



INFLUENZA WATCH

Week 13
Ending 3/31/2018

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.**

Report Contents

Page 1: Overview & Indicators
Page 2: Virus Characteristics
Pages 3-8: Trend graphs
Page 8: Reporting Information

Current
Week**Current Week 13 (ending 3/31/2018)**

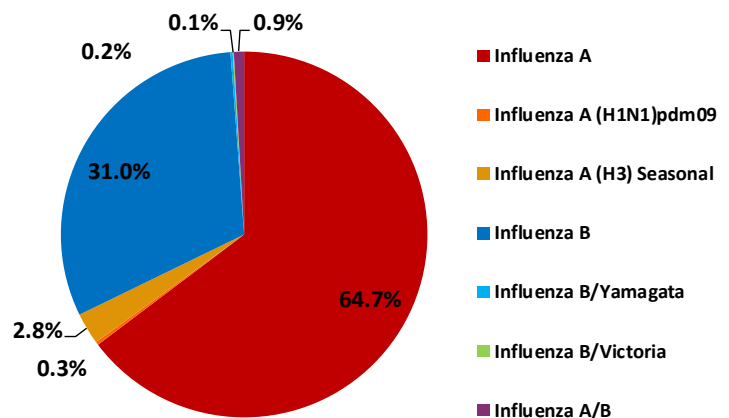
- 247 new influenza detections reported: *Elevated level*
- 3% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 7 new influenza-related deaths reported this week
- 5 new ICU cases reported this week
- 8% of deaths registered with pneumonia and/or influenza: *Expected level*

Current
Season Summary**20,131**

Total Cases

298

ICU Cases

326Deaths[†]**117**Outbreaks^{*}**Virus Characteristics**

[†] Including 42 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 13	Week 12	FYTD [#]	Week 13	FYTD [#]	Week 13	FYTD [#]
All influenza detections reported (rapid or PCR)	247	400	20,131	118	5,203	111	5,872
Percent of emergency department visits for ILI	3%	3%		2%		3%	
Percent of deaths registered with pneumonia and/or influenza	8%	7%		6%		7%	
Number of influenza-related deaths reported [^]	7	11	326	1	80	2	73

[#] 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 Vaccination May Protect Pregnant Women from Pertussis

A post hoc study in South African pregnant women who took part in a vaccine study in 2011 and 2012 found that influenza vaccination may have had a protective effect against *Bordetella pertussis*. Researchers described their findings last week in a letter published in the *New England Journal of Medicine*.

The initial trial included 1,062 pregnant women who received trivalent inactivated influenza vaccine and 1,054 pregnant women who were in a placebo group. Researchers followed the women weekly for any respiratory illnesses from study enrollment, through pregnancy and 24 weeks postpartum. The vaccine was 50.4% effective in preventing lab-confirmed influenza.

Given that there is evidence to suggest influenza can enhance susceptibility to common bacterial infections such as pneumococcus and staphylococcus, the researchers wanted to explore if there was a relationship between influenza virus and pertussis. They used archived samples from the earlier study to assess levels of pertussis. Specimens from 11 flu vaccine recipients tested positive for pertussis, compared with 26 from placebo recipients (risk ratio, 0.4; 95% confidence interval, 0.2 to 0.8).

Acknowledging the limits of a post hoc study, the researchers indicated that it is not likely that influenza vaccination would alter the ability to diagnose pertussis and that their observations warrant further investigation. The study may be found here: [Influenza Vaccination during Pregnancy and Protection against Pertussis](#).

As noted in a recent [local health alert](#), pertussis has been increasing in San Diego in recent months. It is critical that **every woman receive the pertussis (Tdap) vaccine in every pregnancy at the earliest opportunity in the third trimester** to protect their young infants after birth. All pregnant women should also get the annual influenza vaccination.

