



Massachusetts Department of Public Health Bureau of Infectious Disease and Laboratory Sciences



MDPH Influenza Update

9-27-2018

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MA Department of Public Health





Outline

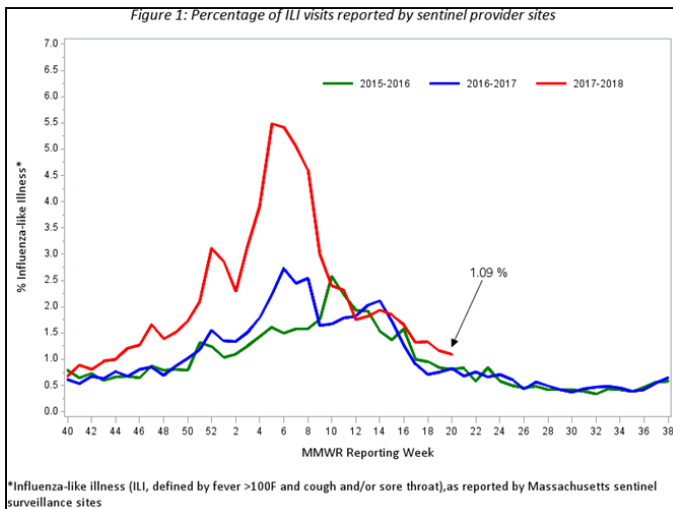
- 2017-2018 Influenza Season Summary
 - Vaccination rates among Health Care Workers
 - Place of Vaccination
- Updated Resources – CDC, NFID and MA DPH





2017-18 Influenza Season Summary National Summary

- Severe season for all age groups
- A lot of media attention
- Started building early but did not peak early (mid-February)
- Influenza A/H3N2 predominated (more flu B later in season)
- Moderate to low vaccine effectiveness
- A/H3N2 tends to impact older adults disproportionately
- **Record year for hospitalizations for all age groups**
- Resources taxed and stressed (hospital beds, EDs, provider offices, vaccines, antivirals, IV bags, rapid tests)



- One pediatric flu-related death in MA
- 180 pediatric deaths nationally (8/25/18)
 - ~80% unvaccinated



2017-18 Influenza Season Summary

National Summary

- Influenza-like-illness (ILI) activity began to increase in November, and remained elevated through the end of March.
- Influenza-like illness (ILI) was at or above the national baseline for 19 weeks, making the 2017-2018 season one of the longest in recent years.
- Influenza A(H3N2) viruses predominated overall during the 2017-2018 season. However, influenza B viruses became more commonly reported than influenza A viruses in early March 2018 through May 2018
- ILI peaked at 7.5%, the highest percentage since the 2009 flu pandemic, which peaked at 7.7%.



**Don't wait - get
your flu shot today!**

Health
Care
gov

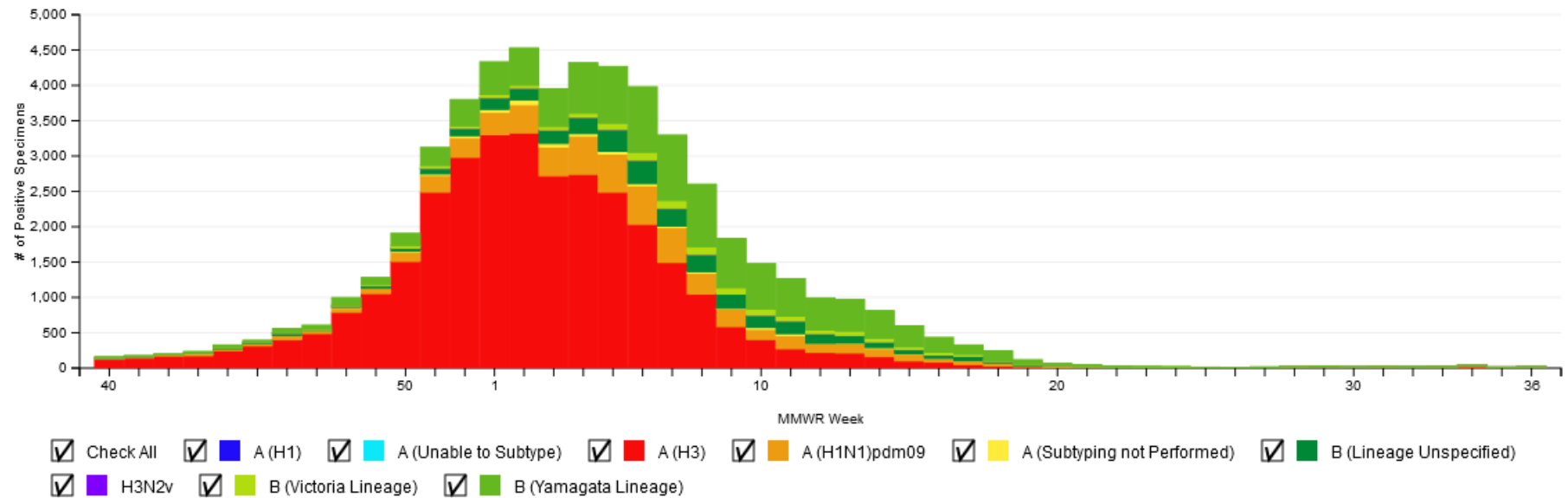


2017-18 Influenza Season Summary National Summary

FLUVIEW



Influenza Positive Tests Reported to CDC by Public Health Laboratories, National Summary,
2017-18 Season, week ending Sep 08, 2018
Reported by: U.S. WHO/NREVSS Collaborating Laboratories and ILINet



