



INFLUENZA WATCH

Week 1
Ending 1/5/19

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.**

Contents

Page 1: Current Season Summary
Page 2: Communiqué
Page 3: Activity Level Indicator
Pages 4-9: Trend Graphs
Page 9: Reporting Information

Current
Week**Current Week 1 (ending 1/5/2019)**

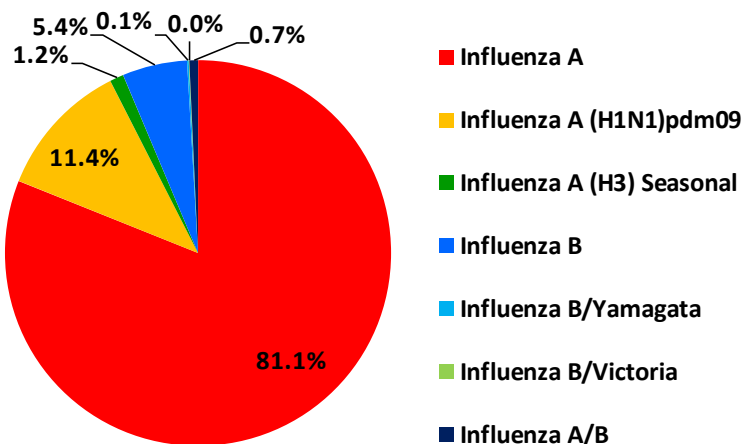
- 357 new influenza detections reported: *Elevated level*
- 5% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 2 new influenza-related deaths reported this week
- 5% of deaths registered with pneumonia and/or influenza: *Expected level*

Current
Season Summary**2,083**

Total Cases

11Deaths[†]**0**

Outbreaks*

Virus Characteristics

[†] Flu deaths less than 18 years of age are reportable to CDPH.

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

Table 1. Influenza Surveillance Indicators.

Indicator	2018-19 Season			2017-18 Season		Prior 3-Year Average**	
	Week 1	Week 52	Total To Date	Week 1	Total To Date	Week 1	Total To Date
All influenza detections reported (rapid or PCR)	357	396	2,083	3,016	10,335	1,199	4,033
Percent of emergency department visits for ILI	5%	6%		15%		8%	
Percent of deaths registered with pneumonia and/or influenza	5%	5%		11%		9%	
Number of influenza-related deaths reported [^]	2	2	11	47	91	17	34

Influenza season is July 1 - June 30, Weeks 27-26. Total deaths reported in prior seasons: 342 in 2017-18, 87 in 2016-17, and 68 in 2015-16.

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

** Includes FYs 2015-16, 2016-17, and 2017-18.

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

Influenza and Encephalitis

Two cases of influenza-associated encephalitis were recently reported to the County Epidemiology Program. Both cases (a [4-year-old](#) and a 26-year-old) were previously healthy. One case had a respiratory sample positive for influenza A (H1N1) and the other was positive for influenza A, type unspecified. Neither case was known to have been immunized against influenza this season or to have taken aspirin after illness onset. Unfortunately, both patients died. The patients were not San Diego County residents, so they are not included among the local influenza-related deaths summarized in this report.

Encephalitis has been reported to be associated with both [seasonal A \(H3N2\)](#) and pandemic A (H1N1) influenza viruses. H1N1-associated encephalitis has been reported more often in [children](#), but can occur in [adults](#). Clinicians should consider influenza-associated encephalopathy in the differential diagnosis of patients with influenza-like illness and seizures or mental status changes, and remain aware of the potential for severe neurologic sequelae associated with influenza virus infection.

For patients with respiratory illness and neurologic signs, diagnostic testing for possible etiologic pathogens associated with neurologic disease, including influenza viruses, is [recommended](#). Only rarely is influenza virus detected in CSF, suggesting that neurologic manifestations might be an indirect effect of influenza respiratory tract infection. Clinicians also should consider a diagnosis of Reye syndrome in patients with viral illness and altered mental status. Salicylates and salicylate-containing products should [not be administered](#) to children with influenza or other viral infections because of the increased risk for developing Reye syndrome.

[Antiviral treatment](#) should be initiated as soon as possible for any hospitalized patient with suspected influenza virus infection, including those with neurologic symptoms. Although respiratory specimens should be obtained and sent for appropriate diagnostic testing before administering antiviral agents, clinicians should not wait for the results before beginning treatment. Antiviral medications have been shown to decrease the risk for complications from influenza; however, the effectiveness of antiviral treatment to prevent influenza-associated encephalopathy sequelae is unknown.

CDC [recommends](#) that everyone aged >6 months receive annual influenza vaccination to prevent illness and complications from infection with influenza.

