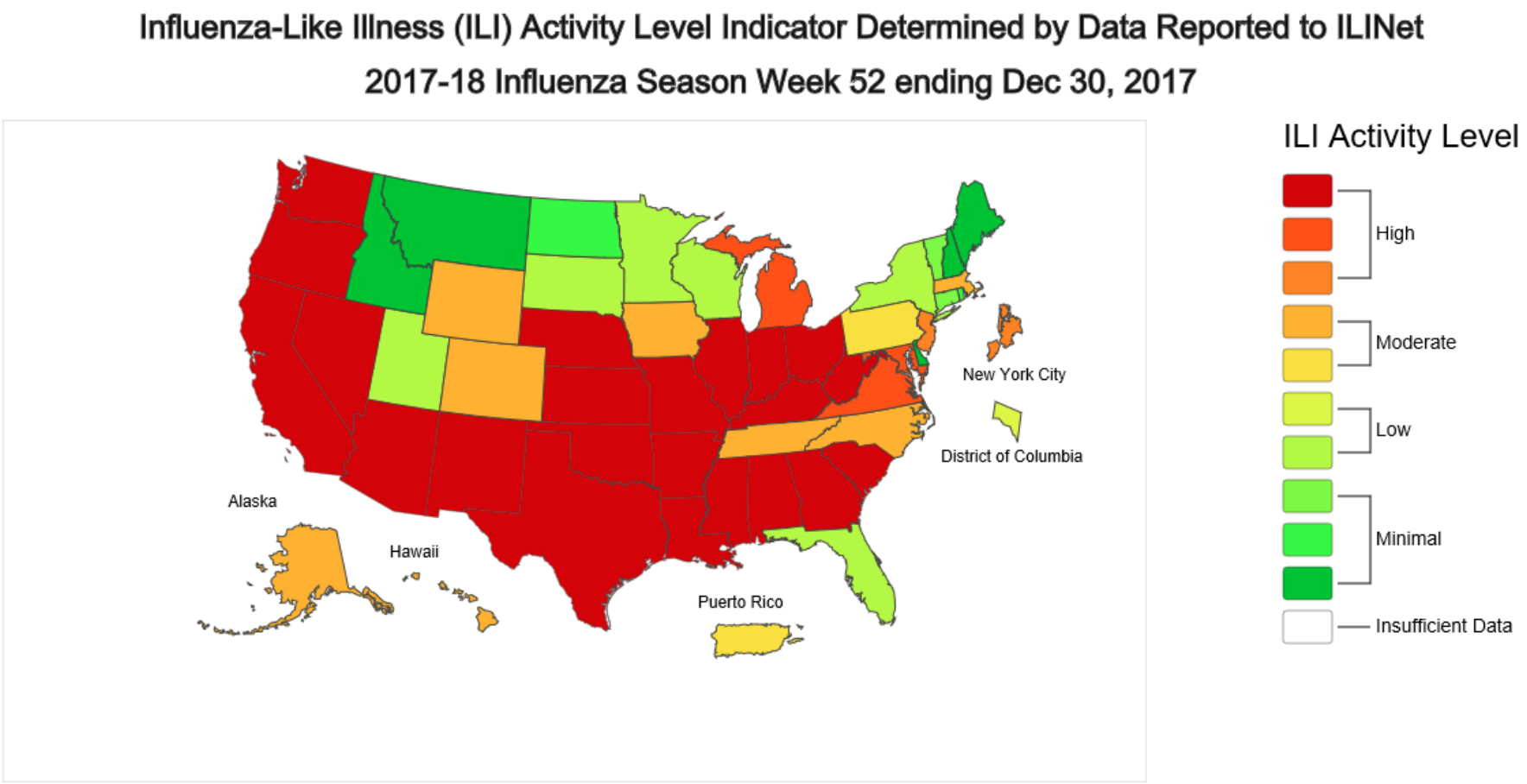
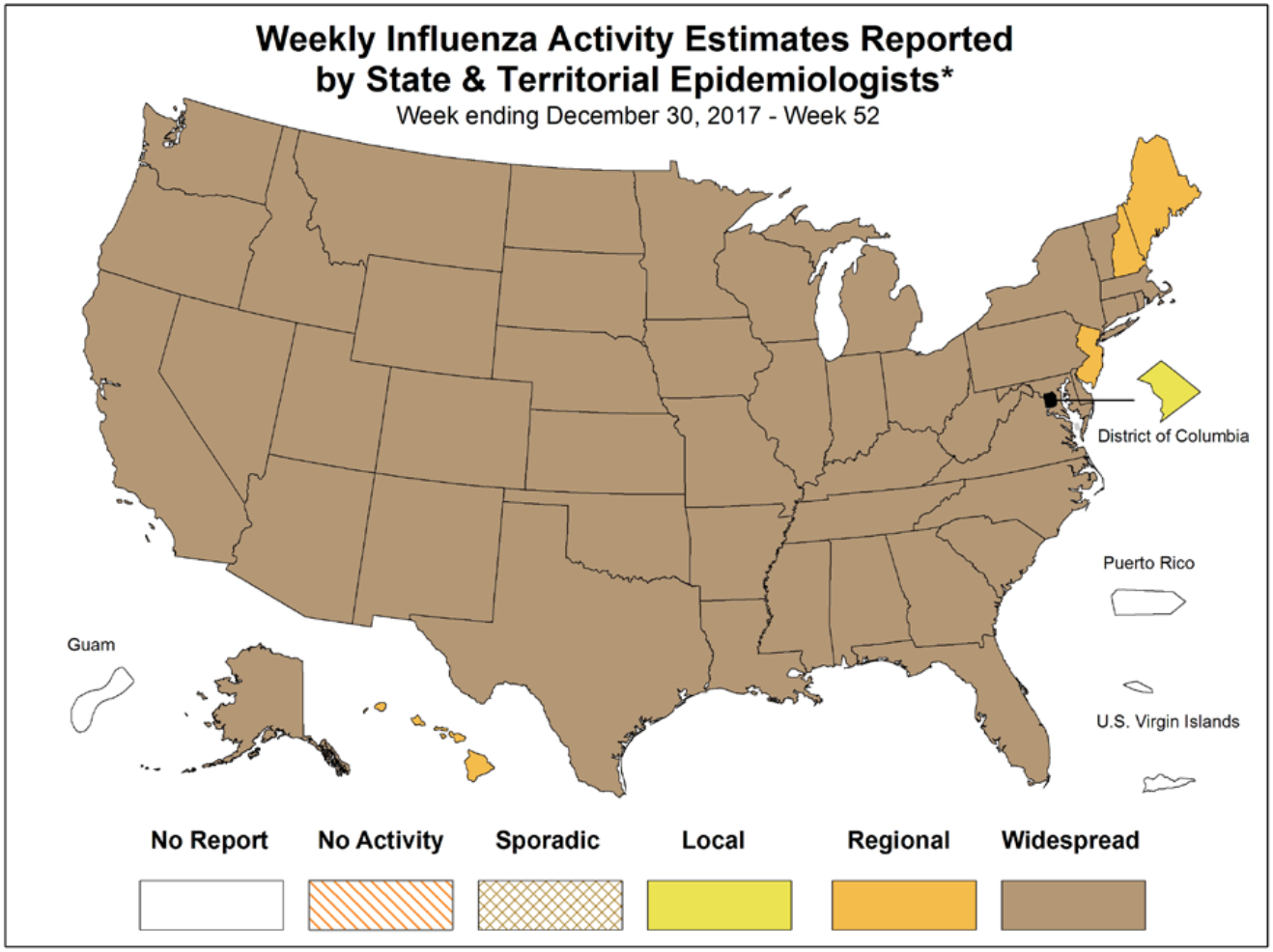
MAIC Meeting 1/9/18
Influenza Season 2017-2018