<https://gis.cdc.gov/grasp/fluview/fluportaldashboard.html>



2017-18 Influenza Season Summary

National Summary

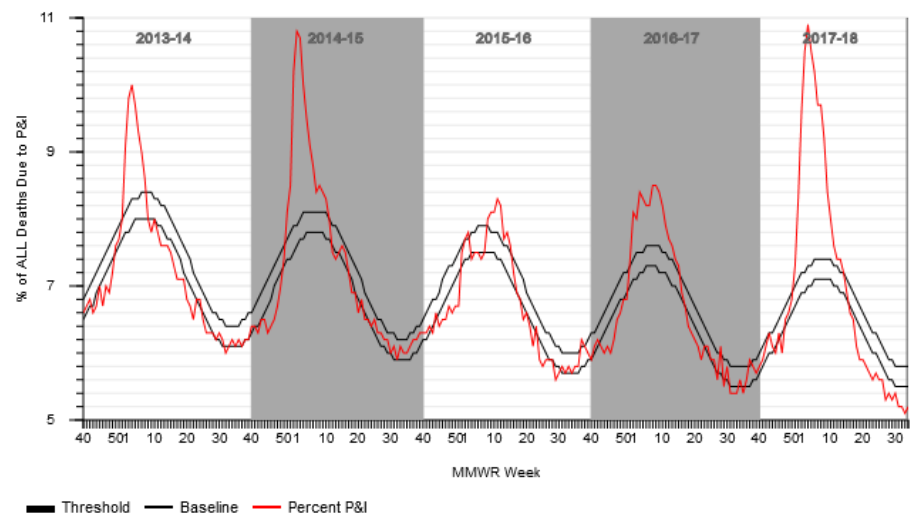
- Majority of circulating strains similar to those in the vaccine
- Vaccine Efficacy Overall: 40%
 - 25% A(H3N2)
 - 65% A(H1N1)
 - 49% B viruses
- The majority of the influenza viruses collected from the United States during the 2017-2018 flu season were characterized antigenically and genetically as being similar to the cell-grown reference viruses representing the 2017–18 Northern Hemisphere influenza vaccine viruses.



2017-18 Influenza Season Summary National Summary

- During the 2017-2018 season, the percentage of deaths attributed to pneumonia and influenza (P&I) was at or above the epidemic threshold for 16 consecutive weeks. During the past five seasons, the average number of weeks this indicator was above threshold was 11 (range of 7 to 15 weeks). Nationally, mortality attributed to P&I exceeded 10.0% for four consecutive weeks, peaking at 10.8% during the week ending January 20, 2018.

Percentage of all deaths due to pneumonia and influenza, National Summary





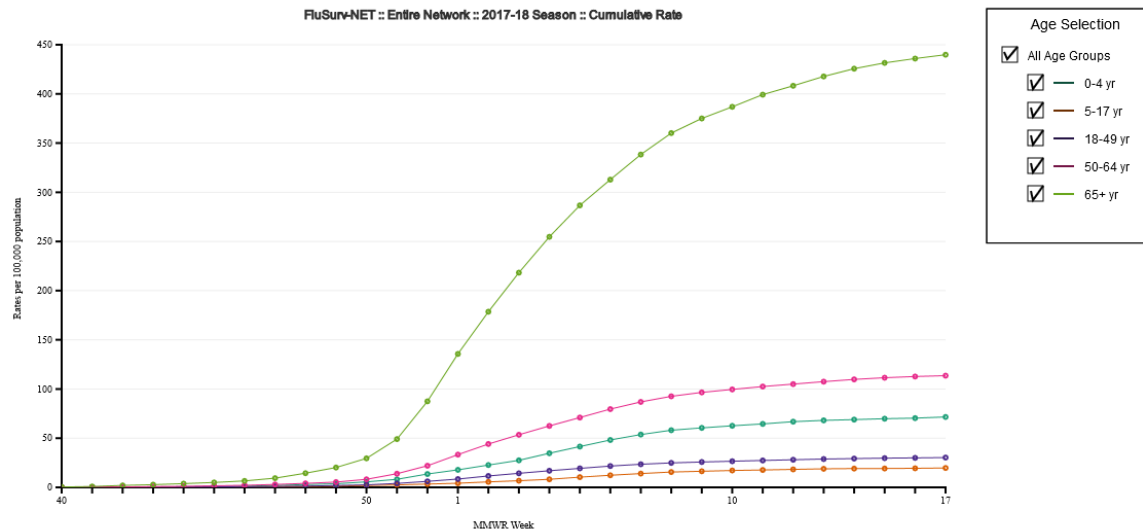
2017-18 Influenza Season Summary National Summary