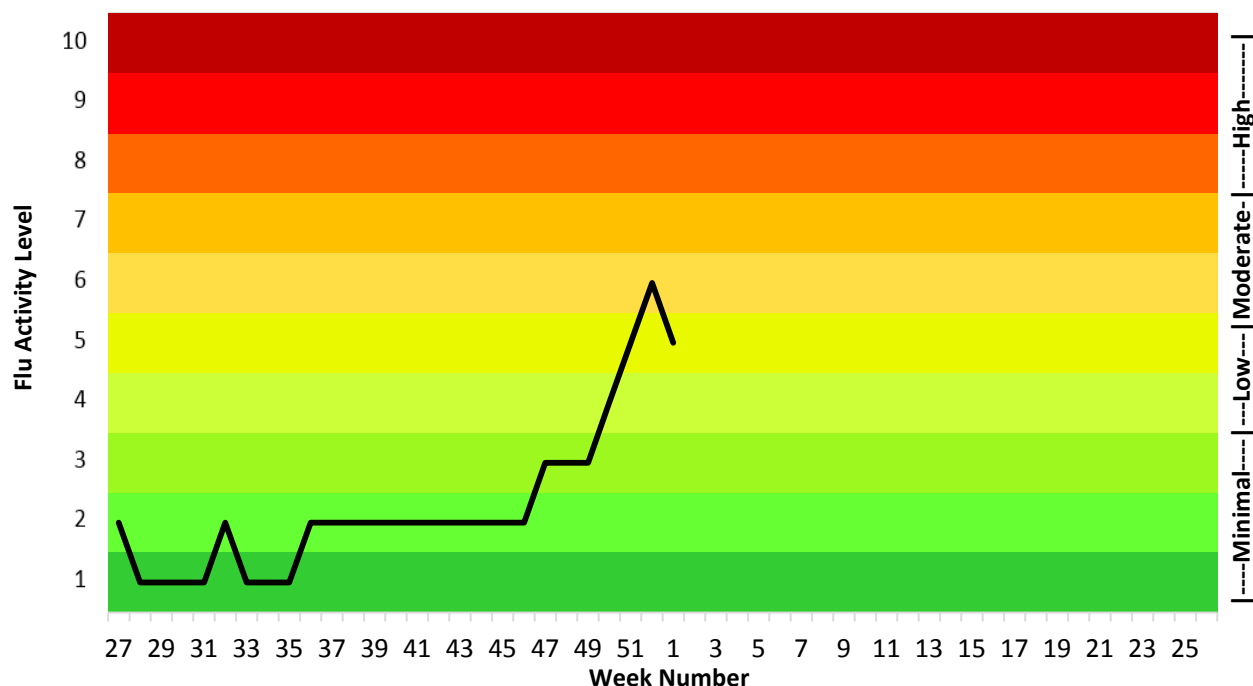
Table 2. Influenza Detections Reported, FY 2018-19*

Positive Test Type/Subtype	Count	Percent
Influenza A	1,689	81.1%
Influenza A (H1N1)pdm09	238	11.4%
Influenza A (H3) Seasonal	24	1.2%
Influenza B	113	5.4%
Influenza B/Yamagata	3	0.1%
Influenza B/Victoria	1	0.0%
Influenza A/B	15	0.7%
Total	2,083	100%

* Season is July 1 - June 30

INFLUENZA WATCH

Figure 1. Influenza Activity Level for Emergency Department ILI.



Legend	Minimal			Low		Moderate		High		
	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4	LEVEL 5	LEVEL 6	LEVEL 7	LEVEL 8	LEVEL 9	LEVEL 10
	< mean	≥ mean and <1 standard deviation above mean	≥1 and <2 standard deviations above mean	≥2 and <3 standard deviations above mean	≥3 and <4 standard deviations above mean	≥4 and <5 standard deviations above mean	≥5 and <6 standard deviations above mean	≥6 and <7 standard deviations above mean	≥7 and <8 standard deviations above mean	≥8 standard deviations above mean

Influenza Activity Indicator:

The activity levels show how the current week's ED ILI% (emergency department influenza-like-illness, percent of all visits) compares to the mean, and number of standard deviations above of the mean, of the non-influenza season weeks (CDC disease weeks 27-39) observed from the prior five seasons.

There are 10 activity levels, classified as: Minimal (levels 1-3), Low (levels 4-5), Moderate (levels 6-7), and High (levels 8-10). An activity level of 1 corresponds to when the ED ILI% is below the mean; level 2 corresponds to when the ED ILI% is less than 1 standard deviation above the mean; level 3 corresponds to when the ED ILI% is more than 1 but less than 2 standard deviations above the mean, and so on, with an activity level of 10 corresponding to when the ED ILI% is at 8 or more standard deviations above the mean.

INFLUENZA WATCH

Figure 2. Percent of Emergency Department Visits for ILI Chief Complaint by Week and Season.