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

Positive Test Type/Subtype	Week 13	Total FY-To-Date
Influenza A†	43	13,025
Influenza A(H1N1) Pandemic 2009	1	57
Influenza A (H3) Seasonal	1	562
Influenza B†	198	6,246
Influenza B/Victoria	0	19
Influenza B/Yamagata	0	40
Influenza A/B†	4	182
Total	247	20,131

* 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

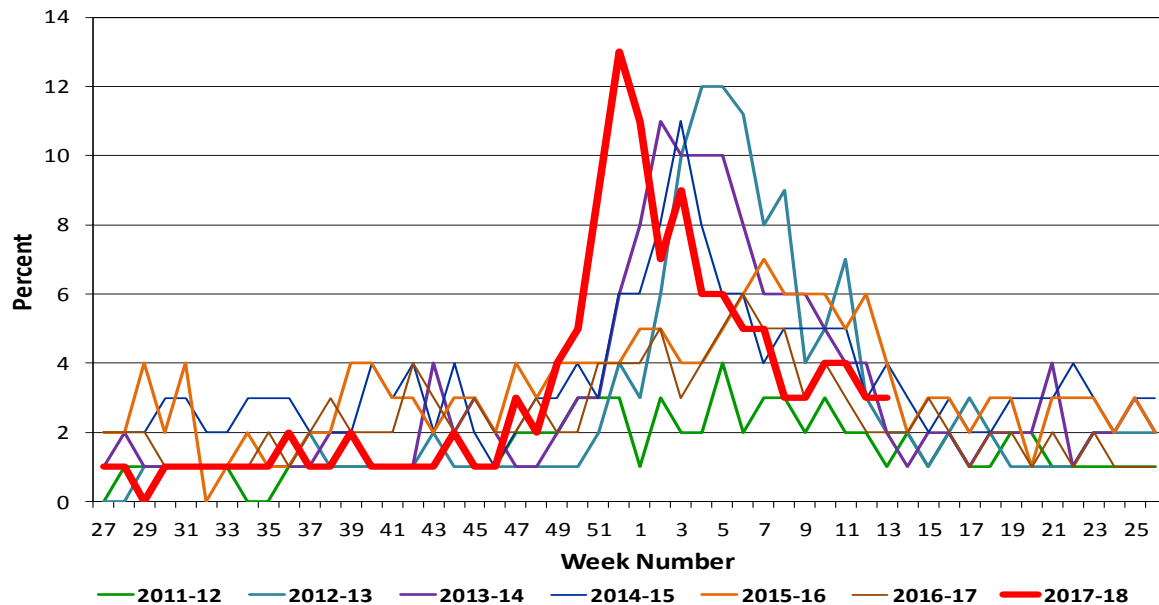


Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2017-18 FYTD (N=20,131)