FLUVIEW



Laboratory-Confirmed Influenza Hospitalizations

Preliminary cumulative rates as of Sep 08, 2018



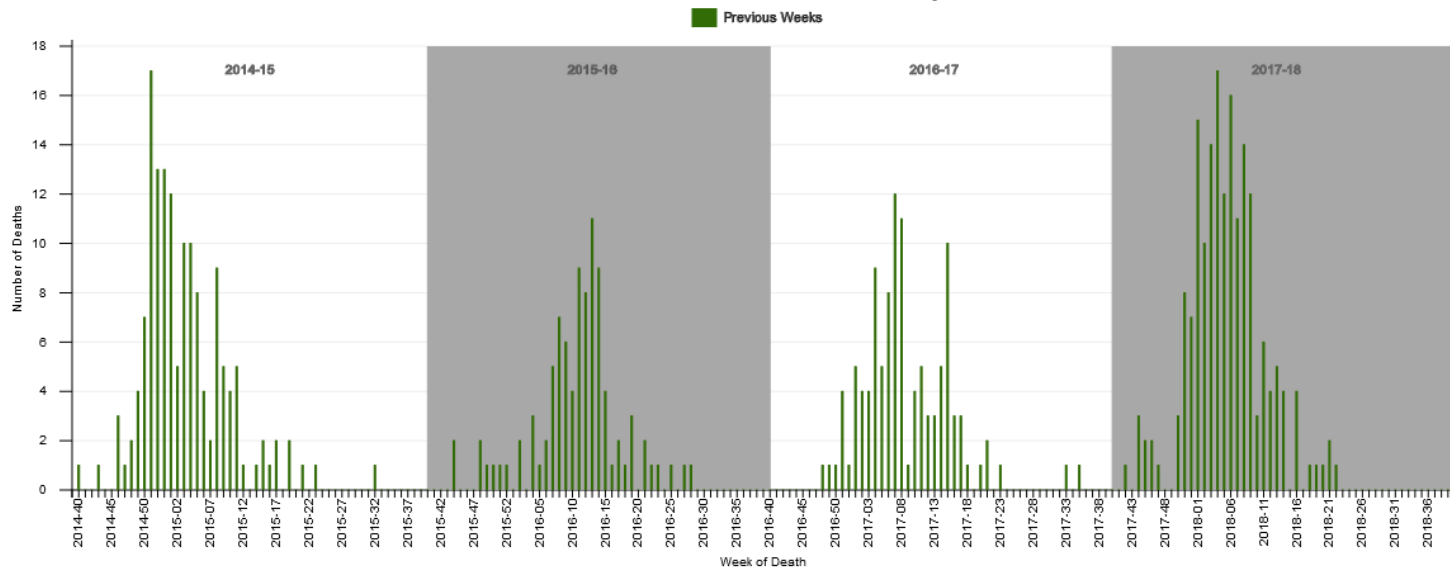
The Influenza Hospitalization Surveillance Network (FluSurv-NET) conducts population-based surveillance for laboratory-confirmed influenza-associated hospitalizations in children (persons younger than 18 years) and adults. The current network covers over 70 counties in the 10 Emerging Infections Program (EIP) states (CA, CO, CT, GA, MD, MN, NM, NY, OR, and TN) and three additional states (MI, OH, and UT). The network represents approximately 9% of US population (~27 million people). Cases are identified by reviewing hospital, laboratory, and admission databases and infection control logs for patients hospitalized during the influenza season with a documented positive influenza test (i.e., viral culture, direct/indirect fluorescent antibody assay (DFA/IFA), rapid influenza diagnostic test (RIDT), or molecular assays including reverse transcription-polymerase chain reaction (RT-PCR)). Data gathered are used to estimate age-specific hospitalization rates on a weekly basis, and describe characteristics of persons hospitalized with associated influenza illness. Laboratory confirmation is dependent on clinician-ordered influenza testing. Therefore, the unadjusted rates provided are likely to be underestimated as influenza-associated hospitalizations can be missed if influenza is not suspected and tested for. FluSurv-NET hospitalization data are preliminary and subject to change as more data become available. All incidence rates are unadjusted. Please use the following citation when referencing these data: "FluView: Influenza Hospitalization Surveillance Network, Centers for Disease Control and Prevention. WEBSITE. Accessed on DATE".



