Maricopa County Department of Public Health
WEEKLY INFLUENZA UPDATE
2017-2018 Season (10/01/2017-09/30/2018)

May 4, 2018 | **2017-2018 Week 17(04/22/2018 - 04/28/2018)**

The Influenza Season is defined by MMWR surveillance weeks, beginning week 40 (October) and continues through week 39 (the following September).

Influenza Surveillance Indicators

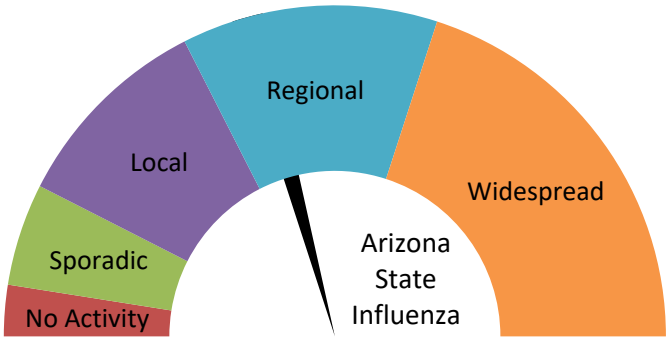
Lab Confirmed Cases
Hospital Emergency Visits
Outpatient Clinics
School Absenteeism
Flu Near You

One previously reported pediatric death has been retracted due to a laboratory result that was later determined to be a false positive from an out of state clinical laboratory

www.FluNearYou.org

The first official day of the 2017-2018 Influenza Season was October 1, 2017 and the surveillance season will continue through September 30, 2018. Maricopa County identified its first locally-acquired influenza case of the 2017-2018 season in week 41.

- Since October 1, 2017 **19,399** cases have been laboratory-confirmed
- All ILI (Influenza like Illness) indicators showed a slight increase this week.
- Maricopa County reported **2 Pediatric Influenza Death this season, PCR positive for A/H3 & B/Victoria**