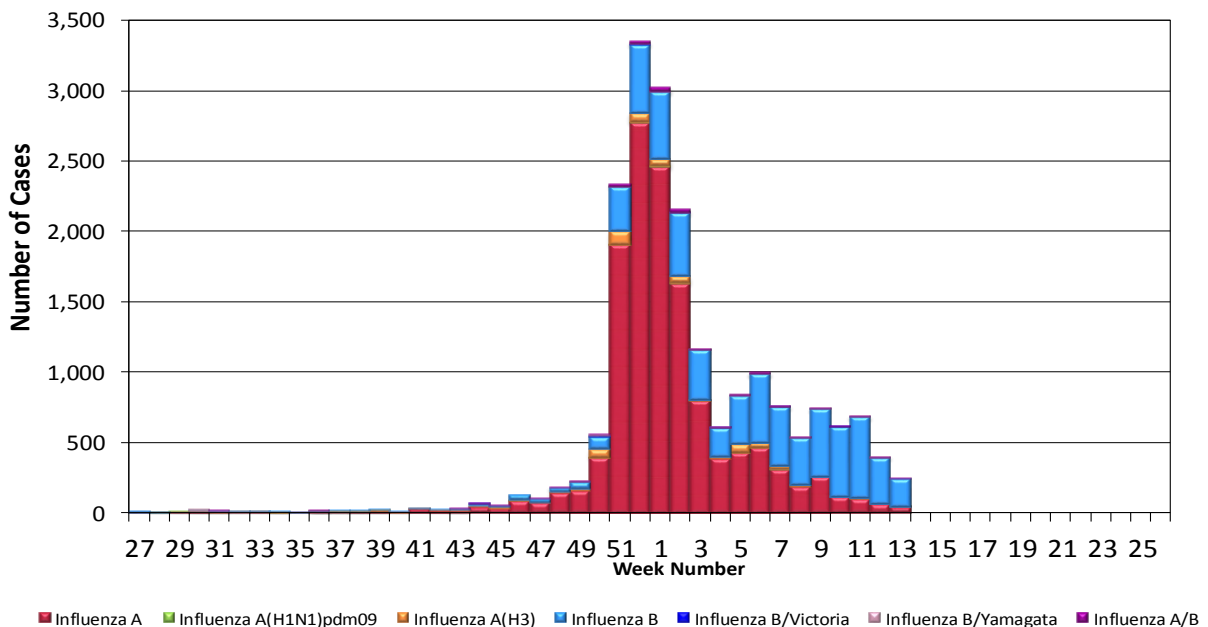


Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2011-12 to 2017-18 FYTD

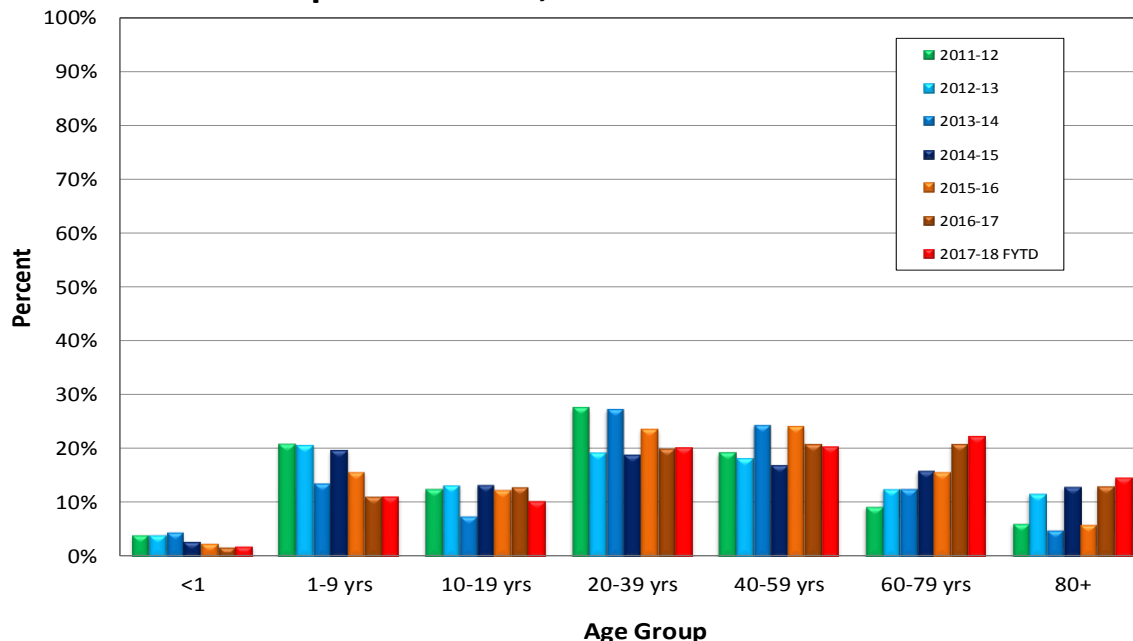


Figure 4. Cumulative Influenza Case Reports by Episode Week & Season

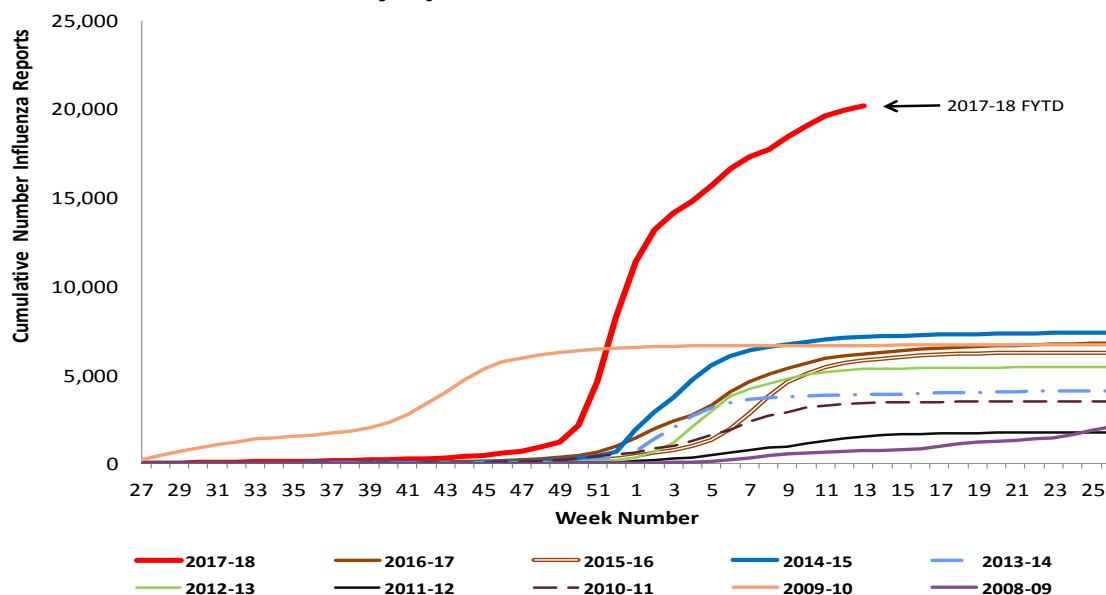