- Quick Update
  - National - CDC Health Advisory
  - Local
- Influenza Vaccine Effectiveness
- Vaccine Protection Against Pediatric Deaths
- Key Findings - Flu Vaccination Coverage in the US

Influenza in the US 2017-18



Influenza in the US 2017-18



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

Influenza Season 2017-2018

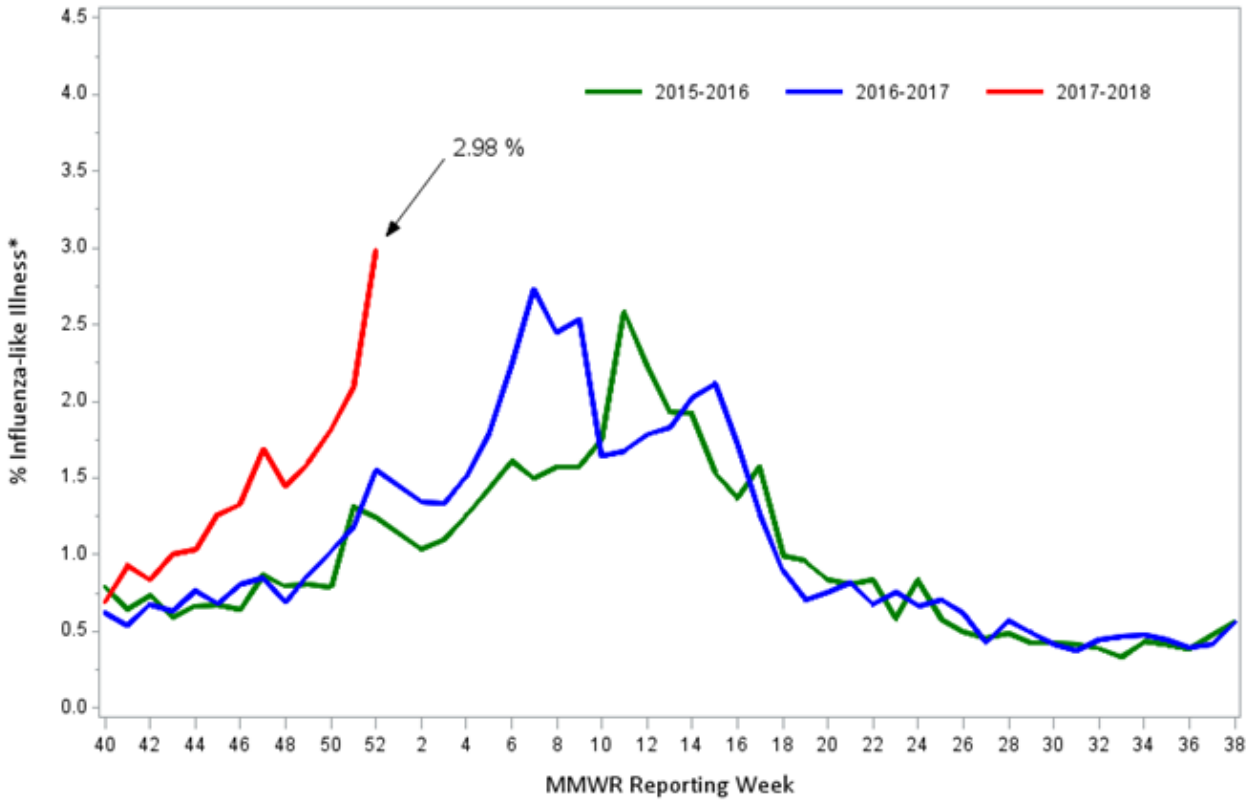
- Influenza A (H3) has been the most frequently identified influenza virus subtype reported by US public health laboratories.
- All 10 surveillance regions in the US report elevated levels of outpatient ILI.
- There have been 13 pediatric deaths reported so far this season.

Influenza Season 2017-2018
CDC Health Advisory

- HAN 409: Seasonal Influenza A(H3N2) Activity and Antiviral Treatment of Patients with Influenza (12/27/17)
  - influenza activity has increased significantly and influenza A(H3N2) viruses predominating so far this season
  - In the past, A(H3N2) virus-predominant influenza seasons have been associated with more hospitalizations and deaths
  - Influenza vaccine effectiveness (VE) in general has been lower against A(H3N2) viruses than against influenza A(H1N1)pdm09 or influenza B viruses.
  - Last season, VE against circulating influenza A(H3N2) viruses was estimated to be 32% in the U.S.
  - https://emergency.cdc.gov/han/han00409.asp