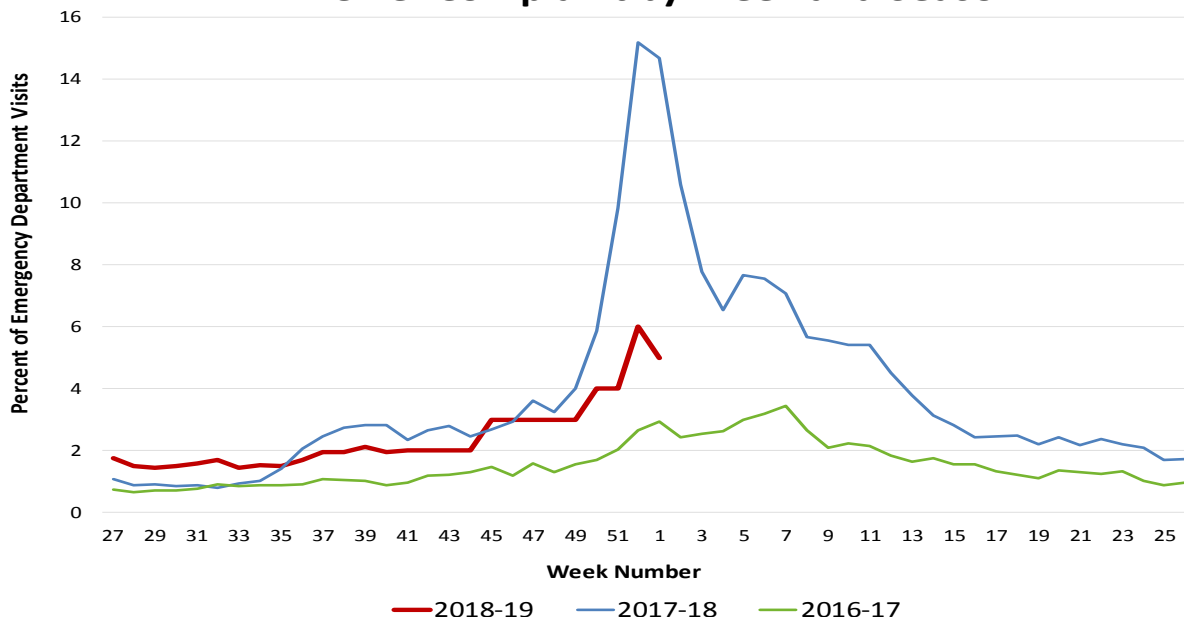
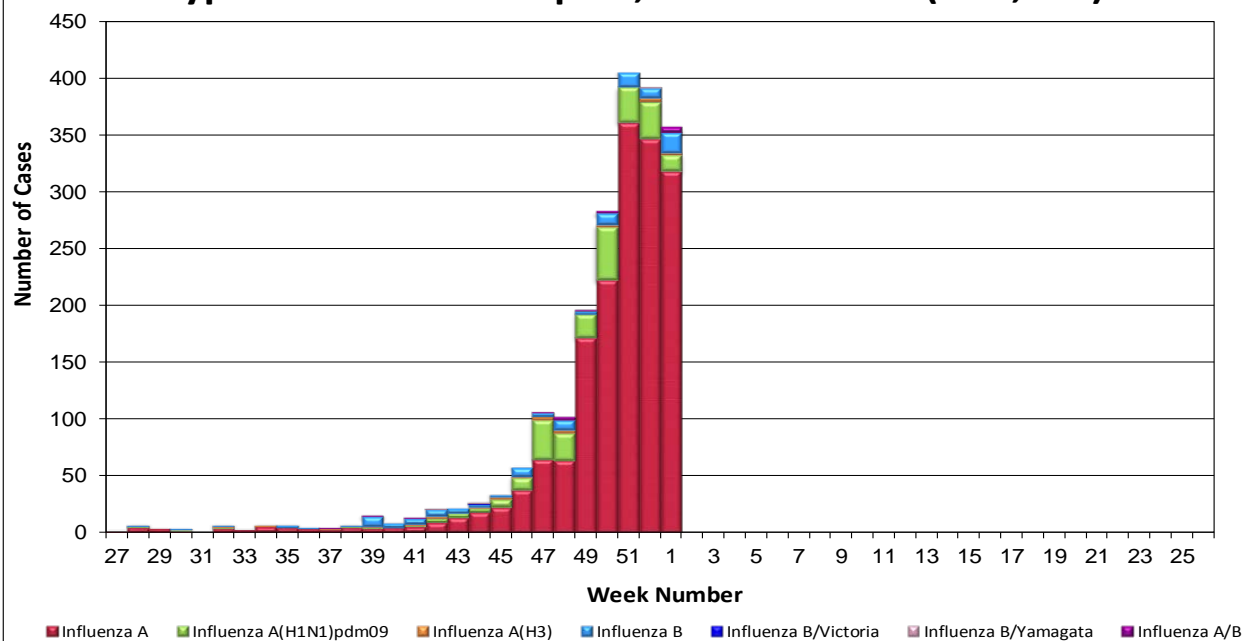


Figure 3. San Diego County Influenza Detections by Type and Week of Report, 2018-19 FYTD (N=2,083).



INFLUENZA WATCH

Week 1
Ending 1/5/19

Figure 4. Proportion of Influenza Detections by Age and Season, 2014-15 to 2018-19.