Figure 5. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by Week and FY Compared to 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

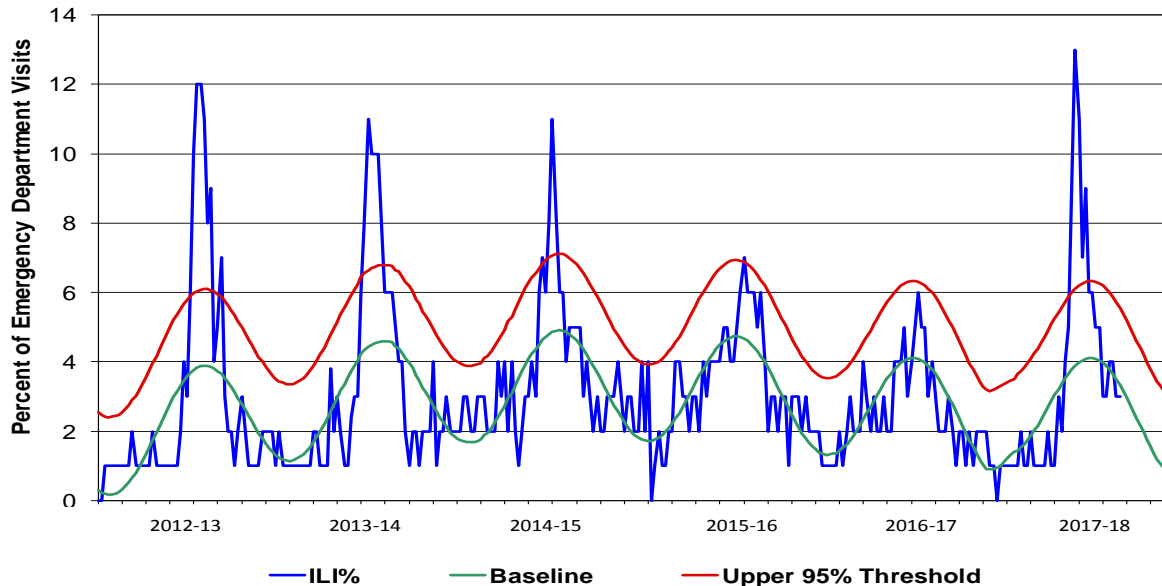


Figure 6. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and FY Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