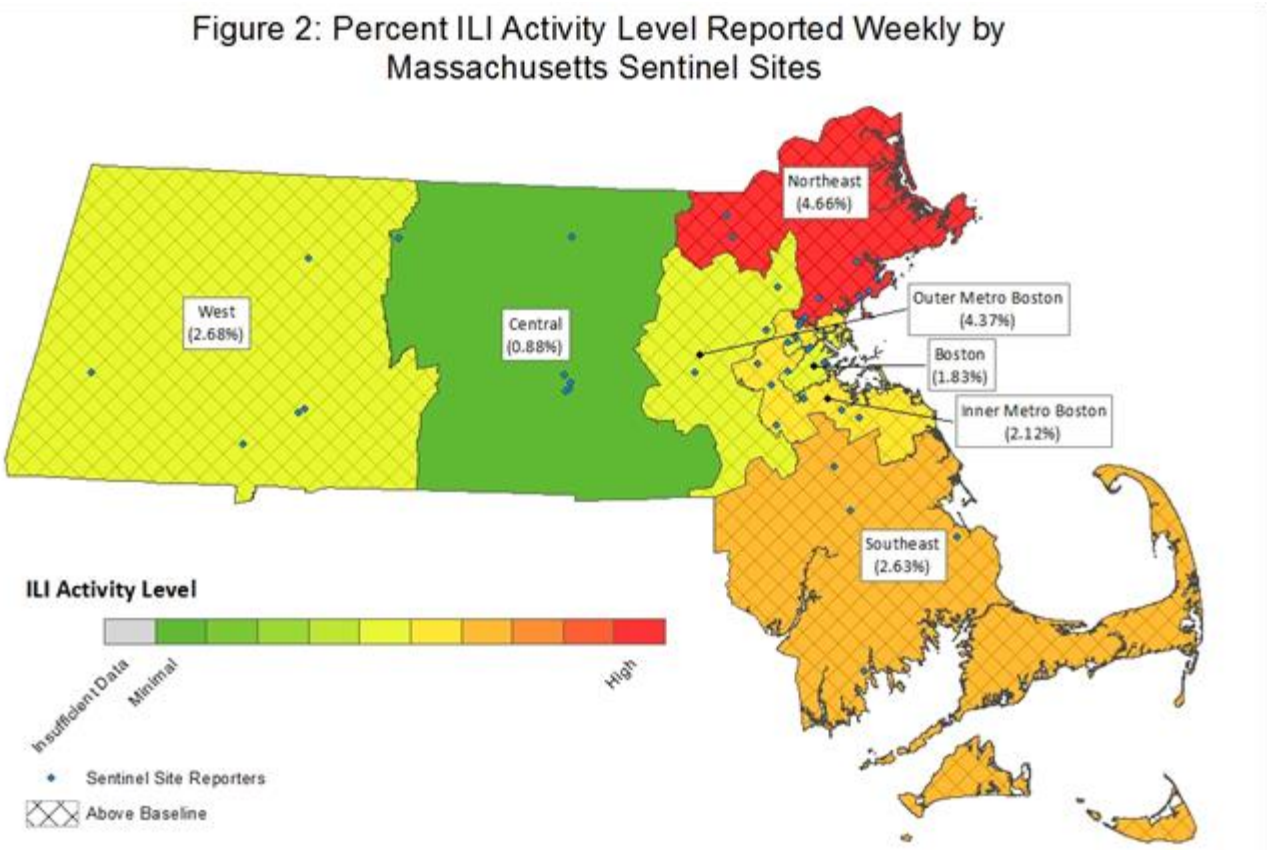
Massachusetts - Influenza Activity 2017-18