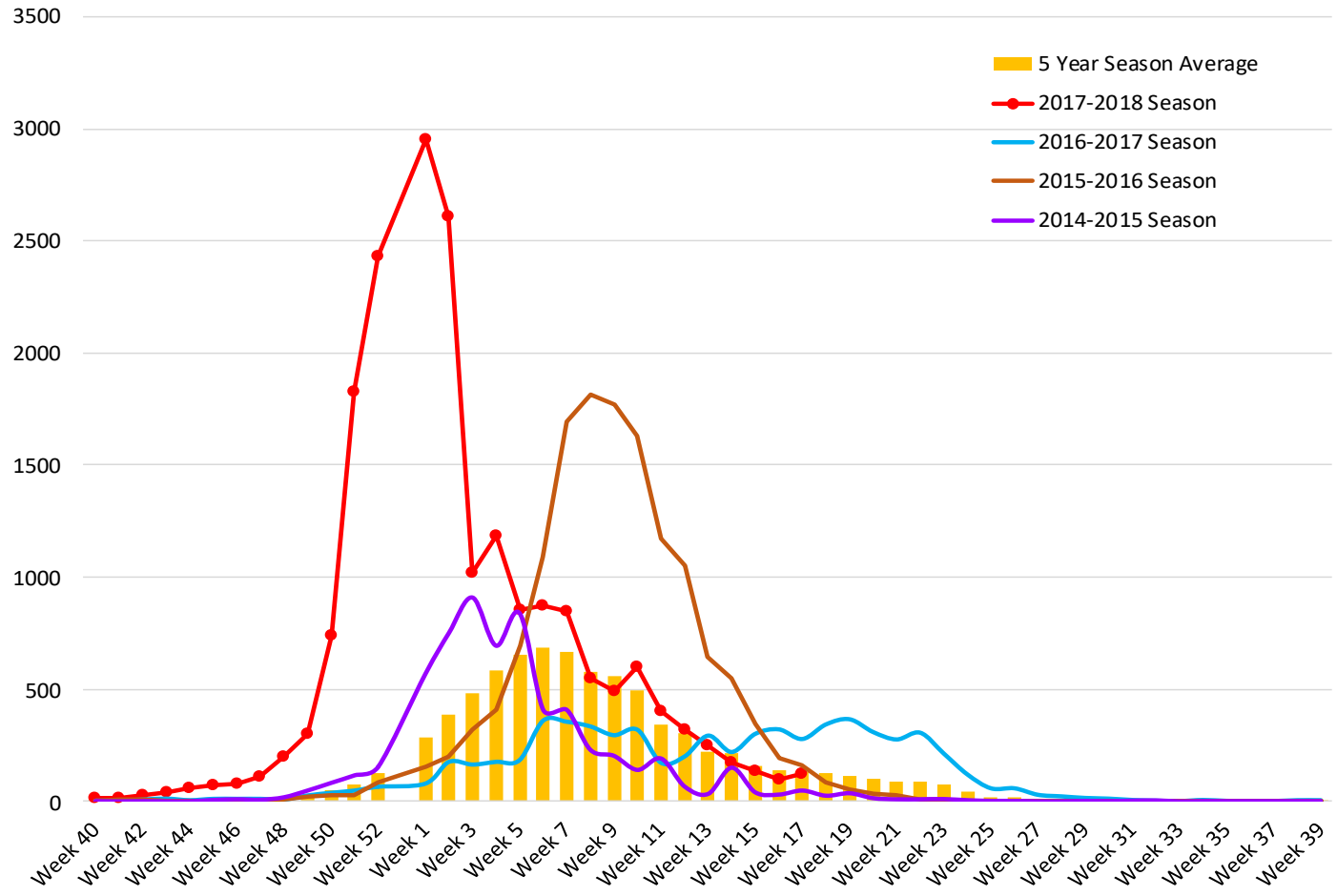


Influenza Activity	2017-2018	2016-2017	2015-2016	2014-2015
First Confirmed Case (no travel)	10/16/2017	10/3/2016	10/4/2015	10/3/2014
Weeks w/Widespread Activity (AZ)	Weeks 50 - 10	Week 6 - 9	Week 5 - 14	Week 1 - 6
Weeks w/Hospital ILI above Regional Threshold	Weeks 41, 43, 45 - 15, 17	Week 49, 52 & 1-23	Week 51 - 16	Week 50 - 11
Weeks w/Outpatient visits above Threshold	Week 47 - 16, 17	Weeks 47, 48, 50-52, 1-3, 5-10, 14 & 17-21	Weeks 45-52, 1-21, 23, 35 & 36	Weeks 48, 50-52, 1-10 & 12-14
Peak Week	Week 1 (12/31-1/6/2018)	Week 6 (2/5-2-11/2016)	Week 8 (2/21-2/27/2016)	Week 3 (1/18-1/24/2015)
Pediatric Deaths	2	1	3	1
Total Cases	19,399	6,633	14,353	6,601

Individuals with Laboratory Confirmed Influenza

Table 1. Laboratory-Confirmed Influenza Cases Compared to Last Week and Last Season, Maricopa County	Cumulative Season Total	Current Week Total
2017-2018 Season	19399	125
2016-2017 Season	4476	278
5 Season Average (2012-2017)	1177	129
% increase compared to 2016-2017 Season	333%	-55%
% increase compared to 5 season average	1548%	-3%
% increase compared to last week	99%	29%

Trends of influenza laboratory test results compared to the previous 3 seasons. The current season is in **red**.

