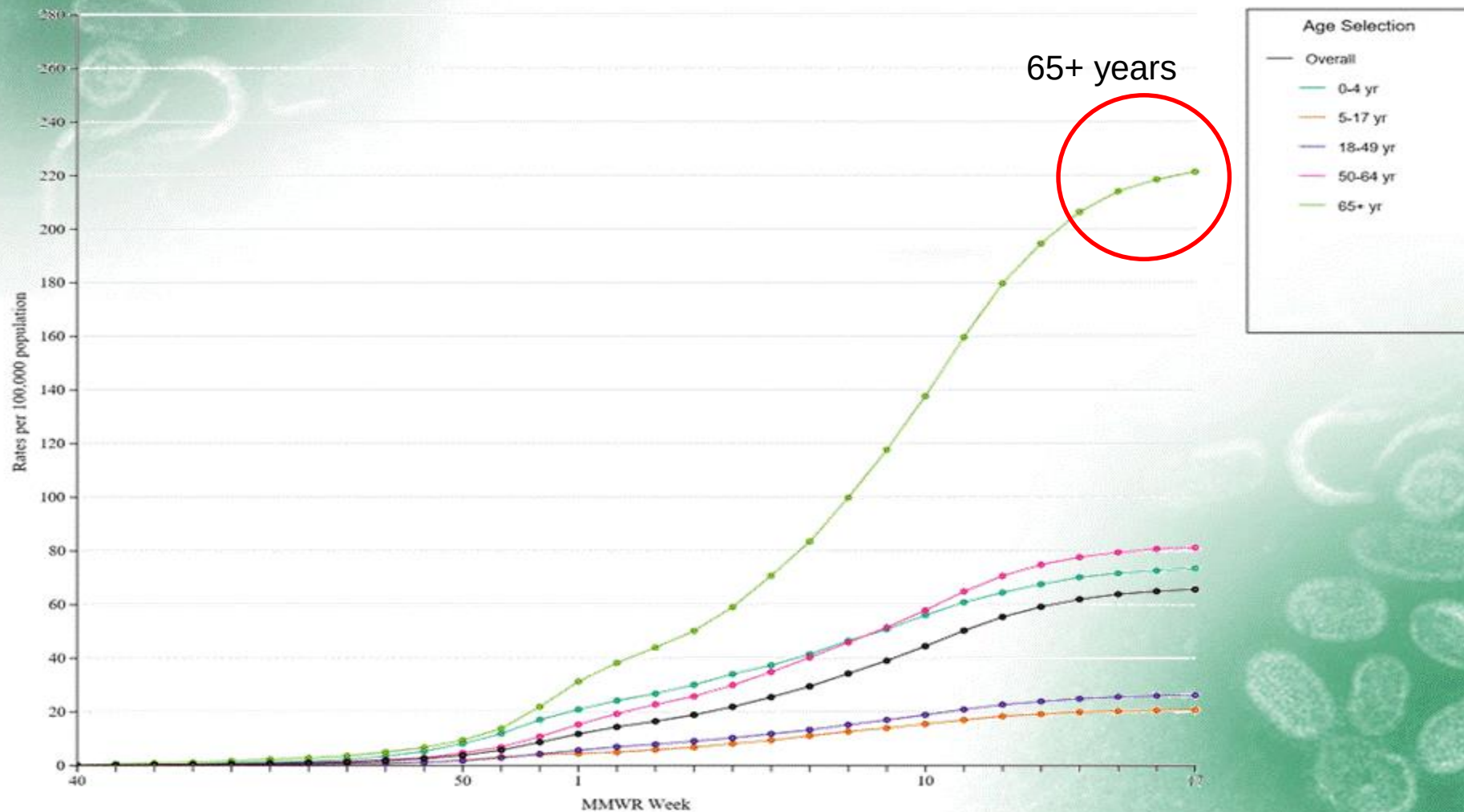


FLUVIEW



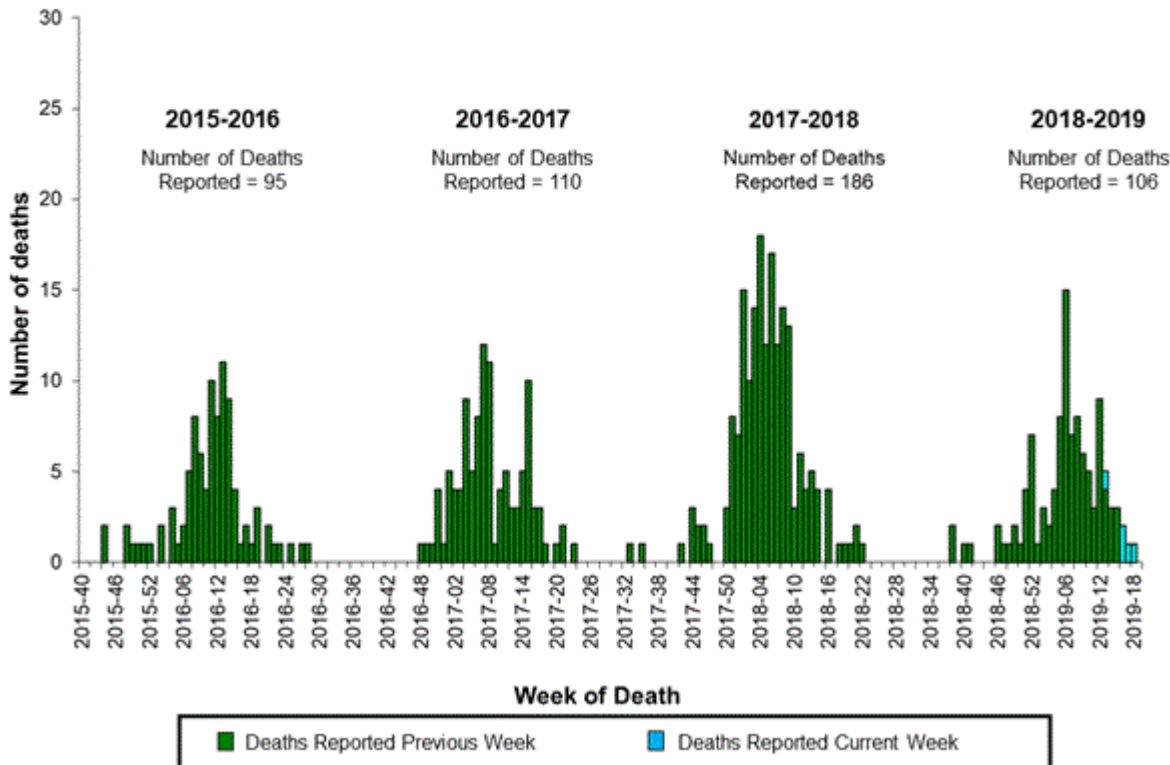
A Weekly Influenza Surveillance Report Prepared by the Influenza Division
Laboratory-Confirmed Influenza Hospitalizations

Preliminary cumulative rates as of May 04, 2019



Pediatric Influenza-related Deaths: US and MA

Number of Influenza-Associated Pediatric Deaths by Week of Death: 2015-2016 season to present



Pediatric Influenza-related Deaths in MA by Season

2018-2019	4
2017-2018	1
2016-2017	2
2015-2016	2
2014-2015	1
2013-2014	2

4th case of child dying of flu reported in Massachusetts

Posted Apr 2, 2019



By [Patrick Johnson](#) | pjohnson@repub.com

The Massachusetts Department of Public Health announced the fourth pediatric death being blamed on a case of the flu.

