



INFLUENZA WATCH

Week 14
Ending 4/7/2018

The purpose of the weekly **Influenza Watch** is to summarize current influenza surveillance in San Diego County. **Please note that reported weekly data are preliminary and may change due to delayed submissions and additional laboratory results.**

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Current Week**Current Week 14 (ending 4/7/2018)**

- 264 new influenza detections reported: *Elevated level*
- 2% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 8 new influenza-related deaths reported this week
- No new ICU cases reported this week
- 7% of deaths registered with pneumonia and/or influenza: *Expected level*

Current Season Summary**20,404**

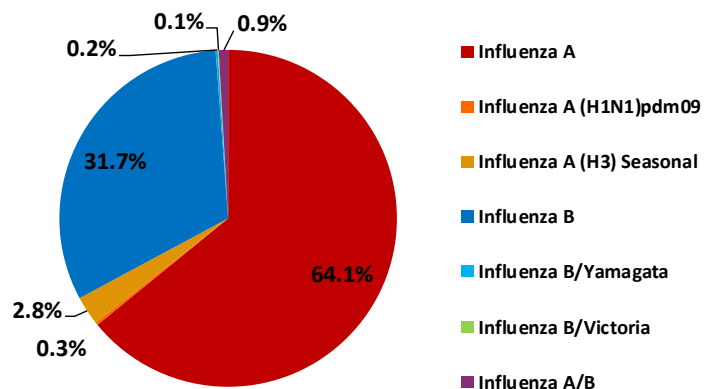
Total Cases

298

ICU Cases

334Deaths[†]**117**

Outbreaks*

Virus Characteristics

[†] Including 43 deaths less than 65 years of age, reportable to CDPH.

* At least one case of laboratory-confirmed influenza in a setting experiencing ≥2 cases of influenza like illness (ILI) within a 72-hour period.

Table 1. Influenza Surveillance Indicators

Indicator	FY 2017-18*			FY 2016-17		Prior 3-Year Average**	
	Week 14	Week 13	FYTD [#]	Week 14	FYTD [#]	Week 14	FYTD [#]
All influenza detections reported (rapid or PCR)	264	257	20,404	89	5,292	80	5,952
Percent of emergency department visits for ILI	2%	3%		2%		2%	
Percent of deaths registered with pneumonia and/or influenza	7%	6%		7%		7%	
Number of influenza-related deaths reported [^]	8	7	334	2	82	1	74

[#] FYTD=Fiscal Year To Date (FY is July 1- June 30, Weeks 27-26). Total deaths reported in prior years: 87 in 2016-17, 68 in 2015-16, and 97 in 2014-15.

* Previous weeks case counts or percentages may change due to delayed processing or reporting.

** Includes FYs 2014-15, 2015-16, and 2016-17.

[^] Current FY deaths are shown by week of report; by week of death for prior FYs.

Influenza and Parotitis: Flumps?

Two new articles published last month in *Clinical Infectious Diseases* indicate that parotitis, the swelling of salivary glands most commonly associated with mumps, may be a complication of influenza infection.

In the first study, Centers for Disease Control and Prevention (CDC) researchers investigated 320 non-mumps parotitis cases reported during the H3N2-dominated 2014-15 flu season. The cases were mostly men (65%) and under 20 years of age (64%). CDC tested for mumps, influenza, and other viruses in 294 available patient samples. One or more viruses were detected in 210 (71%) samples, with influenza A(H3N2) the most common (156), followed by human herpes virus 6B (42) and Epstein-Barr virus (32).

In a second study, CDC researchers interviewed 50 parotitis patients with lab-confirmed influenza in 2015 and compared responses from 124 ill flu-confirmed controls without parotitis. Patients described painful facial swelling, consistent with acute parotitis, which developed an average of 4 days after the onset of systemic or respiratory symptoms. More patients were male (76%) than controls (51%). For most patients, parotitis symptoms lasted about 4 days after their flu symptoms.

Prior to the 2014-15 flu season, only 18 cumulative cases of flu-associated parotitis had been reported in the U.S. since 1975. Several cases of parotitis in lab-confirmed flu patients (nicknamed “flumps”) were reported in San Diego during that season. Local parotitis cases positive for influenza have been reported again this season, with most being influenza A(H3N2), although influenza B was detected in one case.