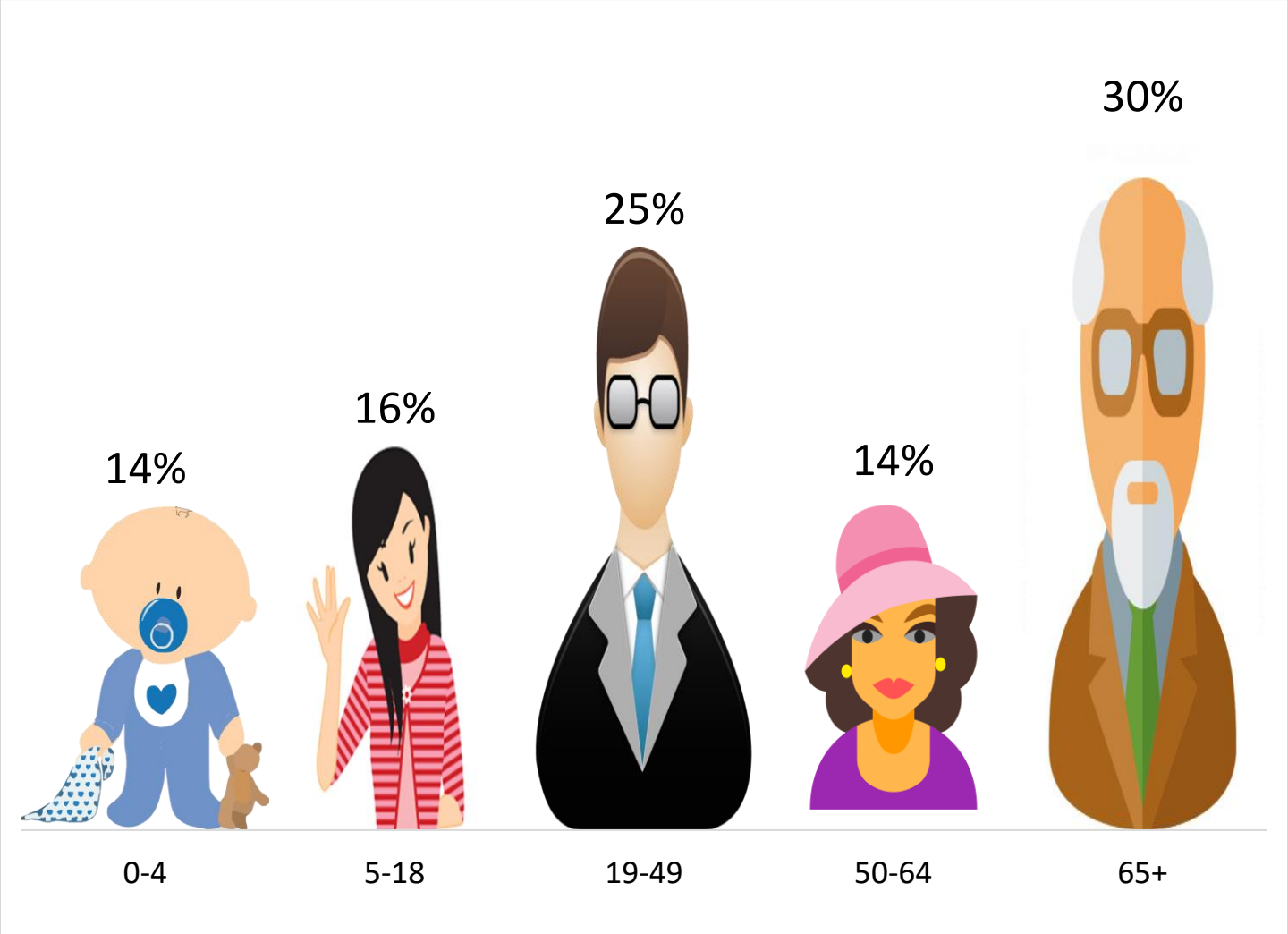


Types of Influenza in Maricopa County

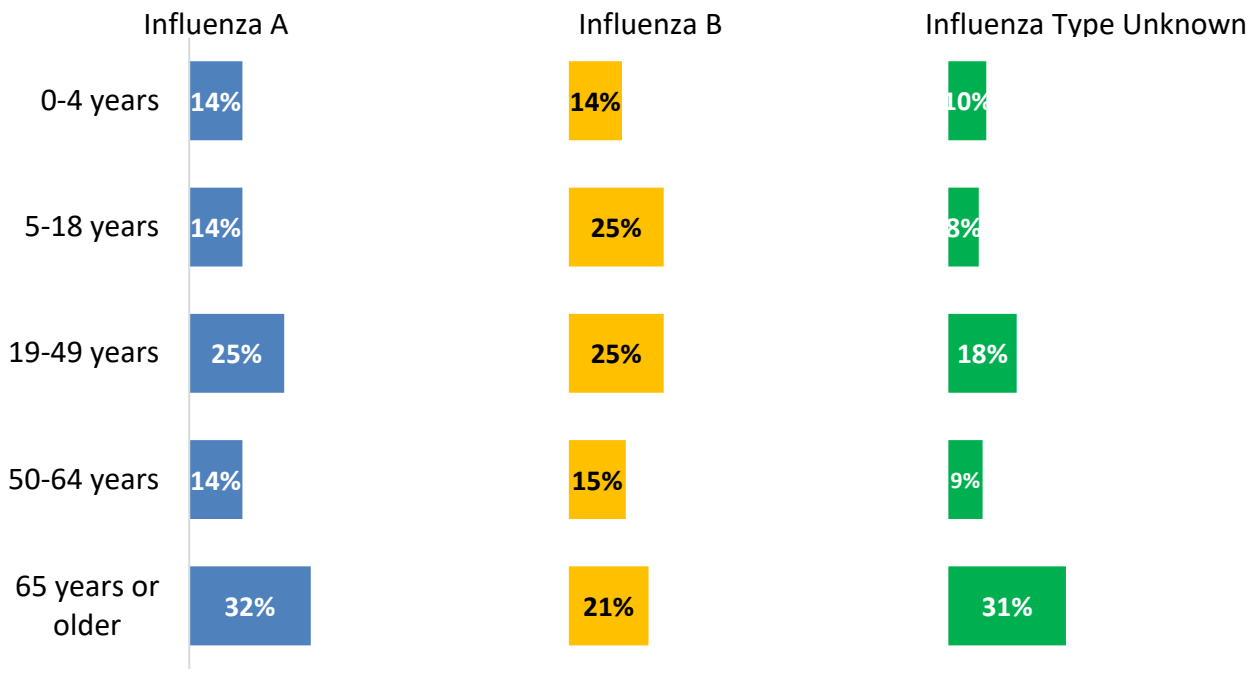
Table 2. Influenza 2017-18 Season		
Types/Subtypes	Count	Percentage
Type A	14782	76%
Subtype 2009 H1N1	124	1%
Subtype H3	1819	12%
Subtyping not performed or unknown	12839	87%
Type B	4477	23%
Unknown	140	1%
Total	19399	100%

Confirmed Influenza Percentages by Age Group

This Influenza Season has proven to effect ages 65 and older and ages 19 to 49.