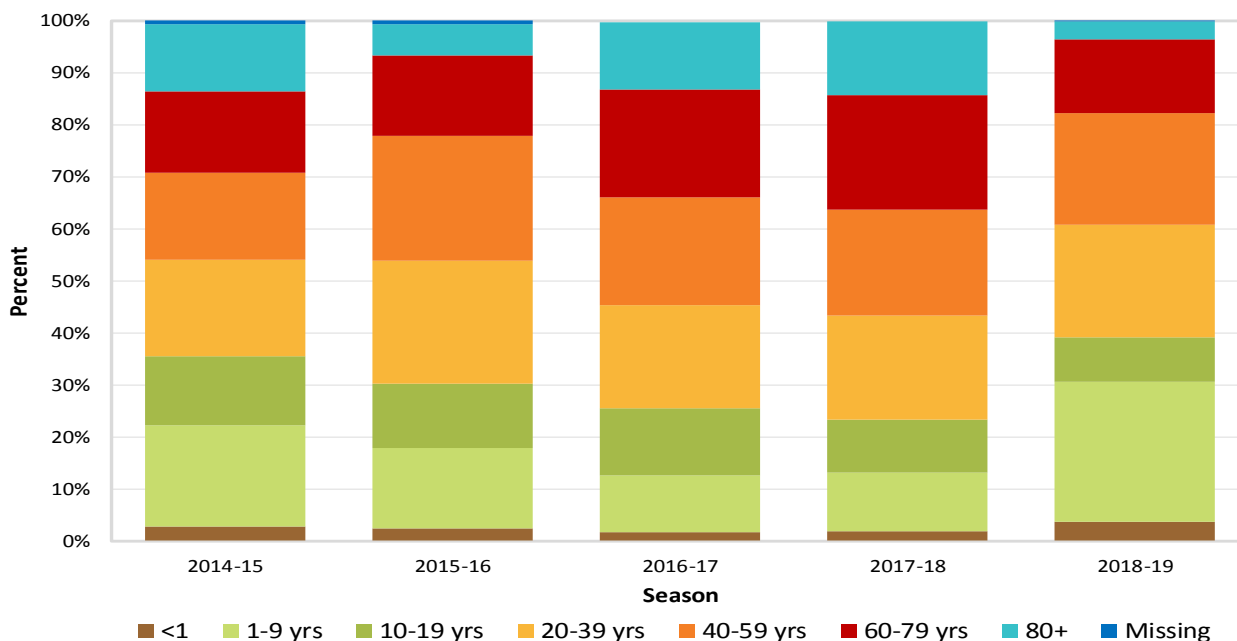
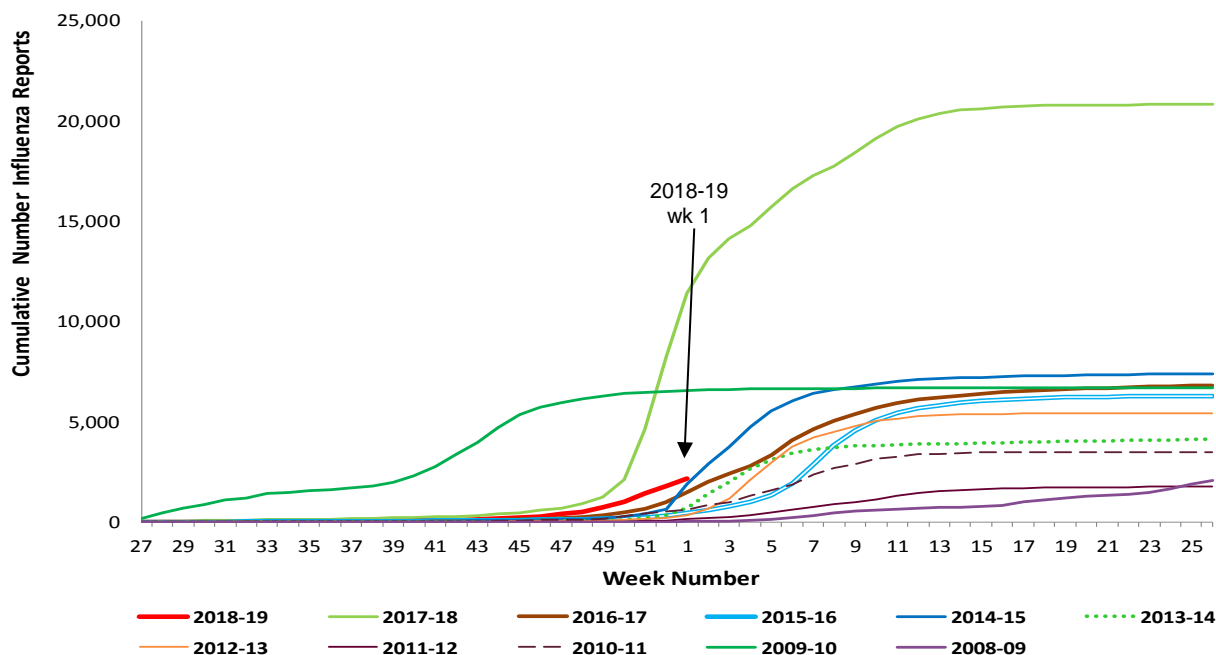


Figure 5. Cumulative Influenza Case Reports by Episode Week & Season.