The studies may be found at: [Non-mumps Viral Parotitis During the 2014-2015 Influenza Season in the United States](#) and [Influenza-Associated Parotitis During the 2014-2015 Influenza Season in the United States](#). A commentary on the studies may be found at: [Is Parotitis One More Complication of Influenza? The Ongoing Challenge of Determining Causal Associations](#).

Patients with parotitis should be evaluated for both mumps and influenza, regardless of vaccination status. To assist with public health response, providers are urged to [report](#) parotitis cases to the [County Immunizations Program](#) when mumps is suspected and before testing. [Buccal swab testing](#) is preferred over serology when evaluating patients for mumps. A useful video on swab collection is [here](#).

Table 2. Influenza Detections Reported, FY 2017-18*

Positive Test Type/Subtype	Week 14	Total FY-To-Date
Influenza A†	54	13,080
Influenza A(H1N1) Pandemic 2009	0	57
Influenza A (H3) Seasonal	1	563
Influenza B†	207	6,461
Influenza B/Victoria	0	19
Influenza B/Yamagata	1	41
Influenza A/B†	1	183
Total	264	20,404

* FY is July 1- June 30.

† No further characterization performed, or results were not yet available at time of publication.

Note: Totals may change due to further laboratory findings.

Figure 1. Percent of Emergency Department Visits for Influenza-like Illness by Week and FY

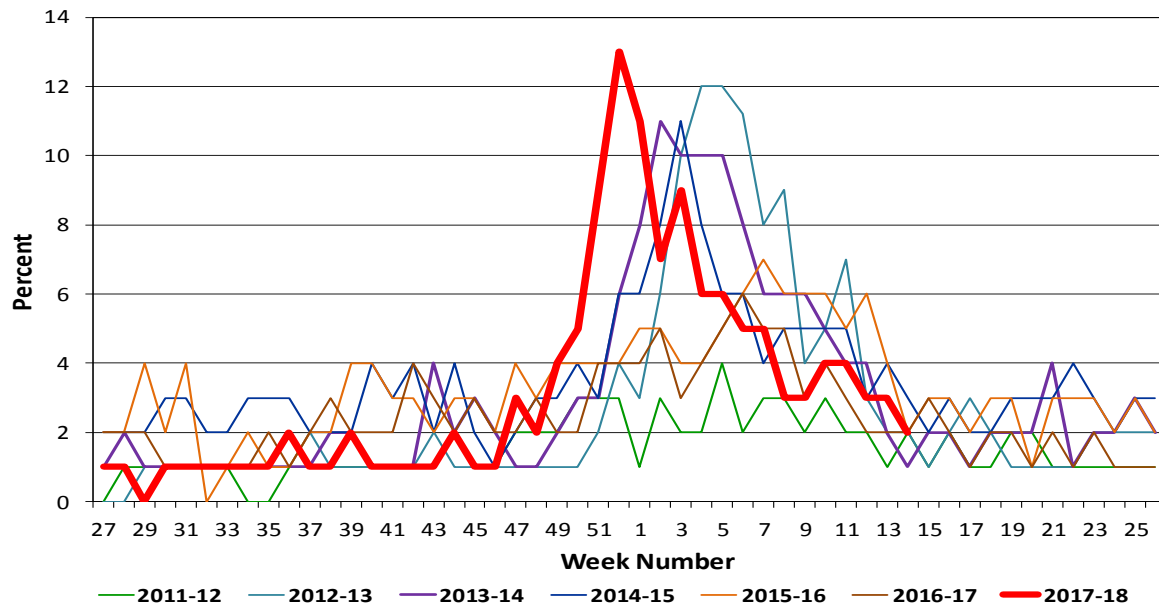


Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2017-18 FYTD (N=20,404)