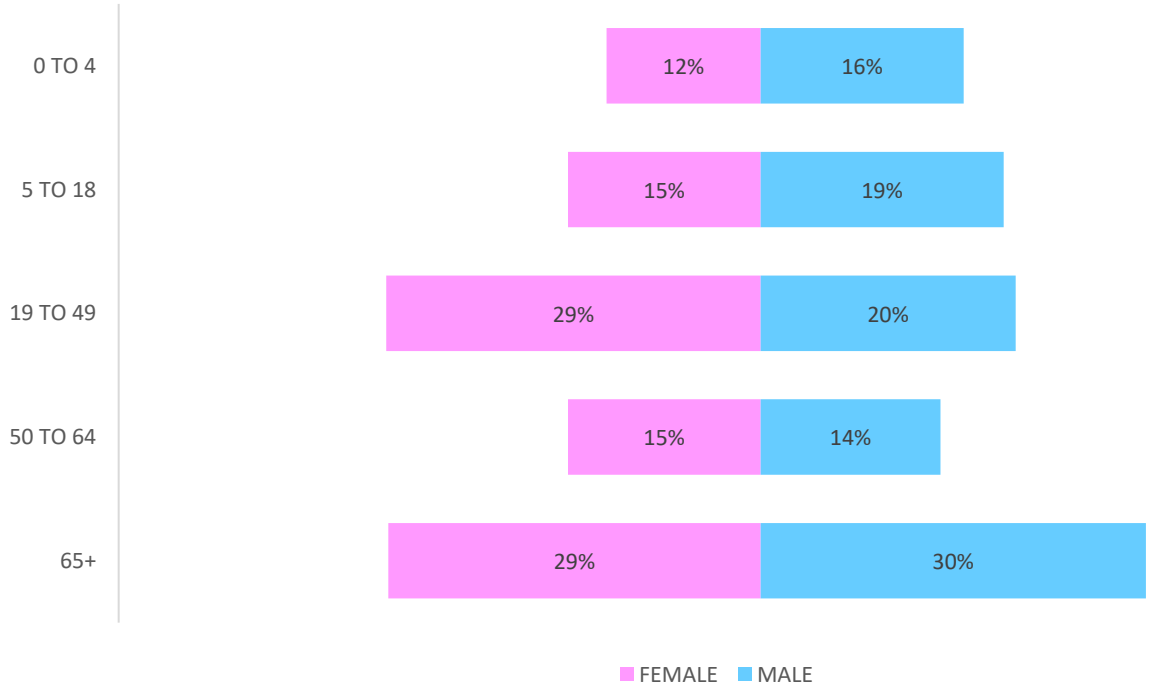


Confirmed influenza cases by Age-Group and Type



* 1 Influenza A is a confirmed case with unknown age

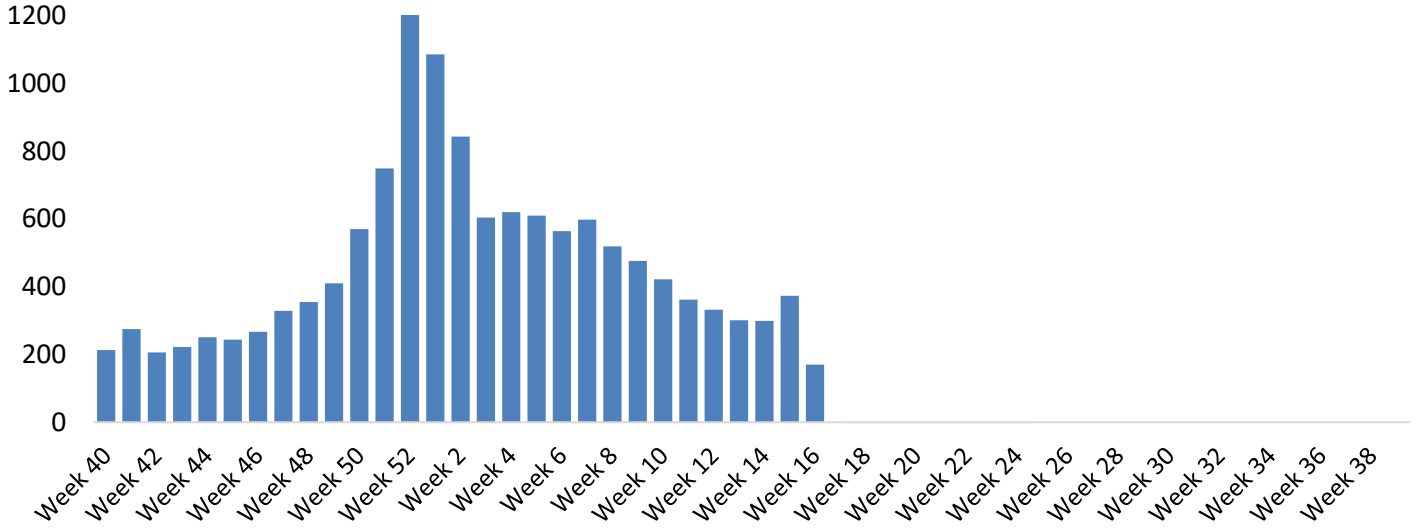
Confirmed influenza cases by Age-Group and Gender