INFLUENZA WATCH

Week 1
Ending 1/5/19

Figure 6. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by Week and Season Compared to 5-Year Baseline & Upper 95% Threshold Values (Serfling Method).

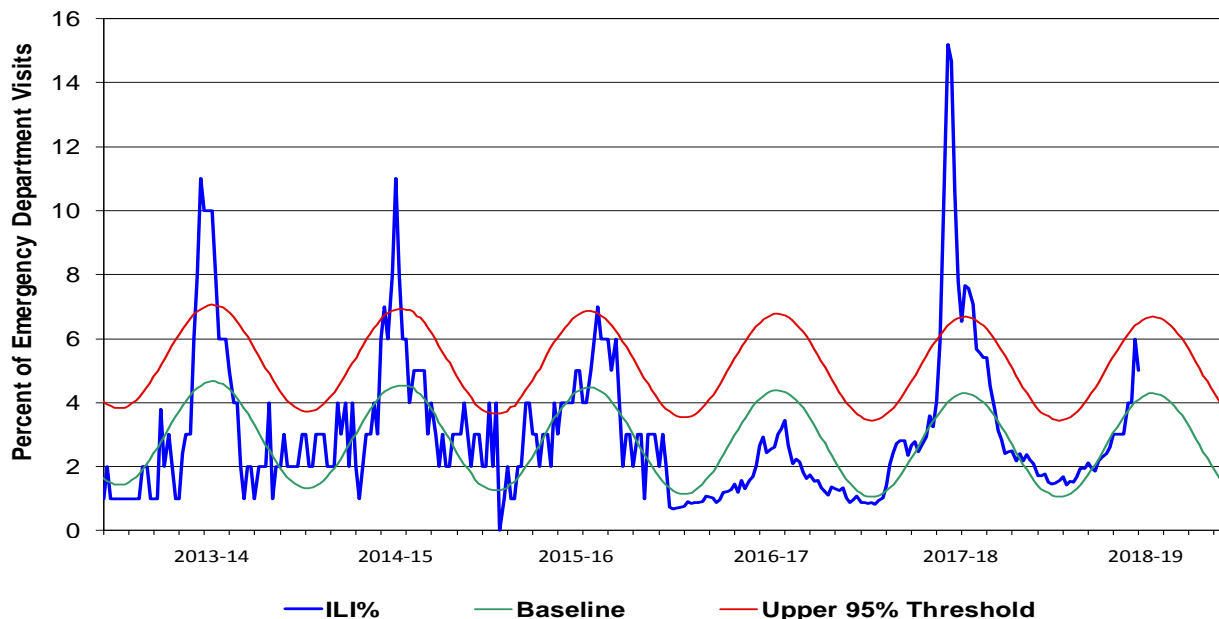
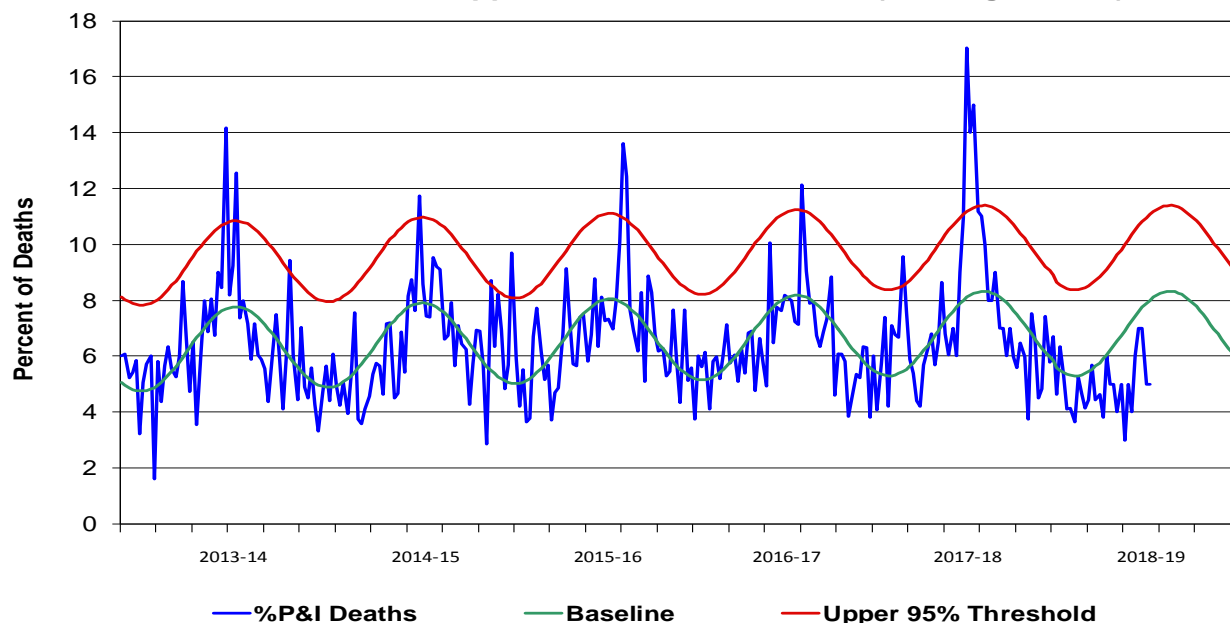


Figure 7. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and Season Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method).