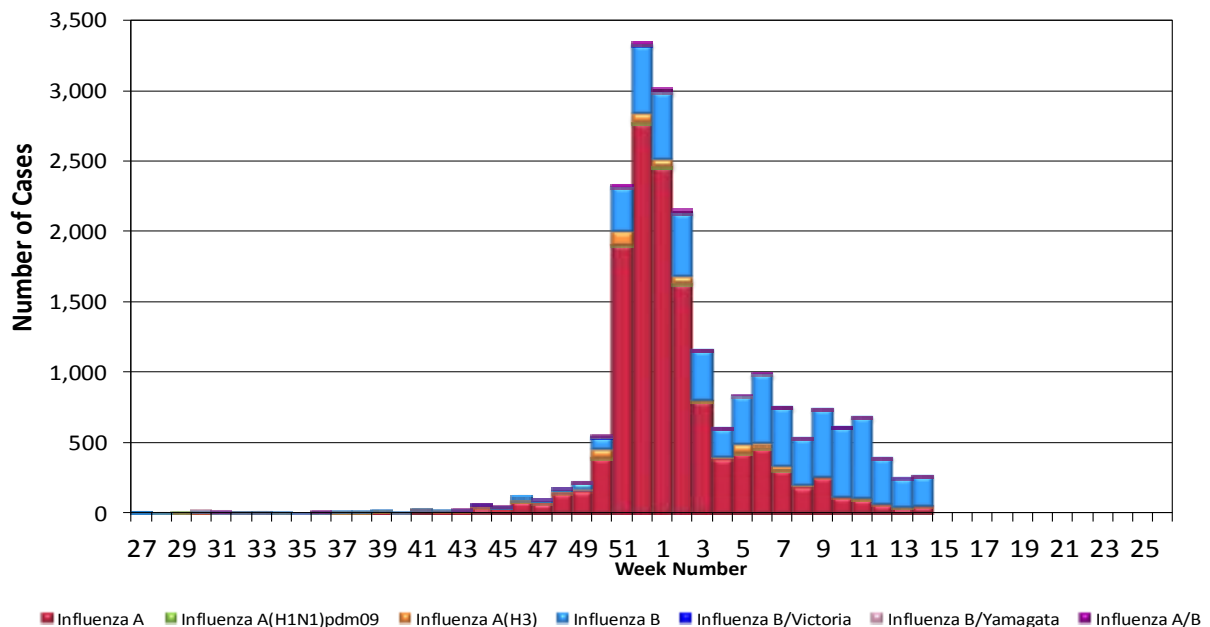


Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2011-12 to 2017-18 FYTD

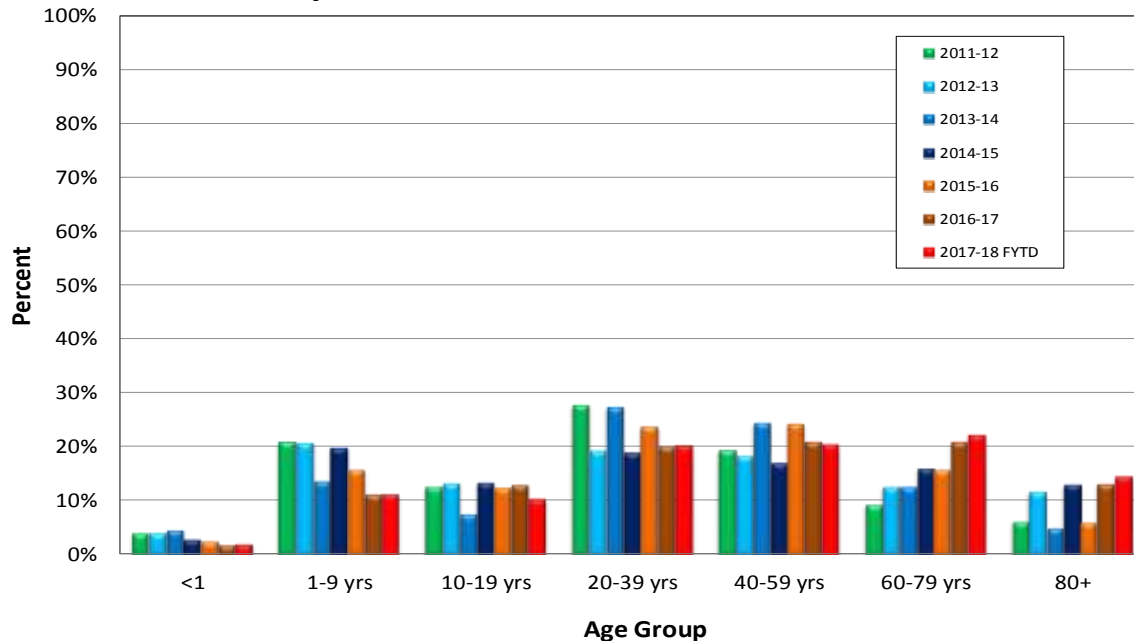


Figure 4. Cumulative Influenza Case Reports by Episode Week & Season

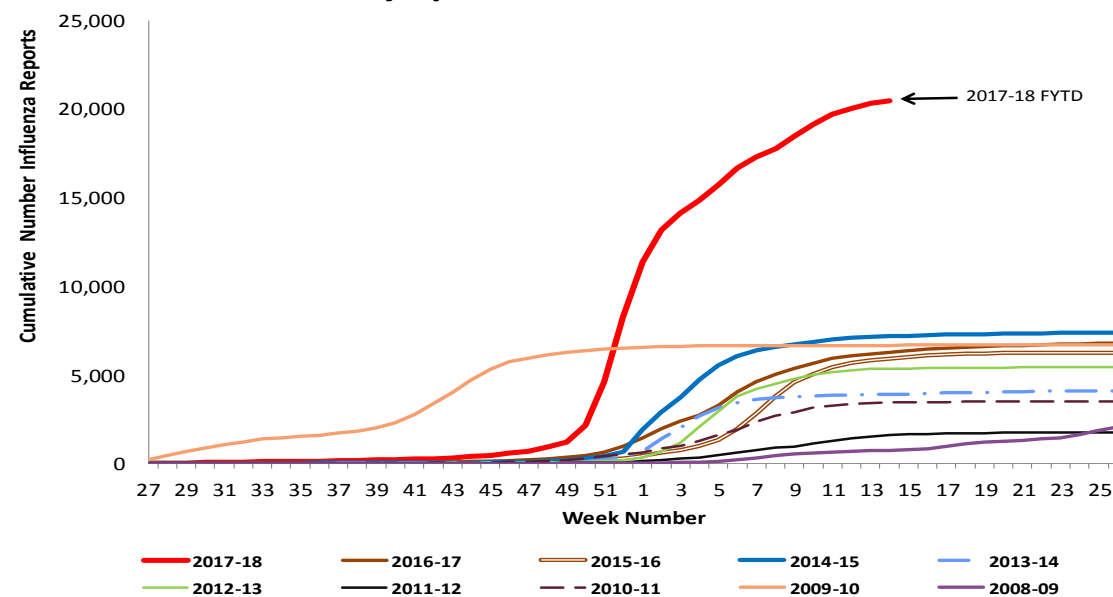