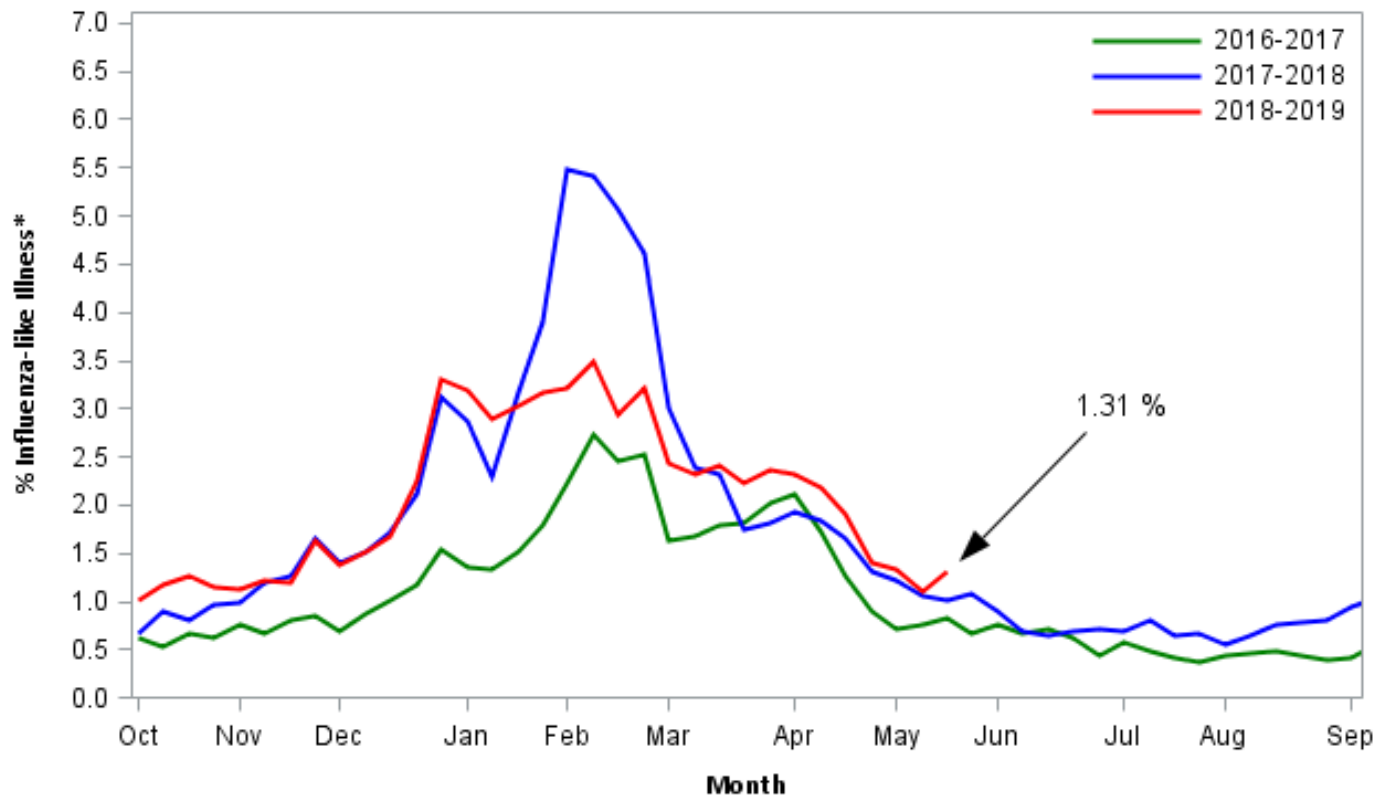
The latest death is a teenage boy from somewhere in Middlesex County. The name of the boy or the town was not disclosed.

There have been three previous fatal flu cases involving an adolescent boy in Worcester County and two girls from Middlesex County. Each occurred in January and February.

CDC 2019 data as of 5/4/2019; MA data as of 5/14/19, preliminary, subject to change

Massachusetts Influenza-like Illness (ILI) as of 5/18/2019

**Figure 1: Percentage of ILI visits reported by sentinel provider sites
September 30, 2018 – May 18, 2019**



ILI Clusters (October-September)