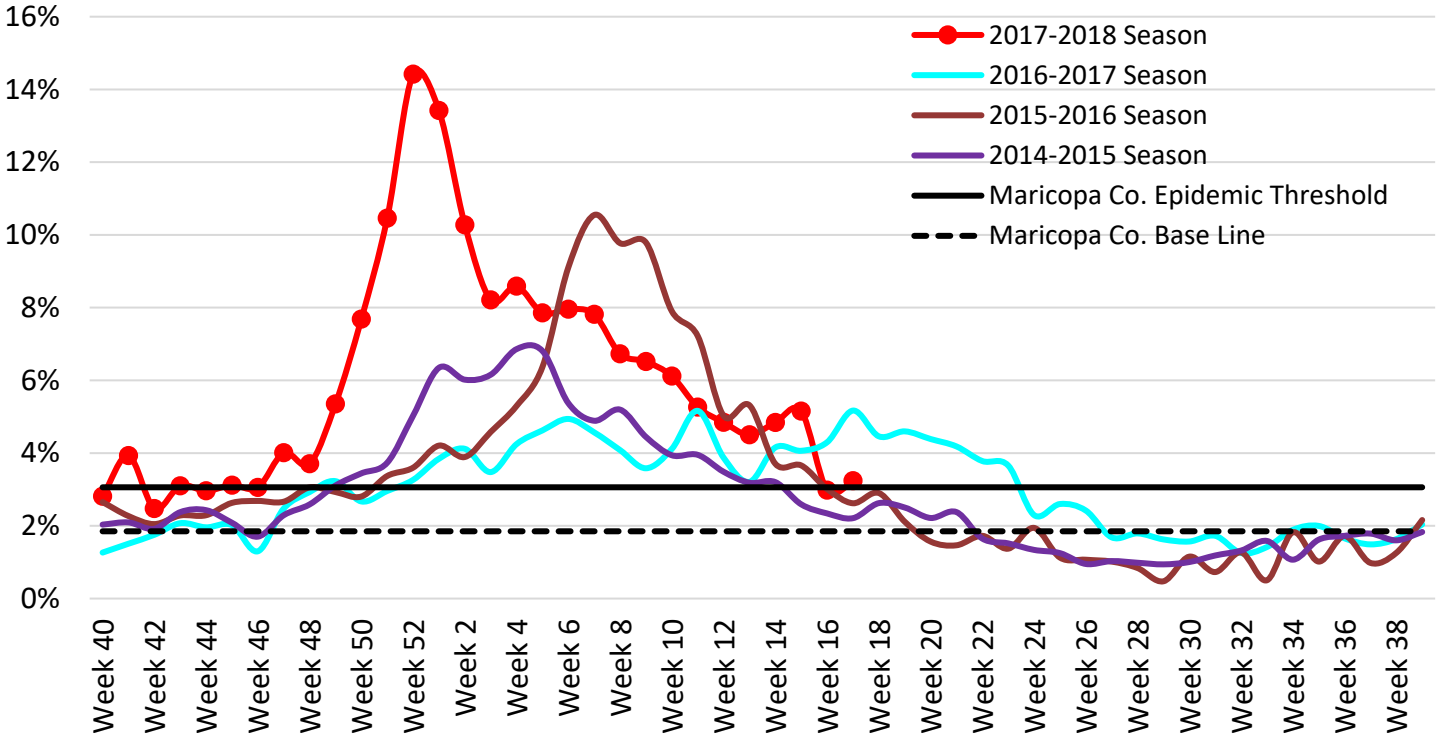
Influenza Like Illness Activity at Hospital Emergency Departments

This influenza season there have been **13,646** visits to emergency departments by individuals with flu-like symptoms. To be counted as an individual with flu-like symptoms, the patient must have both fever and cough/sore throat.

These show the number of patients with flu-like symptoms seen at 12 emergency departments.