Figure 5. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by Week and FY Compared to 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

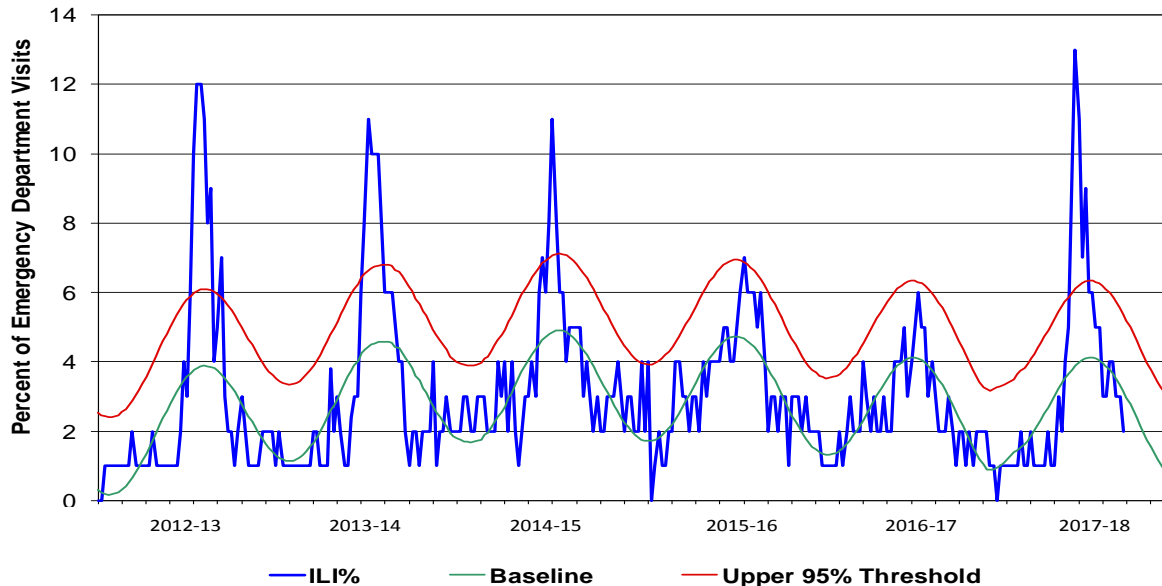


Figure 6. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and FY Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