2018-2019	322*
2017-2018	406
2016-2017	261
2015-2016	67
2014-2015	286

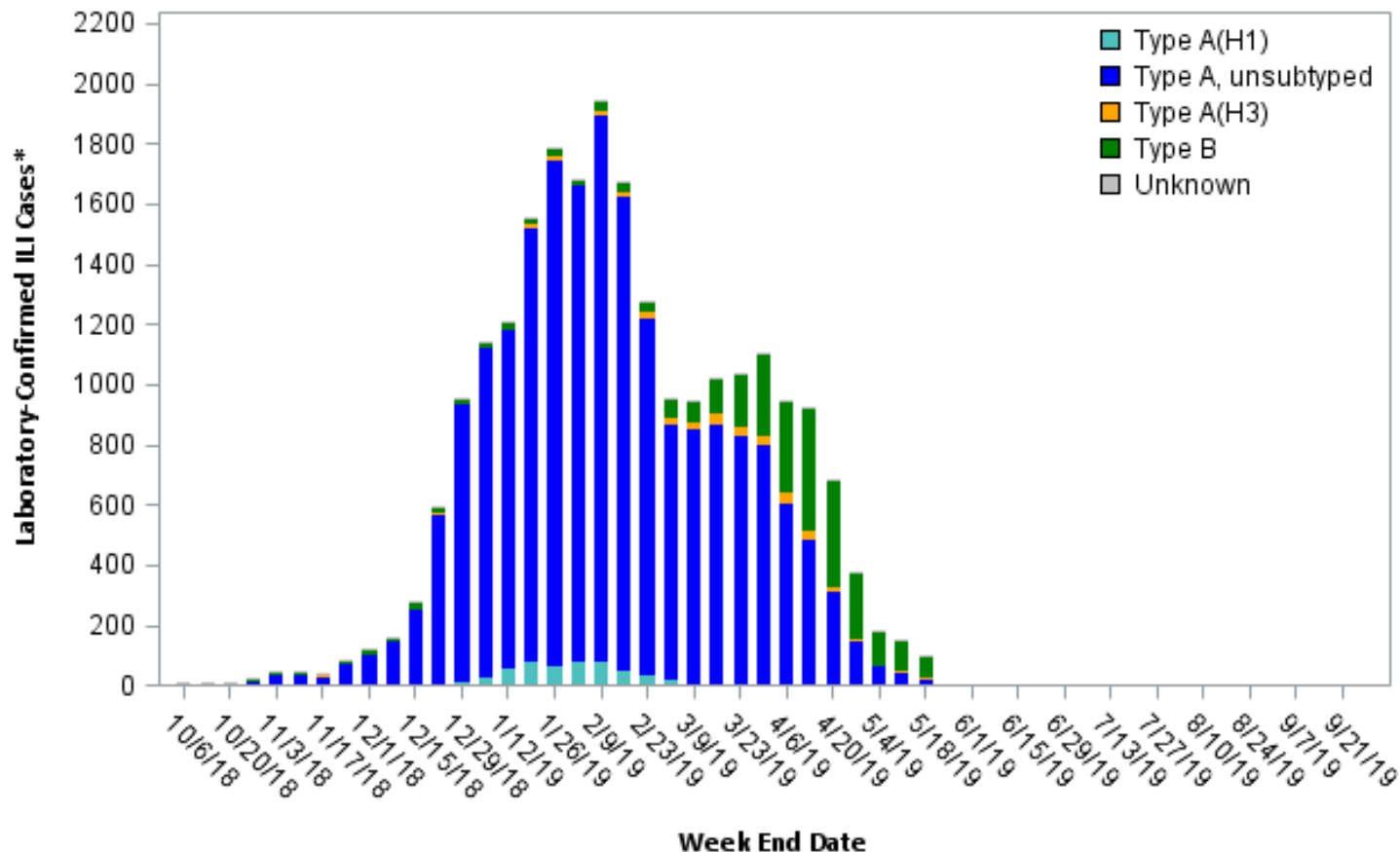
*influenza-like illness (ILI, defined by fever >100F and cough and/or sore throat), as reported by Massachusetts sentinel surveillance sites

Massachusetts Lab-Confirmed Influenza Cases

October– May

Week ending May 18, 2019 – Week 20

**Figure 4: Laboratory-confirmed Influenza Cases in Massachusetts,
September 30, 2018 – May 18, 2019**



*influenza cases confirmed via viral culture or PCR test by specimen collection date.

Subtyping Characterization Cumulative since September 30, 2018

MA Department of Public Health's Bureau of Laboratory Sciences (MDPH-BLS)

Result	Typed Strain	# isolates/ typed
A(H1N1)pdm09	A/California/07/2009-like	423 (45%)
A/H3	A/Hong Kong/4801/2014-like	169 (18%)
B	Victoria lineage	31 (3%)
B	Yamagata lineage	106 (11%)

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH (MDPH) WEEKLY INFLUENZA UPDATE

Non-Influenza Surveillance Totals 2018-2019 (as of 5/18/19)