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



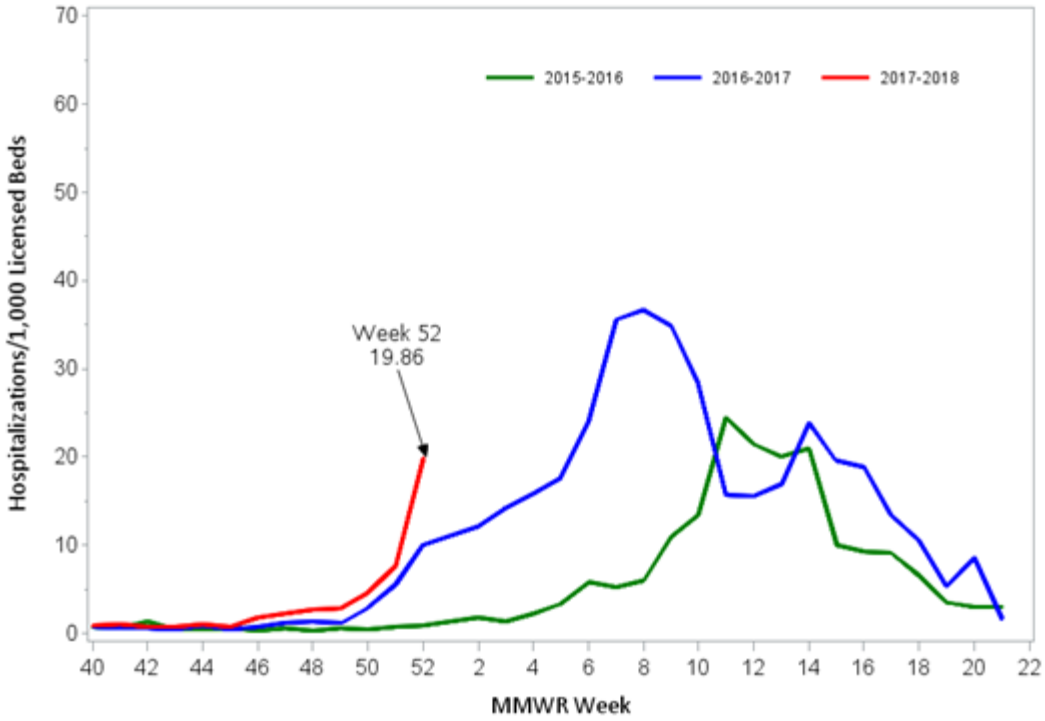
*Influenza-like illness (ILI, defined by fever >100F and cough and/or sore throat),as reported by Massachusetts sentinel surveillance sites

Massachusetts - Influenza Activity 2017-18



Massachusetts - Influenza Activity 2017-18 Hospitalizations

Figure 4: Massachusetts laboratory-confirmed influenza hospitalizations



MA Flu Vaccination Rates

	MA 2015-16	MA 2016-17	US 2016-17
Everyone 6 mos+	50%	50%	47%
Children 6 mos – 17 yrs	75%	*72%	59%
○ Children 6 mos – 4 yrs	85%	82%	70%
○ Children 5 – 12 yrs	79%	71%*	60%
○ Adolescents 13 – 17 yrs	63%	*65%	49%
Adults 18 +	44%	45%	43%
○ Adults 18 – 64 y/o	40%	41%	38%
○ Adults HR 18 – 64 y/o	48%	49%	46%
○ Adults 50 – 64 y/o	46%	47%	45%
○ Adults 65+	60%	59%	65%

*Statistically significant

Source: 2015-16 and 2016-17 National Immunization Survey (NIS) – Flu, and BRFSS

Influenza Vaccine Effectiveness (VE) 2017- 2018

- The 10% vaccine effectiveness (VE) figure reported in the news from Australia estimated the vaccine's benefit against one flu virus (the H3N2 virus).
- In the US last season, overall vaccine effectiveness against all circulating flu viruses was 39%, and VE was only a bit lower (32%) against H3N2 viruses.
- This season's flu vaccine includes the same H3N2 vaccine component as last season.,
- CDC believes U.S. VE estimates from last season are likely to be a better predictor of the flu vaccine benefits to expect this season against circulating H3N2 viruses in the United States.

https://www.cdc.gov/flu/about/season/flu-season-2017-2018.htm

Flu vaccination significantly reduced a child's risk of dying from influenza

- A 2017 study **Influenza Vaccine Effectiveness Against Pediatric Deaths: 2010–2014** was the first of its kind to show that flu vaccination can significantly reduce a child's risk of dying from influenza.
- Flu vaccination reduced the risk of flu-associated death by half (51 percent) among children with underlying high-risk medical conditions and by nearly two-thirds (65 percent) among healthy children.

http://pediatrics.aappublications.org/content/early/2017/03/30/peds.2016-4244

National Early-Season Flu Vaccination Coverage, United States, November 2017 – Key Findings

- Approximately two of every five persons six months and older (39%) in the United States had received an influenza vaccination by early November 2017

- Early-season flu vaccination coverage showed no racial/ethnic differences except for Non-Hispanic children of other or multiple races (43%) had higher coverage than non-Hispanic black children (35%).