2017-18 Influenza Season Summary National Summary



Number of Influenza-Associated Pediatric Deaths by Week of Death

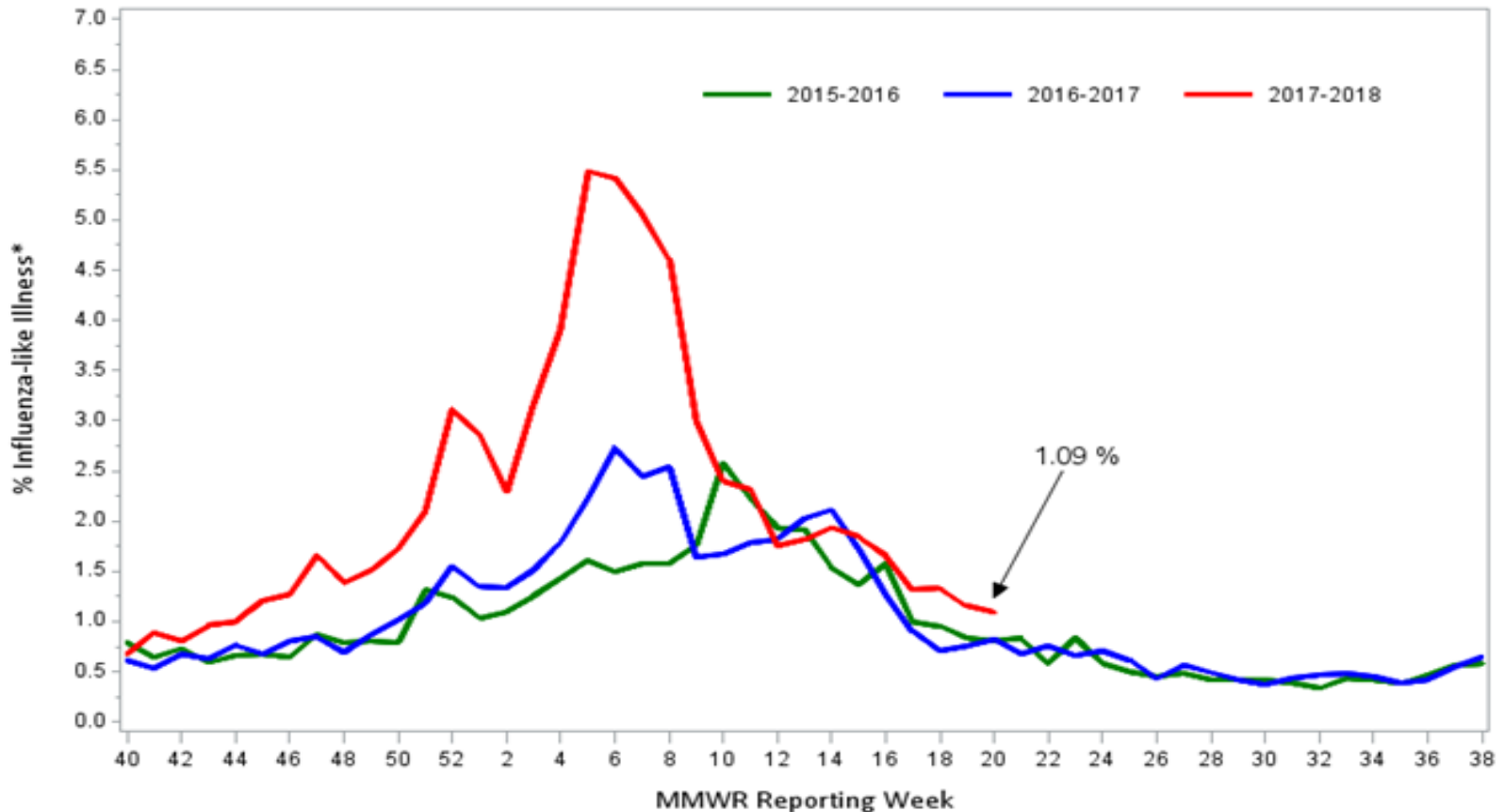


Seasons	Total Deaths
2014-2015	148
2015-2016	93
2016-2017	110
2017-2018	180



Massachusetts Influenza-Like Illness Activity 2017-18

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

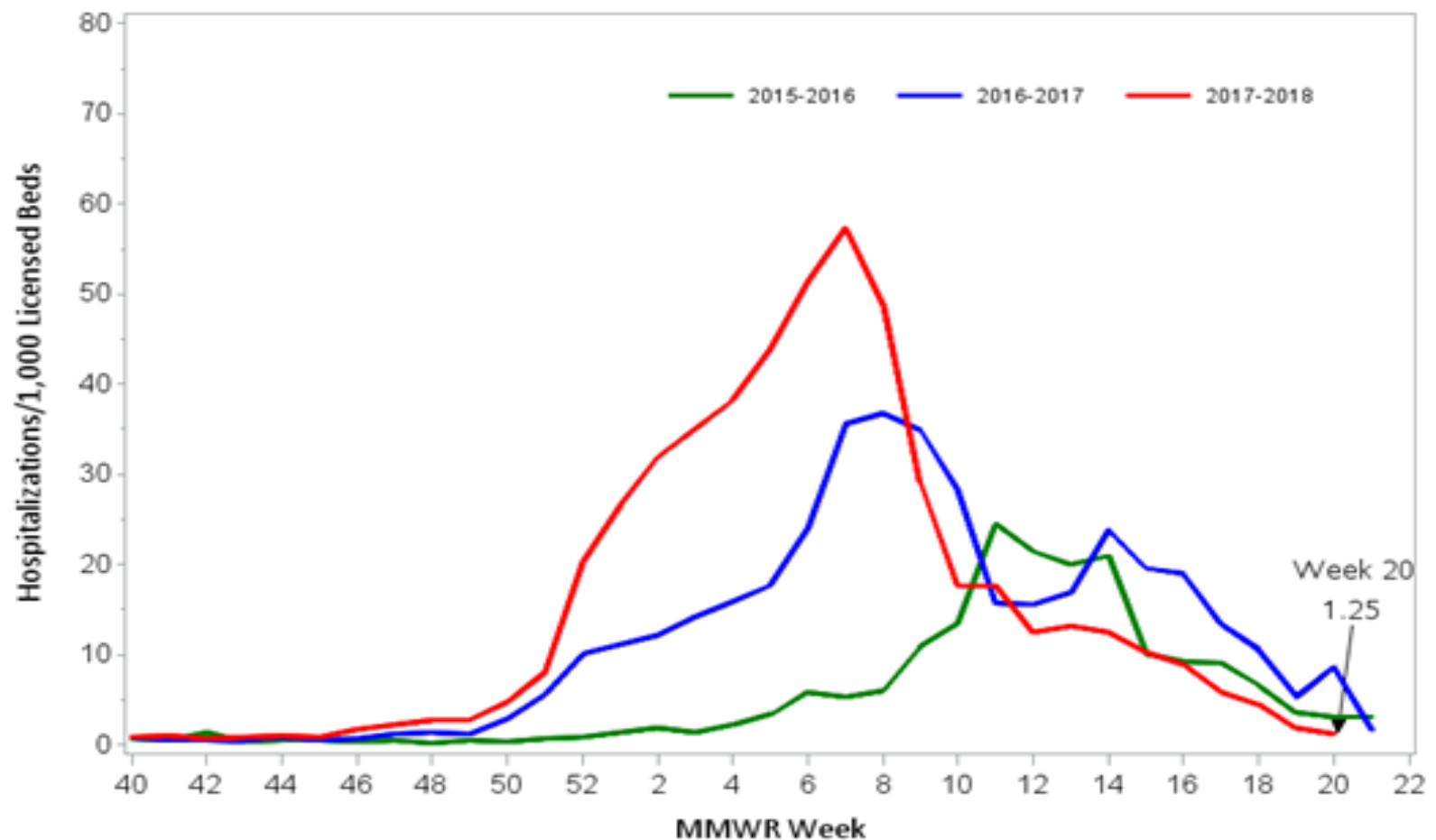


*Influenza-like illness (ILI, defined by fever >100F and cough and/or sore throat), as reported by Massachusetts sentinel surveillance sites



Massachusetts Influenza Activity 2017-18 Laboratory-confirmed Hospitalizations

Figure 4: Massachusetts laboratory-confirmed influenza hospitalizations





MA Healthcare Provider Influenza Vaccination Rates

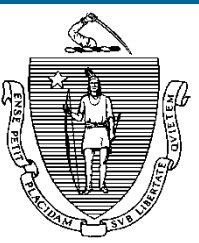
Annual influenza vaccination is the best method of preventing influenza and potentially serious complications. The current Healthy People 2020 goal for influenza vaccination among healthcare personnel is 90%.

The table below outlines influenza vaccination rates for different groups of healthcare workers. Vaccination rates in acute care hospitals, both nationally and in MA have surpassed the Healthy People 2020 goal and should be congratulated. However, rates for healthcare workers in all other groups are much lower.

MA - Healthcare Personnel Setting	MA 2015-16 ¹	MA 2016-17 ¹	MA 2017-18 ¹
Nursing Homes	73%	75%	71%
Rest Homes	76%	75%	71%
Adult Day Health	63%	60%	63%
Acute Care Hospitals	92%	94%	93%