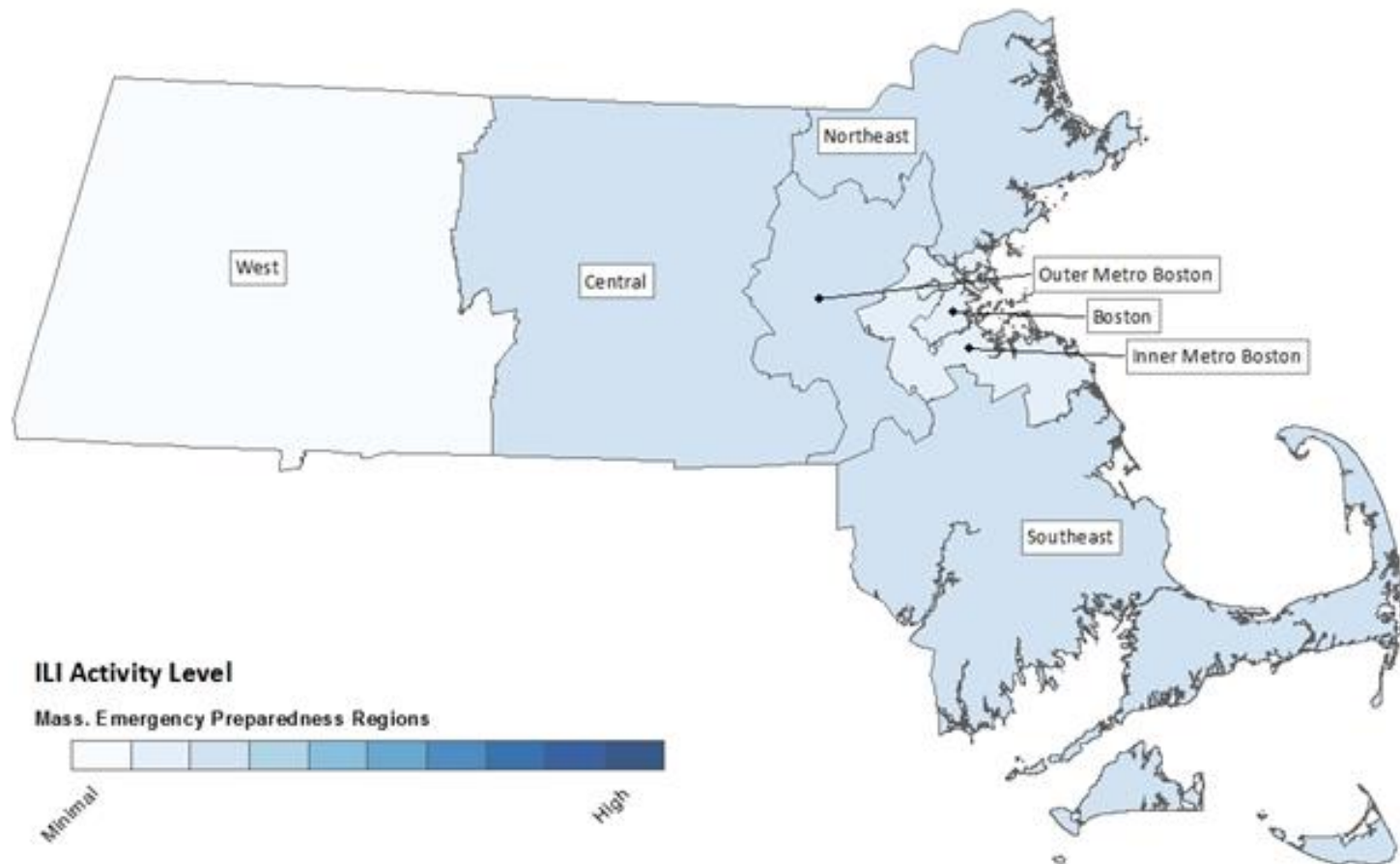
	Influenza Like Illness Surveillance MA Department of Public Health's Bureau of Laboratory Sciences (MDPH-BLS)									
	RSV	RHV/ENT	PIV	HMPV	HCoV	ADENO	Co-Infection	No. Pos (%)	Unsat	Total Tested
2017-2018	26	32	5	8	34	6	7	104 (37%)	0	280
2018-2019	7	23	5	6	31	6	2	76(34%)	2	221

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH (MDPH) WEEKLY INFLUENZA UPDATE

ILI Activity Level Reported Weekly by Massachusetts Sentinel Sites

Week ending May 4, 2018 – Week 18

Figure 3: ILI Intensity Reported Weekly by Massachusetts Sentinel Sites



Vaccine Strain Selection: 2019-2020 Influenza Season

U.S. Influenza Vaccine Composition: The World Health Organization has recommended two new vaccine viruses for the 2019-2020 influenza season.

2019-2020

**New
New**

A/Brisbane/02/2018 (H1N1)pdm09-like virus

A/Kansas/14/2017 (H3N2)-like virus

B/Colorado/06/2017-like virus (B/Victoria lineage)

B/Phuket/3073/2013-like (B/Yamagata lineage) virus (quadrivalent only)



World Health
Organization