INFLUENZA WATCH

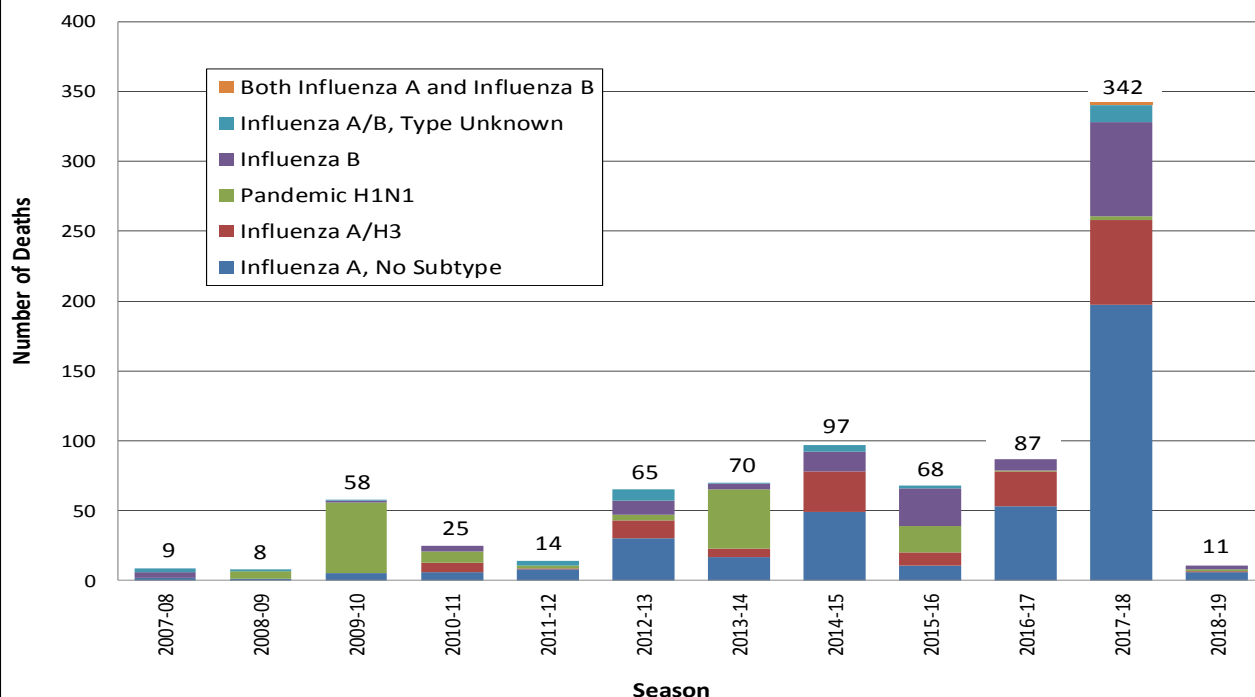
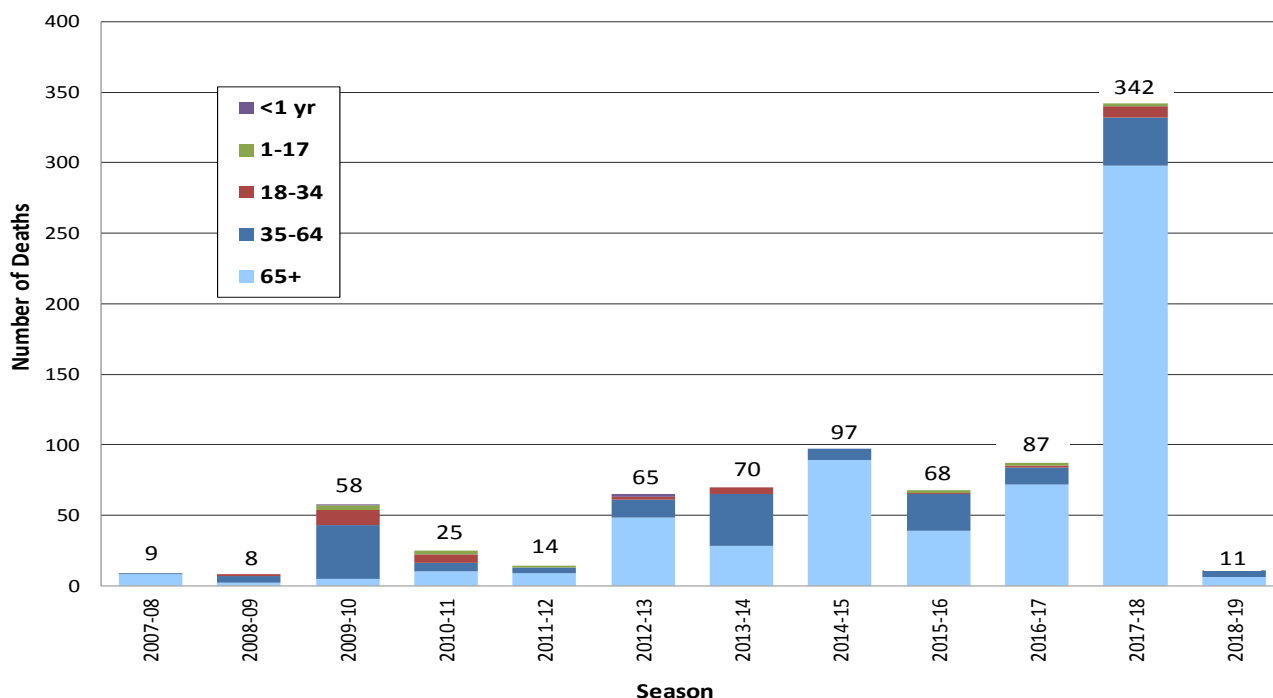
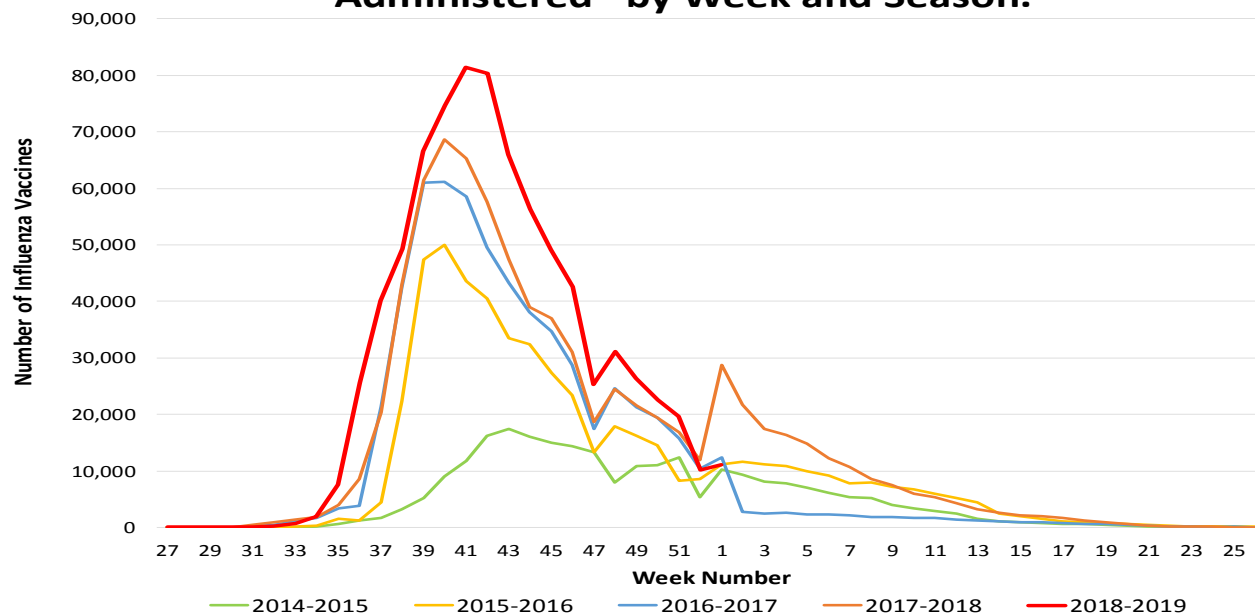