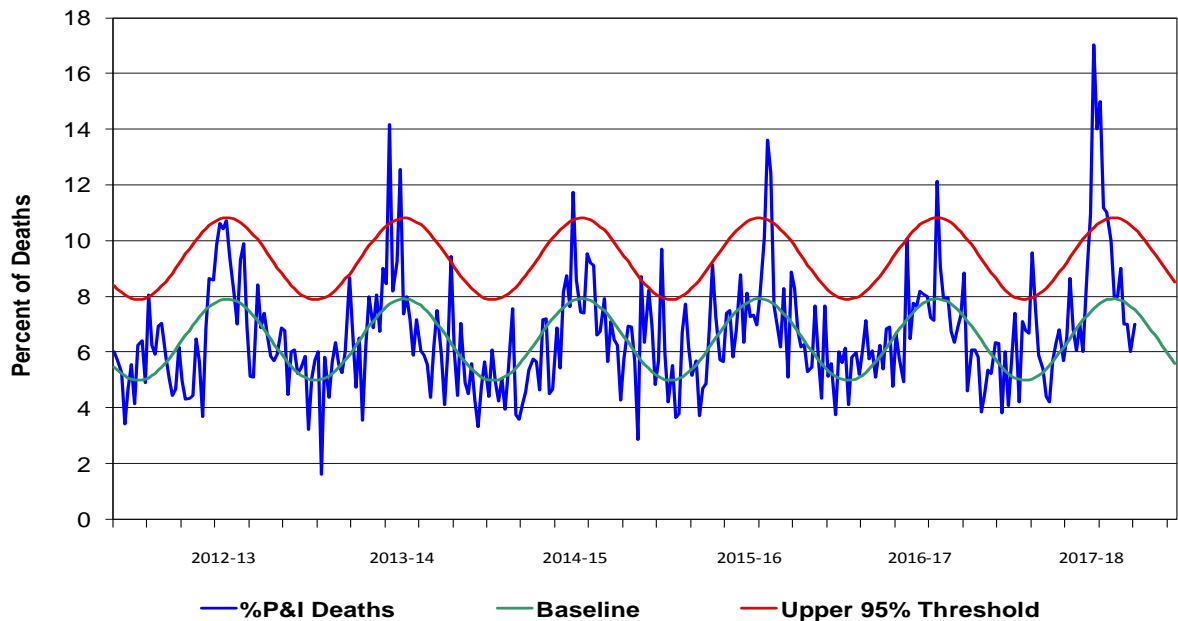


Figure 7. Influenza Deaths by Type and Season

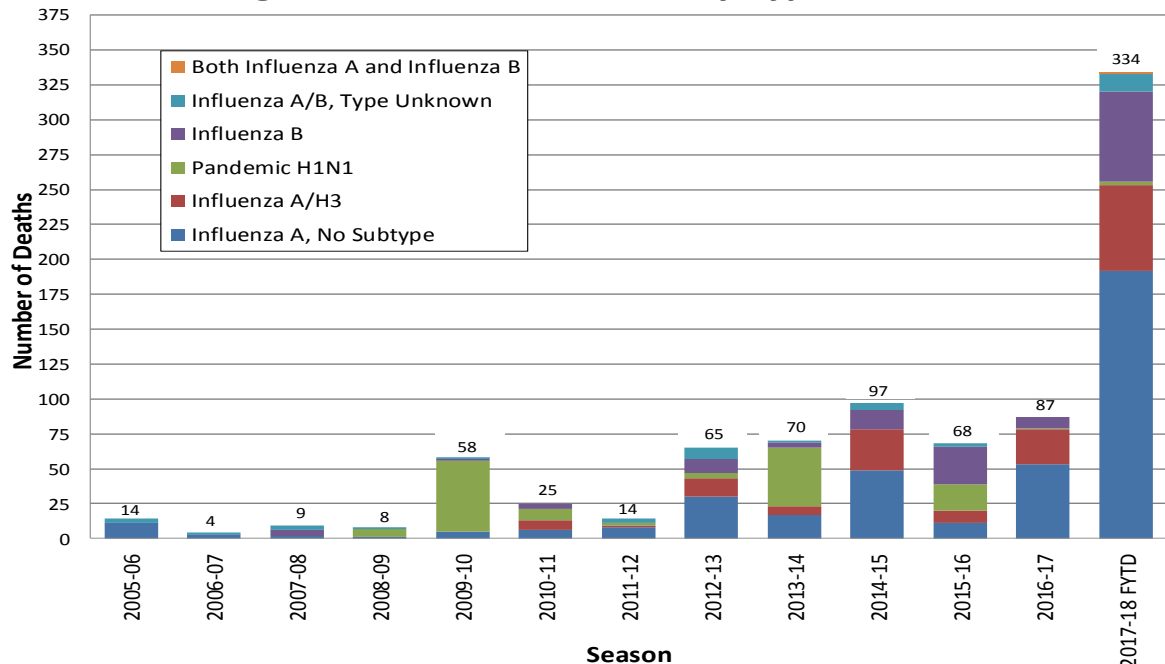