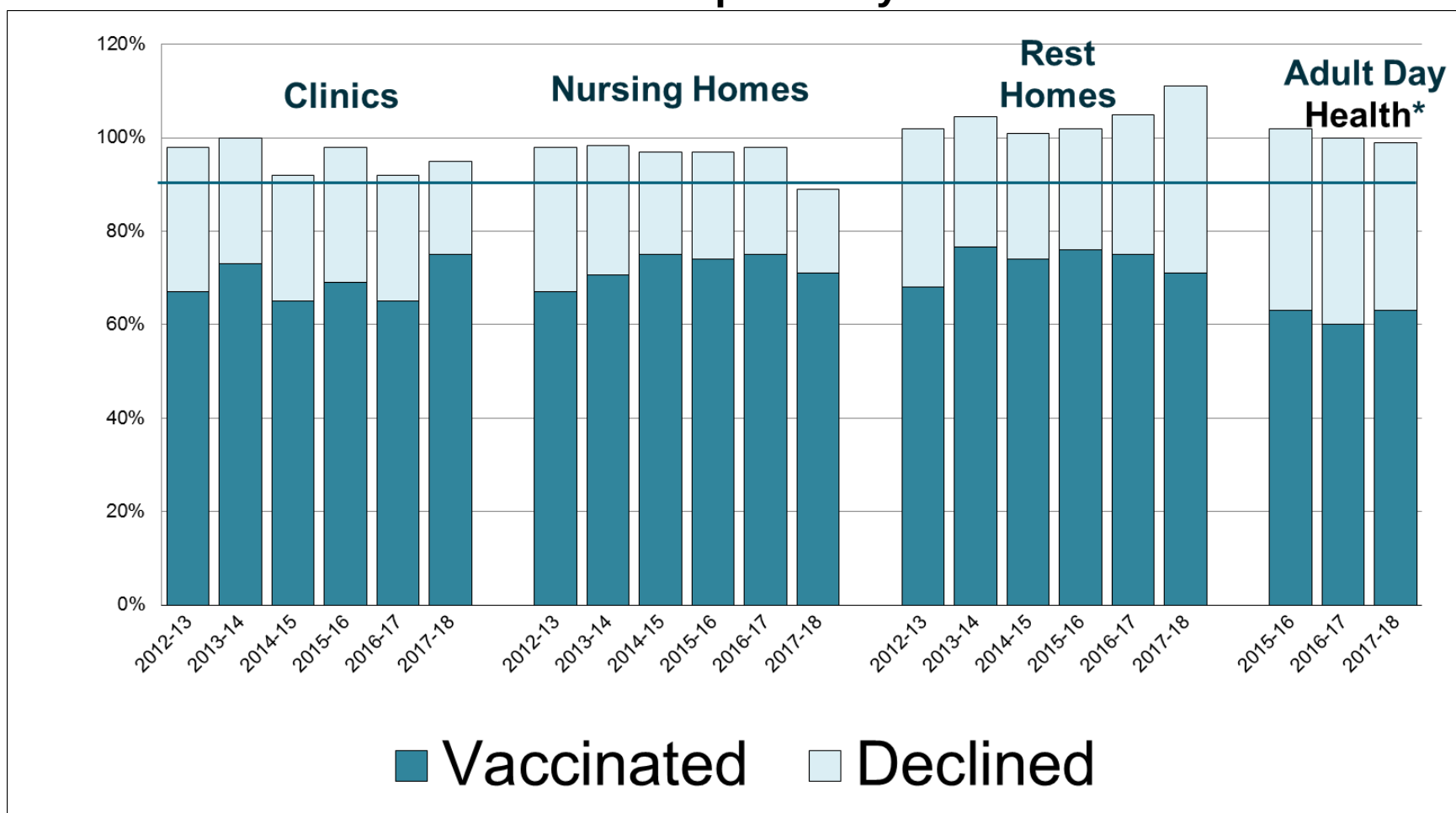
Source: [Influenza Vaccination of Health Care Personnel in MA Nursing Homes and Acute Care Hospitals](#)

Mean Percent HCP Vaccinated Against Influenza



Trends Over Time: MA Clinics, Nursing Homes, Rest Homes and Adult Day Health Programs

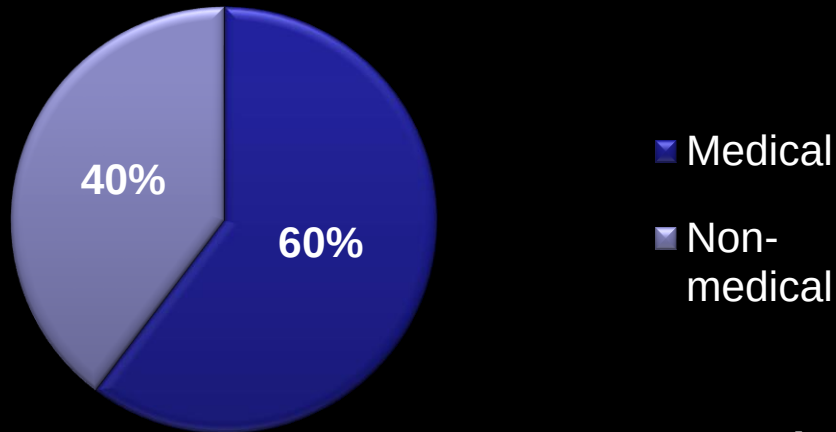
Mean Percent of HCP Influenza Vaccinations and Declinations Reported by



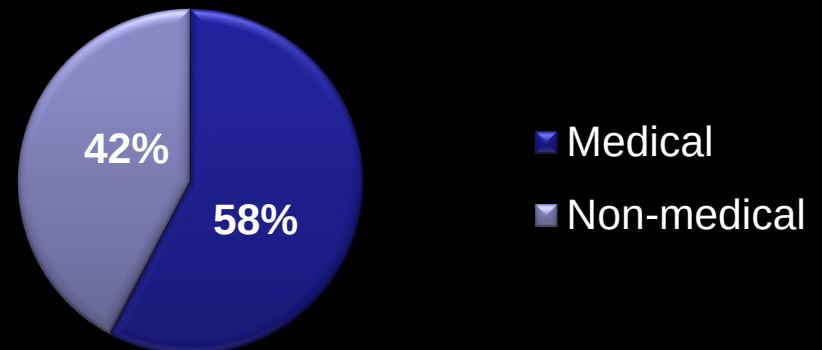


Place of Vaccination

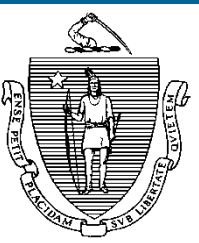
**Place of Vaccination in +18yrs,
Massachusetts**