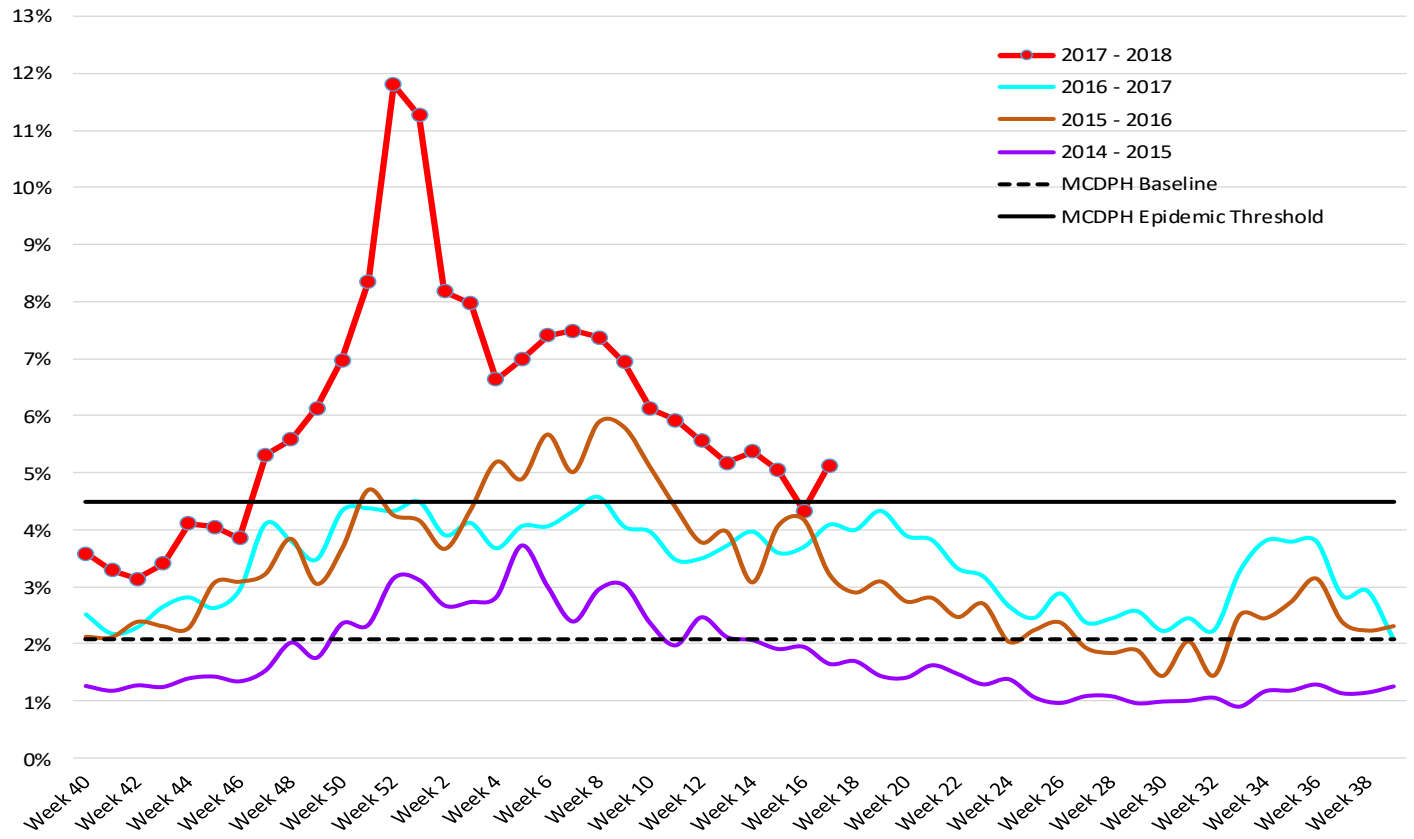


This compares what percent of all emergency department visits were individuals with flu-like symptoms (fever and cough/sore throat). The graph shows the trend week by week, with the current season in **red**.