Figure 8. Influenza Deaths by Age and Season

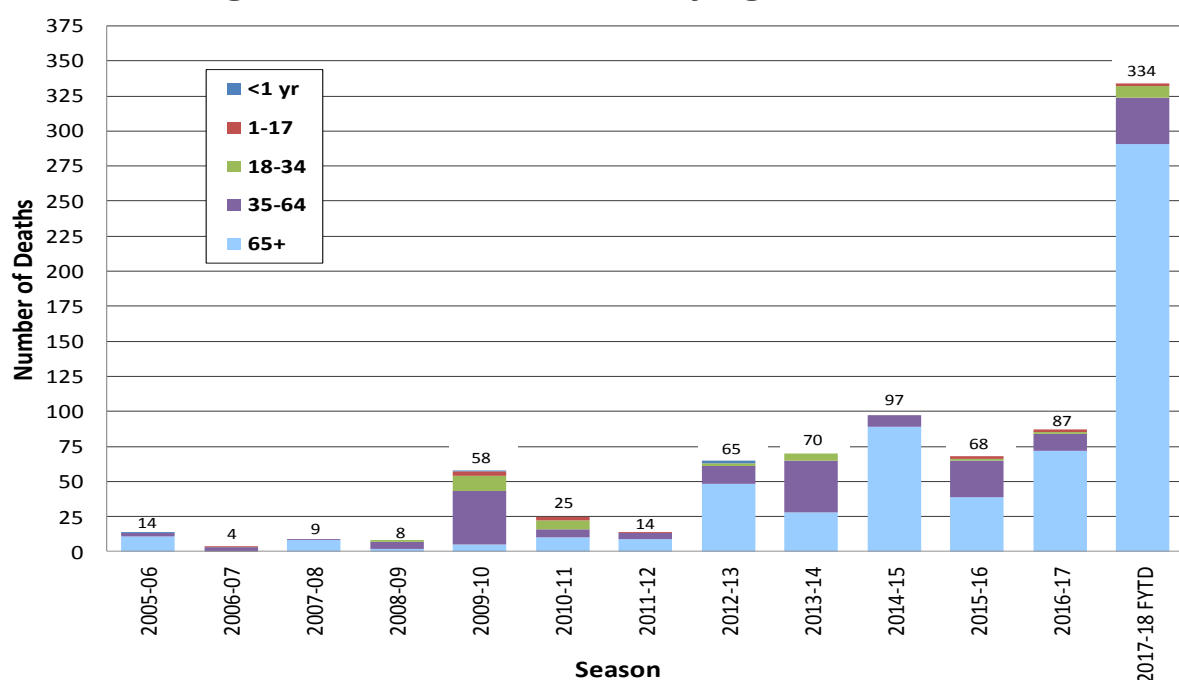


Figure 9. Number of Influenza Vaccinations Administered* by Week and Season