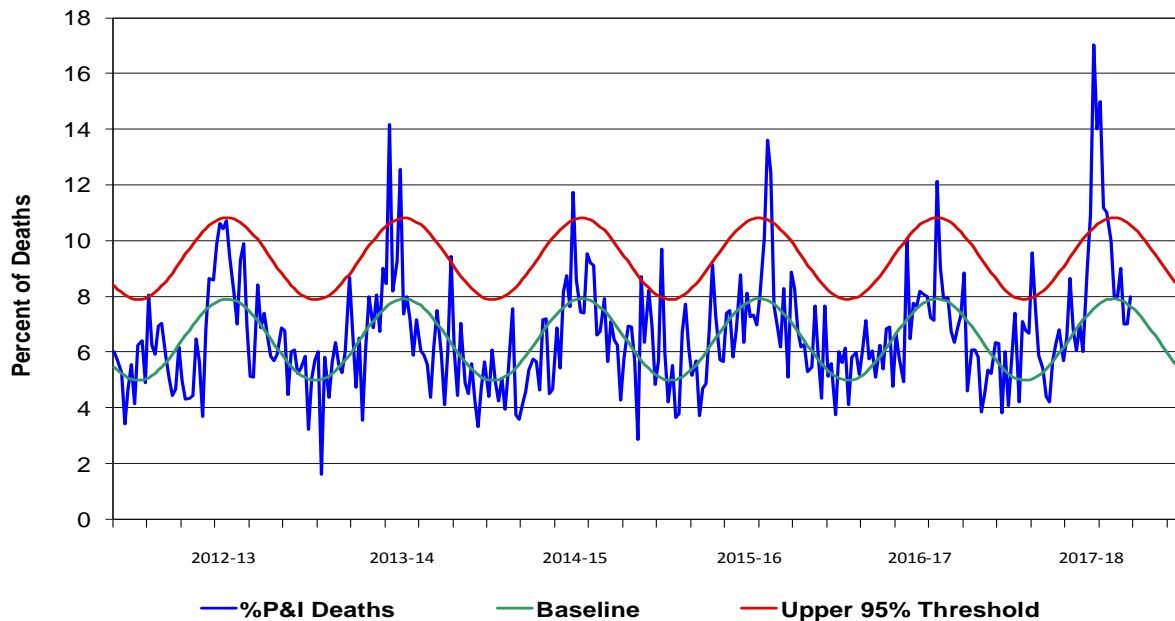


Figure 7. Influenza Deaths by Type and Season

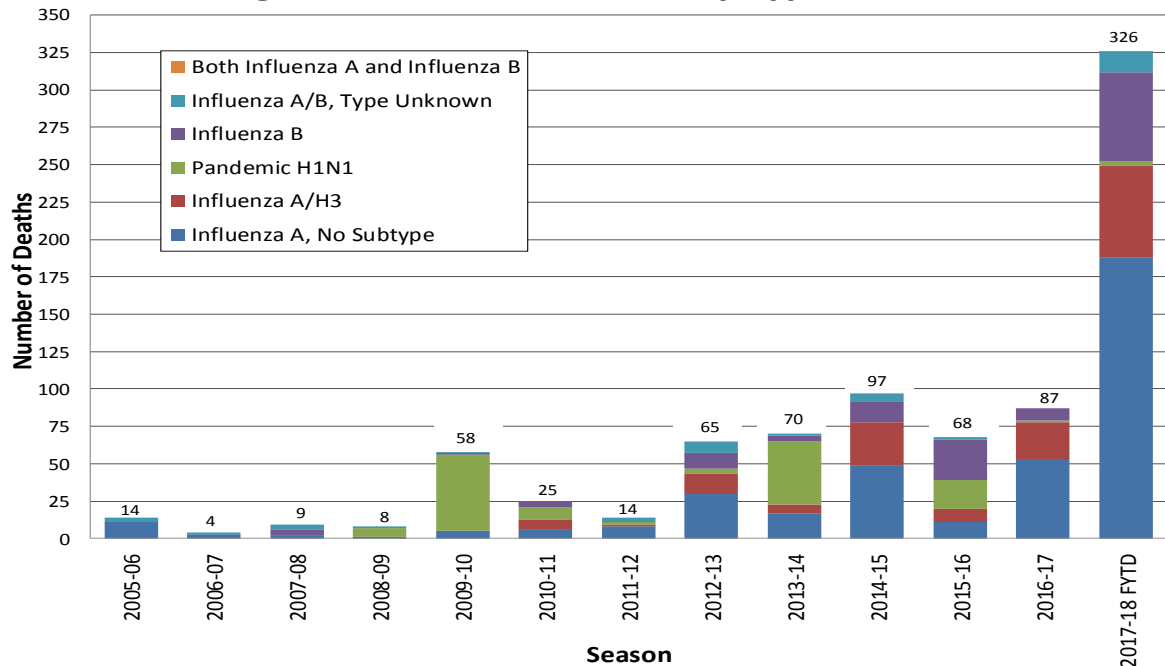