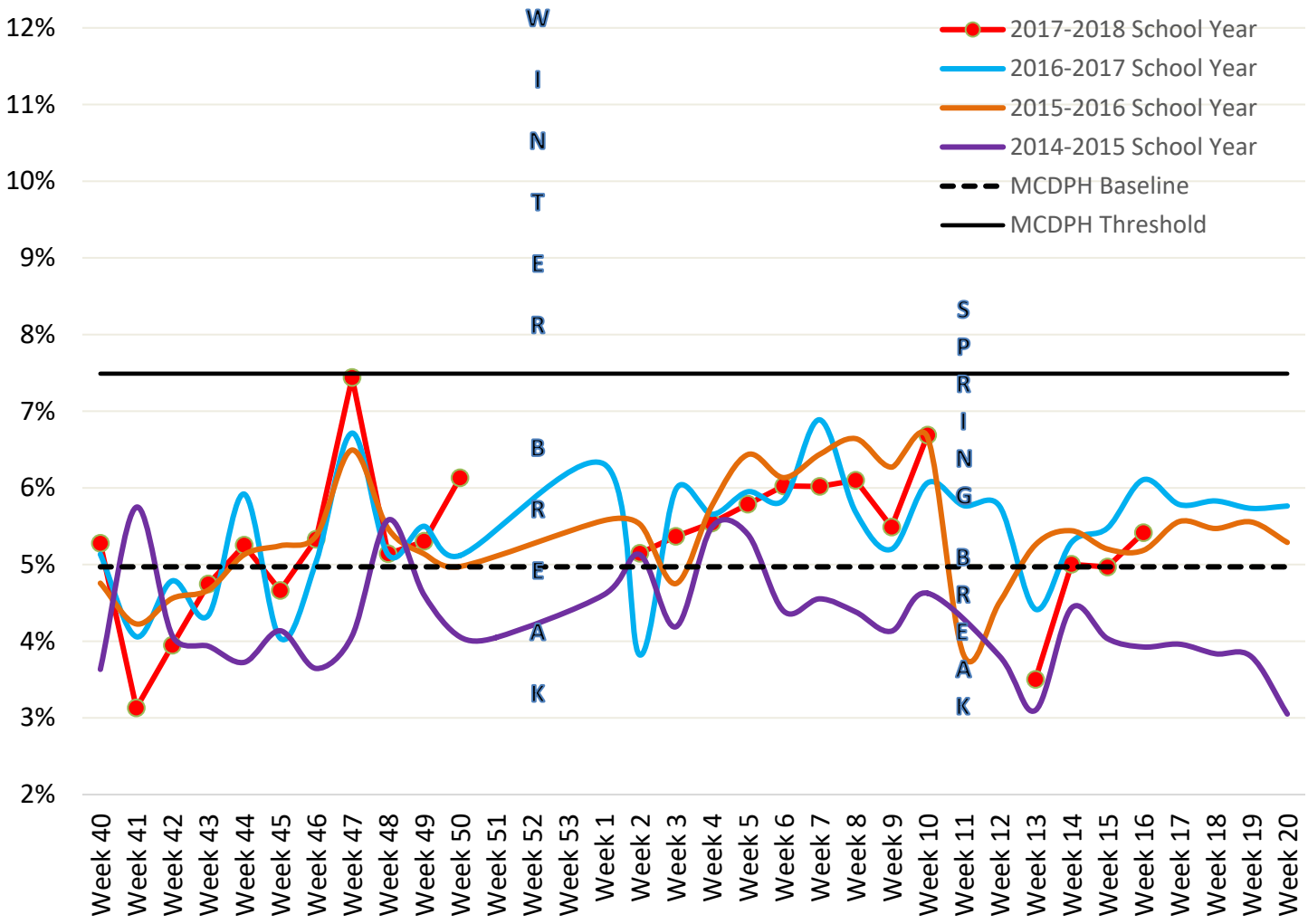
Influenza-Like Illness Activity at Sentinel Site Outpatient Facilities Reported to the Centers for Disease Control and Prevention (CDC)

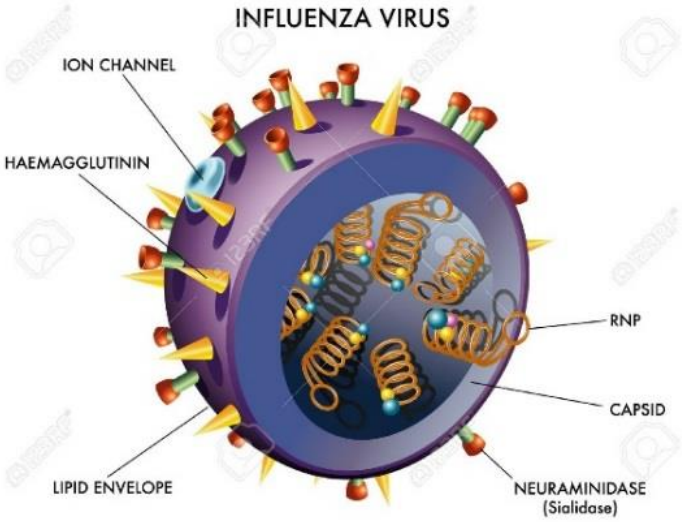
Maricopa County sentinel sites (outpatient facilities) report visits due to flu-like symptoms. This week outpatient facilities saw an **increase of .80%** to **5.13%** of visits at outpatient facilities due to flu-like symptoms, last week outpatient facilities reported **4.33%**.