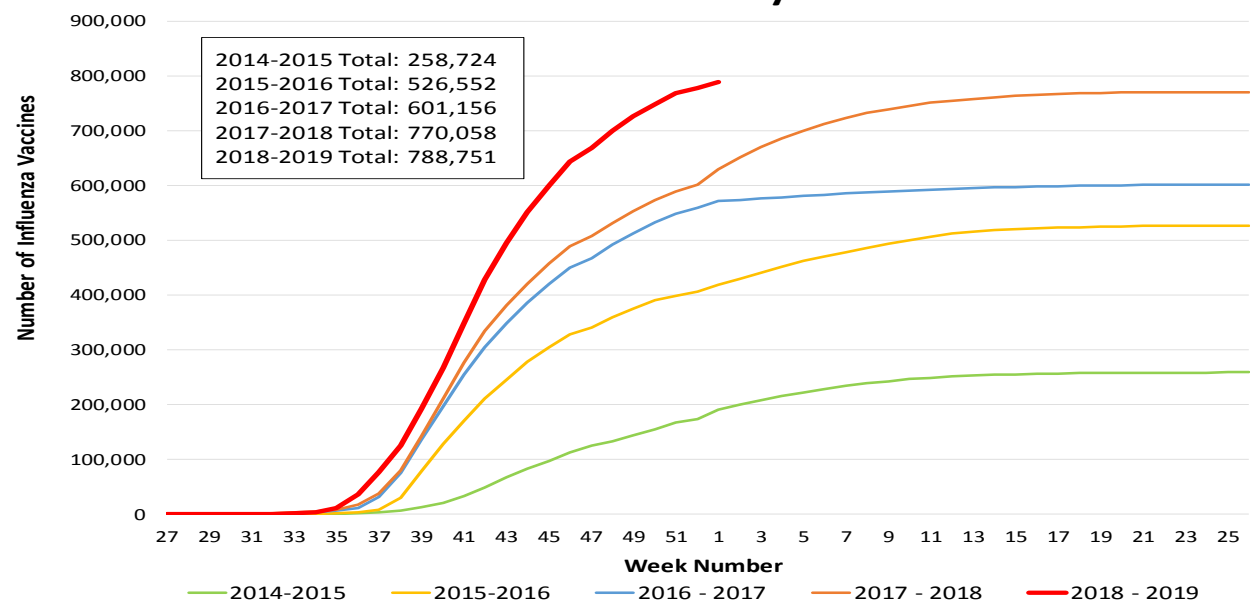
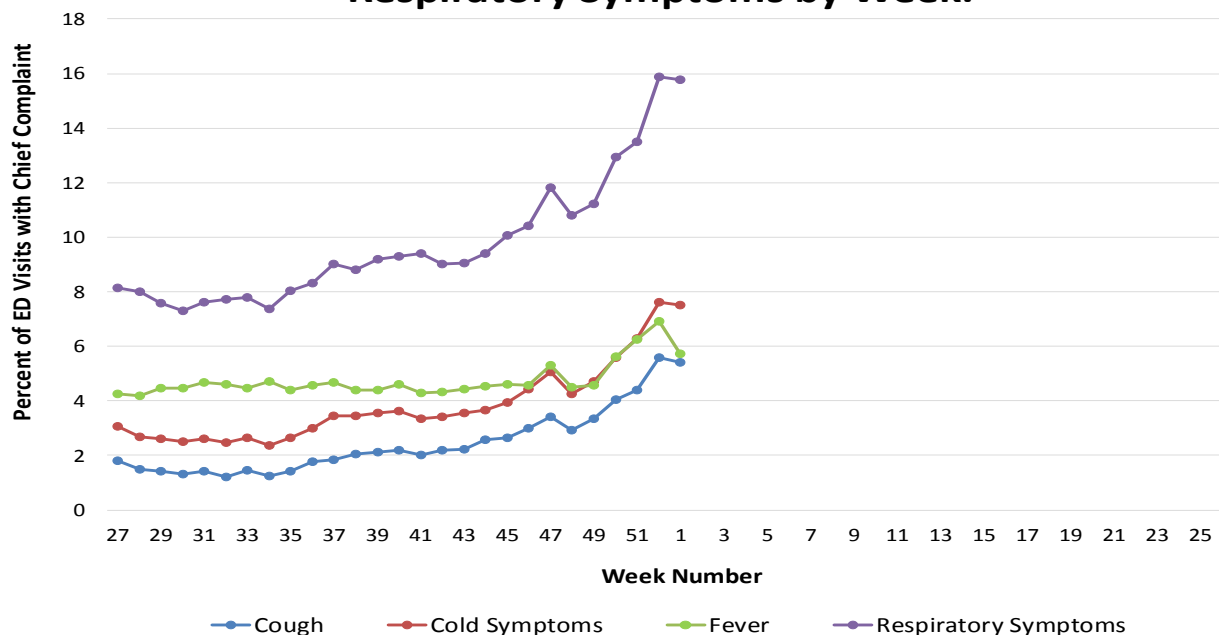
Figure 8. Influenza Deaths by Type and Season.