Figure 8. Influenza Deaths by Age and Season

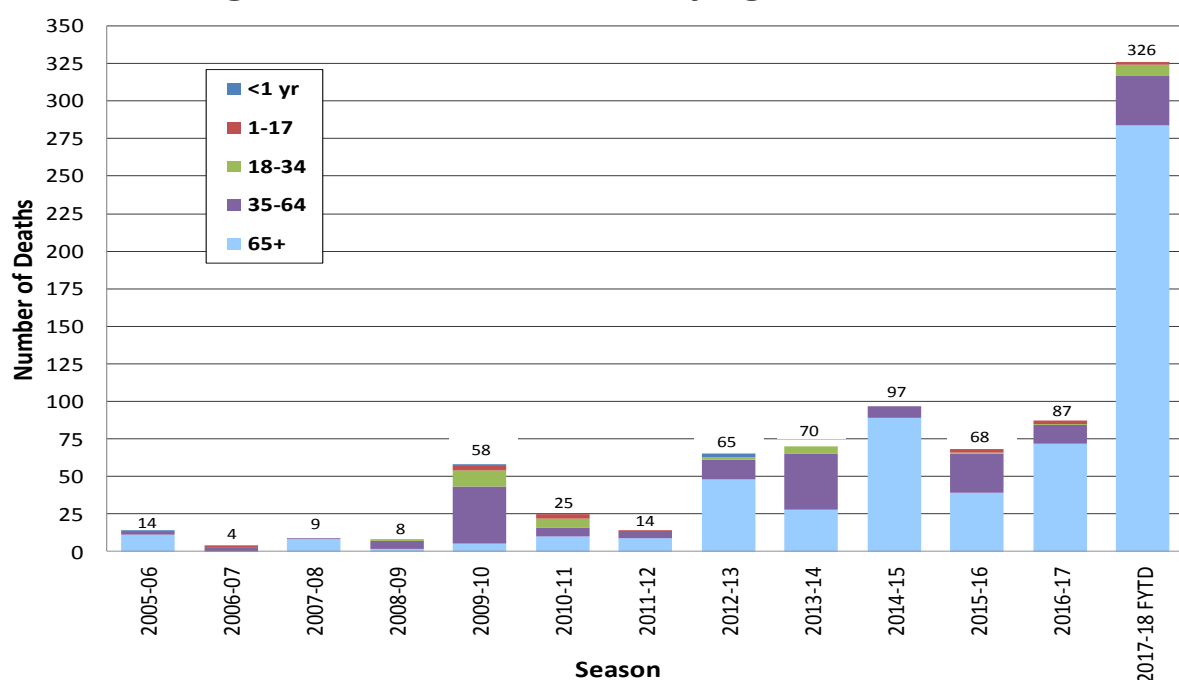


Figure 9. Number of Influenza Vaccinations Administered* by Week and Season