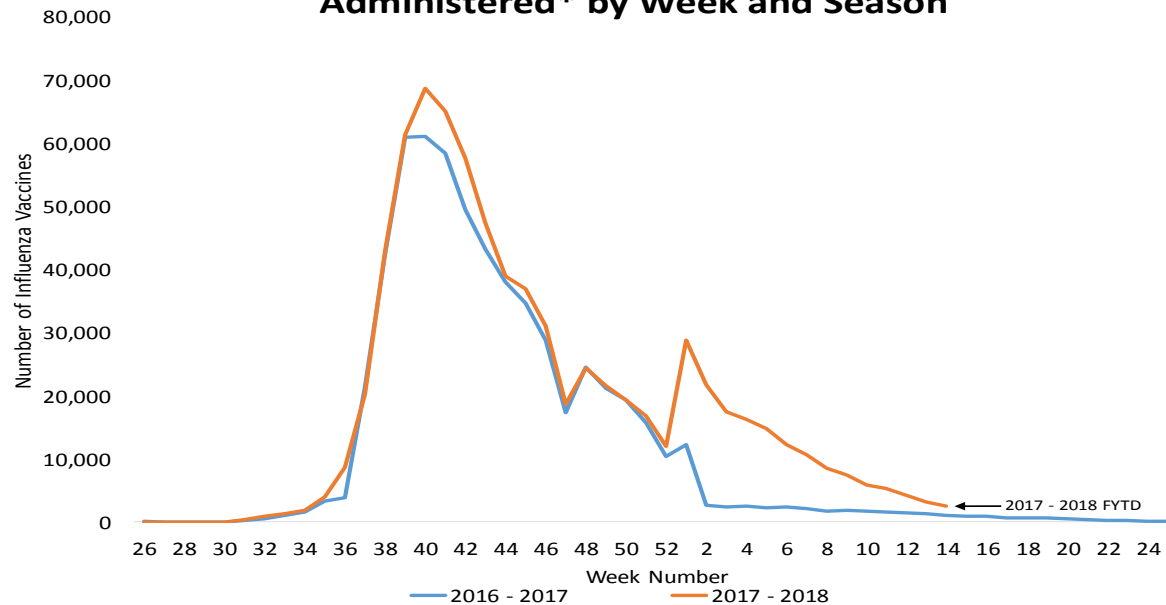
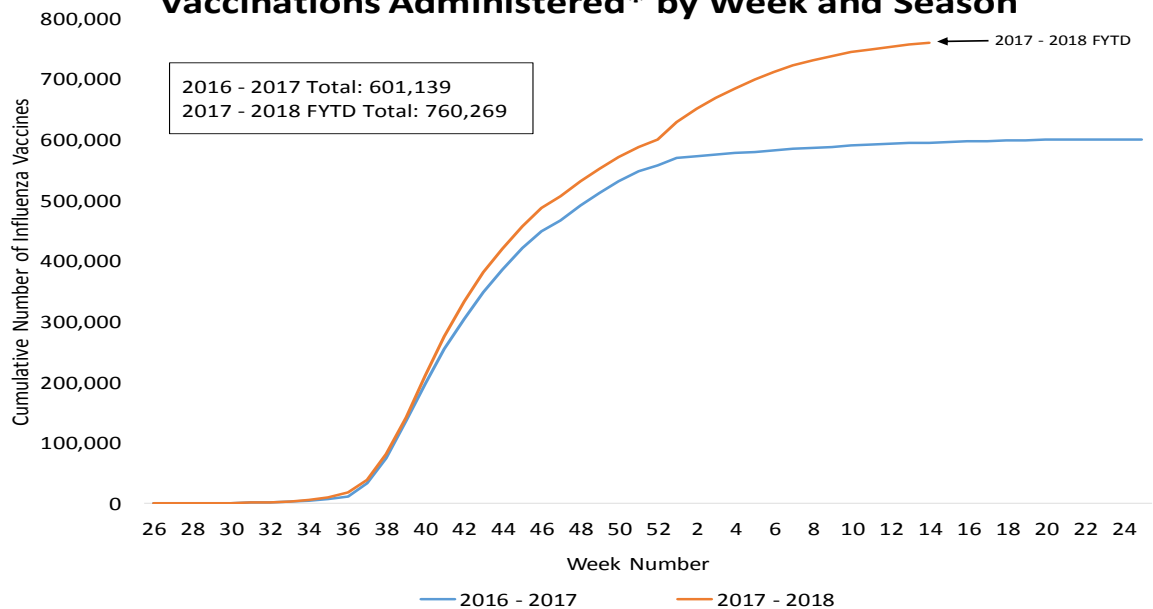
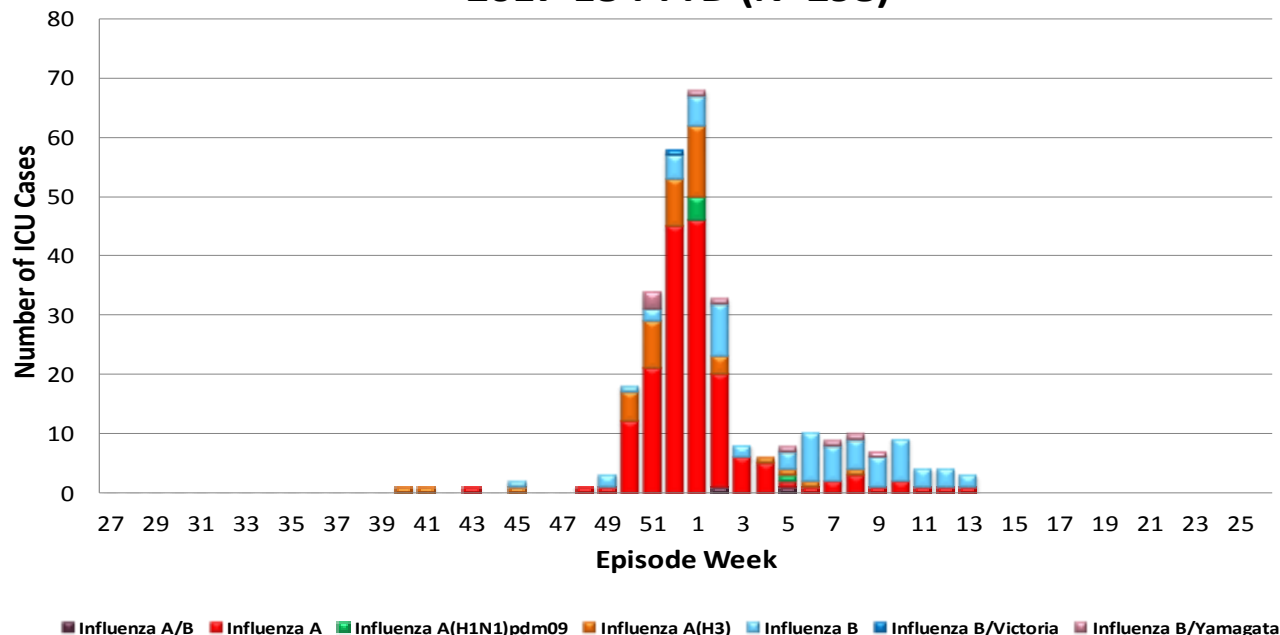