Place of Vaccination in +18yrs, US

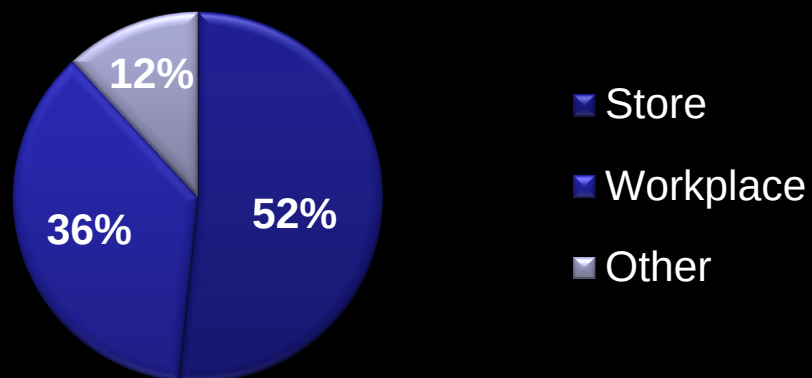


Reported Place of Influenza Vaccination by State and Area, Children 6 months through 17 years, United States,[§] National Immunization Survey-Flu (NIS-Flu), 2014-15 Influenza Season^{||}

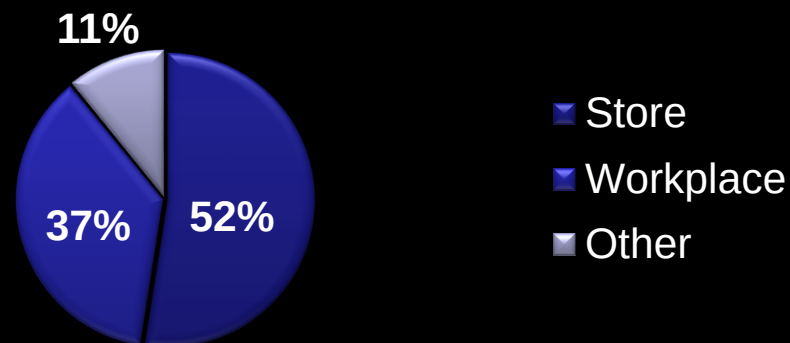


Place of Vaccination

Non-medical Setting for Vaccination +18yrs, Massachusetts



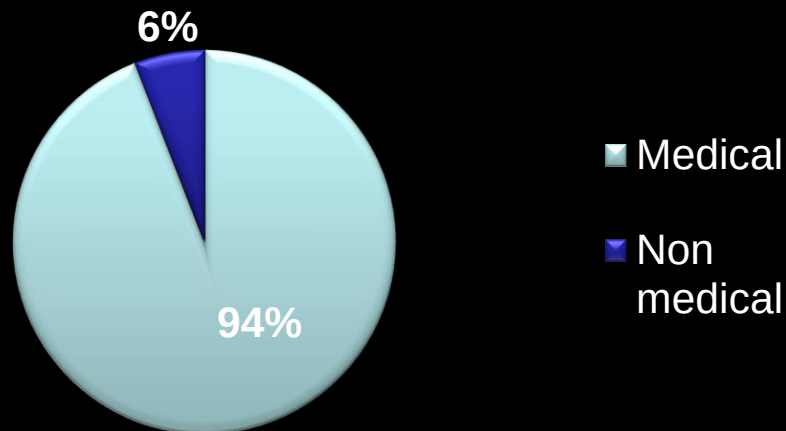
Non-medical Setting for Vaccination +18yrs, US