Absentee Activity at Schools

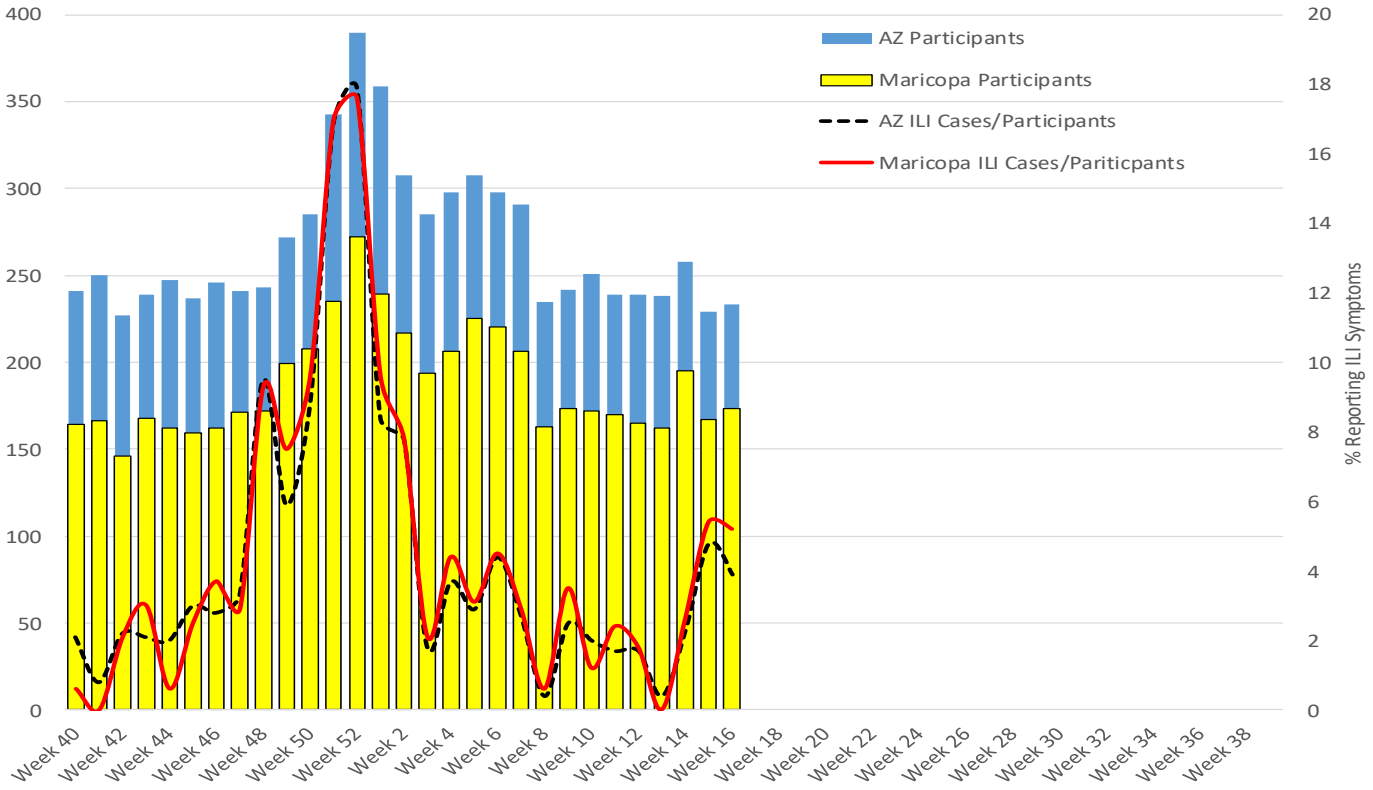
Absenteeism trends compared to the last three school years show the percent of students reported absent and illustrates the week by week trend, the current school year in in **red**. (School Surveillance will begins Week 40 thru Week 20).





The following report summarizes data captured from volunteer reports to the Flu Near You participatory surveillance platform between CDC Weeks 40 and 39 (October 2017 to October 2018). This report is intended to update Maricopa County public health professionals and other partners on system performance and results during the 2017-18 influenza season. Results are NOT final and may be subject to change pending further analyses.

Count of participants and rate of ILI cases per MMWR week in Maricopa County
Flu Season: 2017-2018



Why register for Flu Near You?

Registered users have access to many features, such as:

- The ability to report their symptoms
- A map that displays where users can find vaccines in their area
- A map of flu activity in their area and across the nation
- Updated news on the current flu season, flu shots, treatment, recovery time, and more

Everyone is invited to participate in Flu Near You by enrolling at https://flunearyou.org

The Maricopa County Department of Public Health wishes to thank all of the Influenza surveillance participants:

Arizona Department of Health Services

Local Hospital Emergency Departments & Infection Control Practitioners

Local Outpatient Facilities and Medical Directors

Maricopa County Public Schools

Maricopa County Office of Vital Statistics

Questions about this report may be directed to:

epidemiology@mail.maricopa.gov

Information on influenza activity for the state, the U.S. and the world may be found at the following websites:

http://www.azdhs.gov/phs/oids/epi/flu/index.htm (ADHS)
https://www.cdc.gov/flu/weekly/fluactivitysurv.htm (CDC)
http://www.who.int/influenza/gisrs_laboratory/updates/en/index.html (WHO)