Figure 10. Cumulative Number of Influenza Vaccinations Administered* by Week and Season



* Influenza vaccinations administered and entered into the San Diego Immunization Registry ([SDIR](#))

Figure 11. Number of Influenza Cases Requiring ICU Care by Episode Week and Type of Influenza, 2017-18 FYTD (N=298)



Episode week is the week of symptom onset, or earliest available date in which the case is identified.

Influenza Reporting in San Diego County

Local providers are encouraged to report laboratory positive influenza detections to the County Epidemiology Program by **FAX (858) 715-6458**. Please fax a [Case Report](#) Form and/or a printed laboratory result, and indicate if the patient was admitted to ICU or died, and/or is a resident of a congregate living facility.

For questions regarding sending specimens to Public Health Laboratory (PHL), call (619) 692-8500. Click here for the updated PHL [PCR Test Request Form](#). Contact the Epidemiology Program with any questions at **(619) 692-8499** or by email to: EpiDiv.HHSA@sdcounty.ca.gov.

Resources

San Diego County Influenza Surveillance Weekly [Slide Deck](#) - presentation version of this report

County of San Diego Immunization Program www.sdiz.org

California Department of Public Health [Influenza](#)

Centers for Disease Control and Prevention Influenza Surveillance [Weekly Report](#)