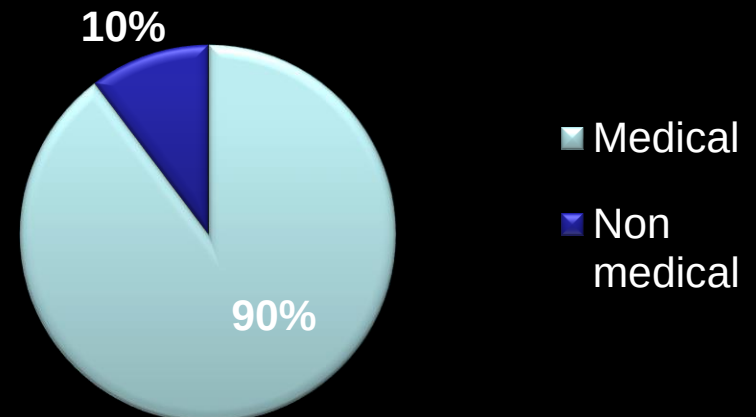


Place of Vaccination

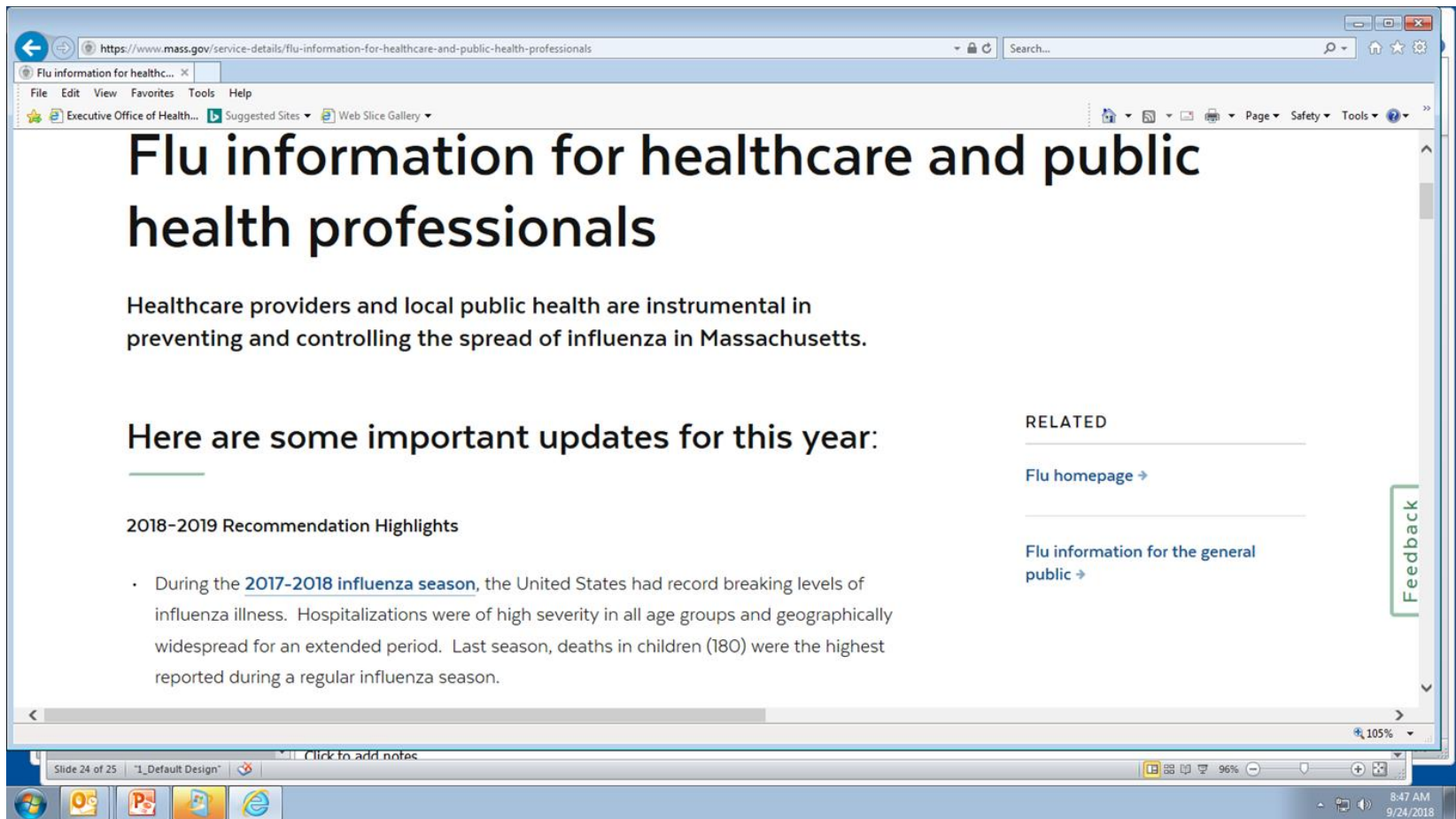
Place of Vaccination in 6mo to 17yrs, Massachusetts



Place of Vaccination in 6mo to 17yrs, US



mass.gov/flu



Massachusetts Department of Public Health

Massachusetts Department of Public Health (MDPH)
Division of Epidemiology and Immunization

Long-Term Care Facilities (LTCF): Control of Influenza and Pneumococcal Disease 2018 – 2019

Part 1: Influenza Prevention and Control	Pg	Part 2: Influenza and Pneumococcal Vaccines	Pg
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Key Recommendations

LTCF Residents

- Everyone aged 6 months and older should receive flu vaccine every year and vaccination should be offered as soon as it is available.
- No preference for inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV)¹.
- No preference for adjuvanted vaccine or high dose influenza vaccine.
- Vaccination should not be delayed to procure a specific vaccine formulation.





MDPH Immunization Program Contact Information



Immunization Program Main Number

For questions about immunization recommendations, disease reporting, etc.

- **Phone:** 617-983-6800
- **Fax:** 617-983-6840
- **Website:** www.mass.gov/dph/imm

MIIS Help Desk

- **Phone:** 617-983-4335
- **Fax:** 617-983-4301
- **Email:** miishelpdesk@state.ma.us
- **Websites:** www.contactmiis.info | www.mass.gov/dph/miis

MDPH Vaccine Unit

- **Phone:** 617-983-6828
- **Fax:** 617-983-6924
- **Email:** dph-vaccine-management@state.ma.us
- **Website:** www.mass.gov/dph/imm (click on Vaccine Management)