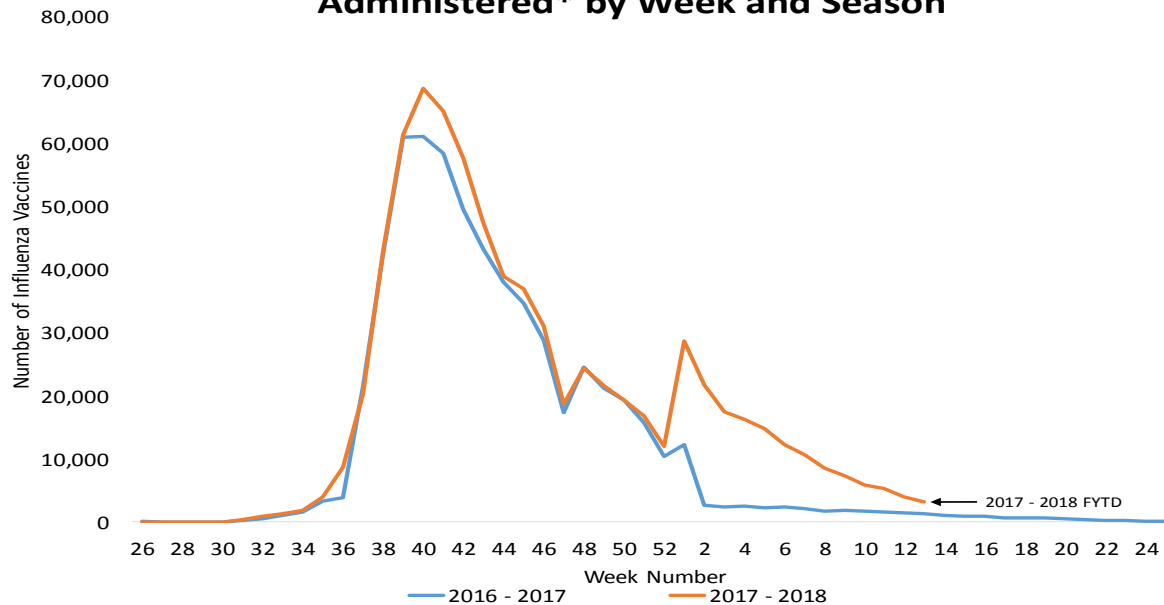
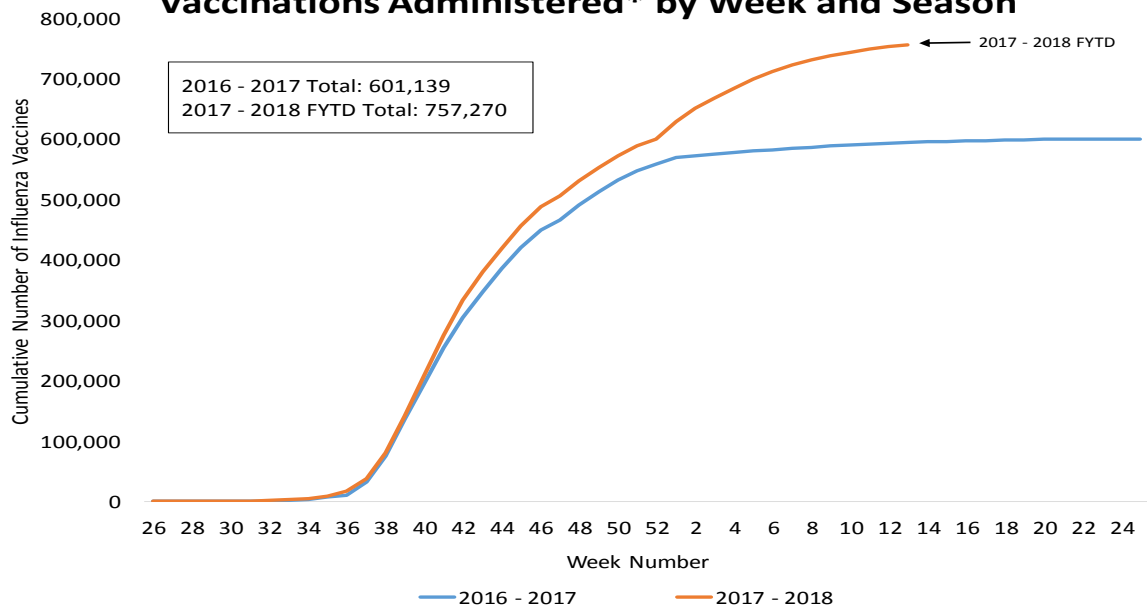
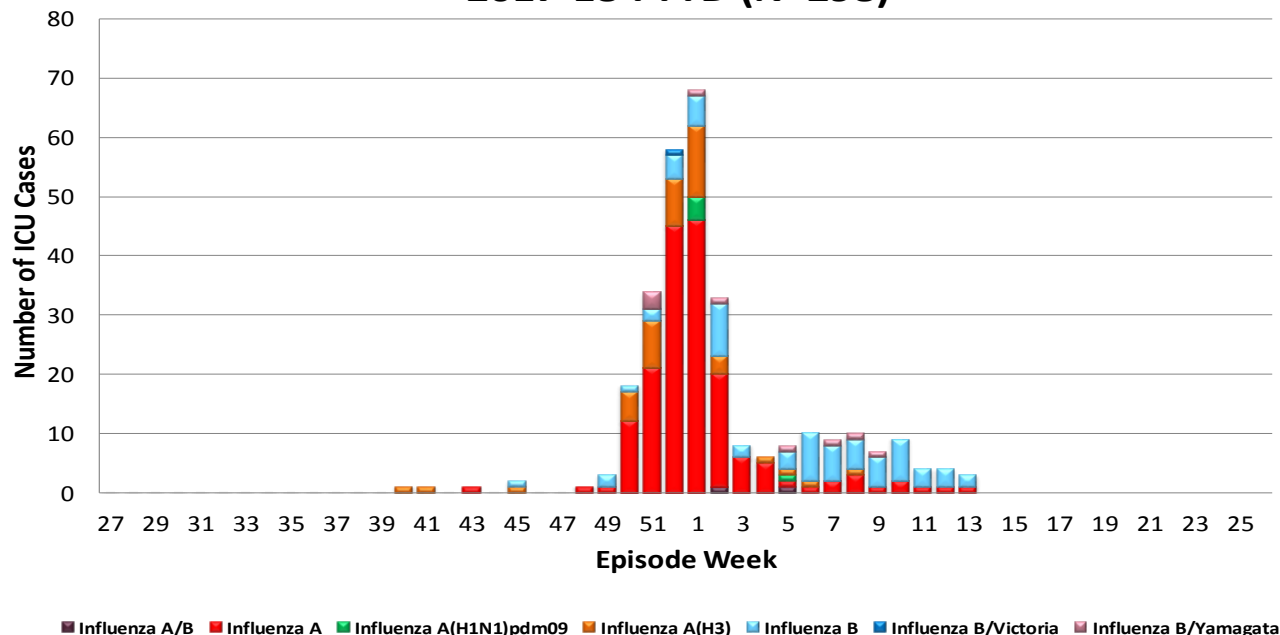


Figure 10. Cumulative Number of Influenza Vaccinations Administered* by Week and Season



* 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](#)