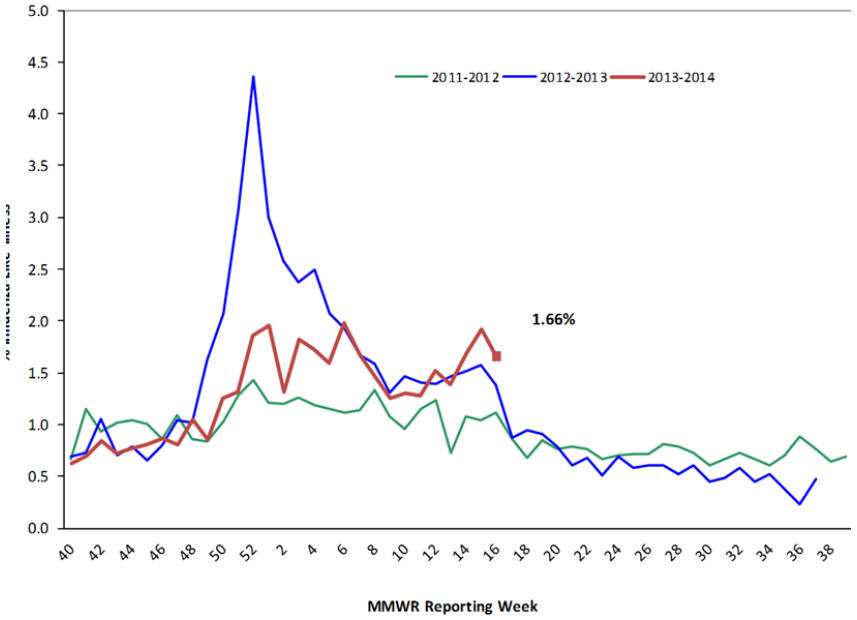
https://www.cdc.gov/flu/fluvaxview/index.htm

National Early-Season Flu Vaccination Coverage, United States, November 2017 Con't

- Among health care personnel (HCP) early season coverage was 68%, similar to last season at this time.

- As of early November 2017, influenza vaccination coverage among pregnant women before and during pregnancy was 36%.

Will the 2017-2018 influenza season mimic 2012-2013?



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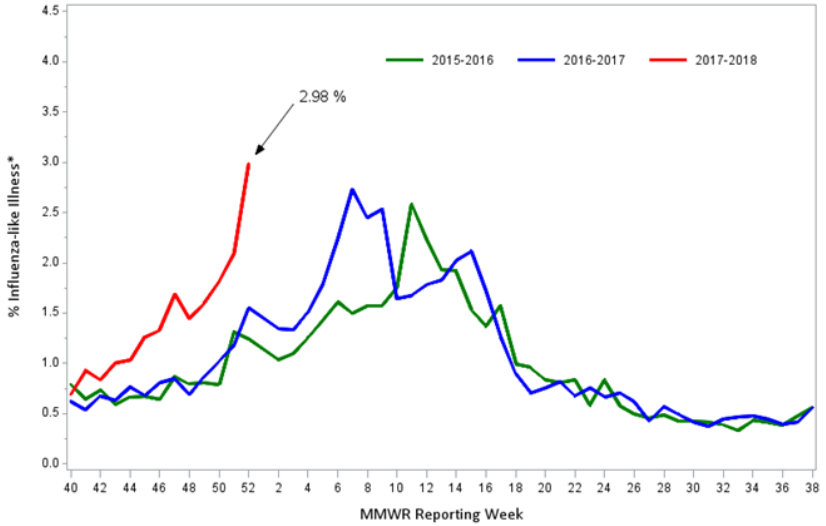

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