Figure 9. Influenza Deaths by Age and Season.


Figure 10. Number of Influenza Vaccinations Administered* by Week and Season.**Figure 11. Cumulative Number of Influenza Vaccinations Administered* by Week and Season.**

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

Figure 12. Percent of Emergency Department Visit Chief Complaints for Cough, Cold, Fever, or Respiratory Symptoms by Week.



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 [Confidential Morbidity Report Form](#), or an [Influenza Case Report Form](#), and/or a printed laboratory result. If known, please indicate if the patient was admitted to ICU and/or died, and/or is a resident of a congregate living facility.

Regarding sending influenza specimens to [Public Health Laboratory](#) (PHL) for confirmation, please use the updated PHL [Test Request Form](#) and contact PHL at **(619) 692-8500** with any questions. Contact the Epidemiology Program by telephone **(619) 692-8499** or email to EpiDiv.HHSA@sdcounty.ca.gov with questions regarding influenza data.

Resources

County of San Diego Epidemiology Program website www.sdepi.org
 County of San Diego [2017-18 Influenza Season Summary](#)
 Current Week Influenza Watch [Slide Deck](#) – A slide presentation version of this report
 County of San Diego Immunization Program (SDIZ) www.sdiz.org

California Department of Public Health (CDPH) [Influenza Update](#)
 Centers for Disease Control and Prevention (CDC) [Influenza Surveillance](#)