



INFLUENZA WATCH

Week 44
Ending 11/3/18

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 44 (ending 11/3/2018)**

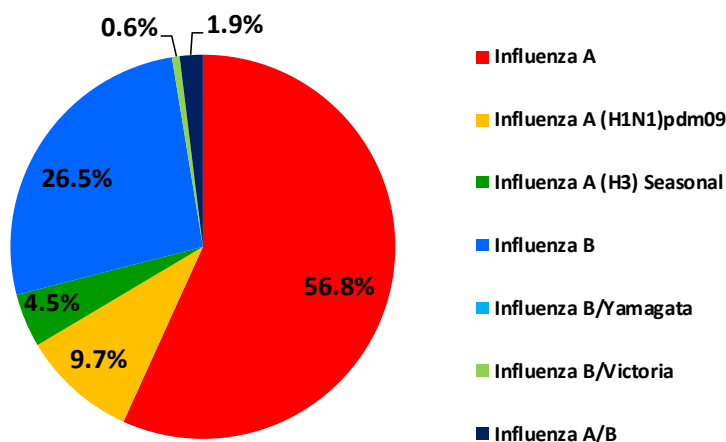
- 26 new influenza detections reported: *Expected level*
- 2% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 1 influenza-related death reported this week
- 4% of deaths registered with pneumonia and/or influenza: *Expected level*

Current
Season Summary**155**

Total Cases

1Deaths[†]**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 ≥2 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 44	Week 43	Total To Date	Week 44	Total To Date	Week 44	Total To Date
All influenza detections reported (rapid or PCR)	26	24	155	65	383	28	197
Percent of emergency department visits for ILI	2%	2%		2%		2%	
Percent of deaths registered with pneumonia and/or influenza	4%	5%		7%		6%	
Number of influenza-related deaths reported [^]	1	0	1	0	2	0	1

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.

High-dose flu vaccine may offer advantages for seniors

The high-dose flu vaccine provided better protection against influenza hospitalization for seniors than the standard vaccine, according to a recent study from the Oregon Public Health Division that matched cases by age, residence, and other factors.

Based on earlier studies comparing vaccines, they noted that the "healthy vaccine" phenomenon can inflate vaccine effectiveness (VE), while an "at-risk vaccinee" bias can deflate VE estimates. This latter bias may particularly apply with a high-dose vaccine targeted a frailer adults. As another way to compare high-dose and regular flu vaccines, the researchers used immunization registry records and hospitalizations for lab-confirmed flu to see how they performed in groups matched by age, gender, residence type, race-ethnicity, provider bias, and zip code.

Using data from the Portland area during the 2016-17 flu season, a simple aggregate comparison of the two vaccine groups showed no VE difference against flu-related hospitalization. However, adding different categories increased VE, with the final analysis of 23,712 matched pairs suggesting that the high-dose vaccine was 30.7% more effective in preventing flu-related hospitalization (95% confidence interval, 8% to 48%).

The researchers suggested that VE studies include matching factors that reflect local geographic areas, age, and other potential provider biases. They concluded, "As a warning, non-matched or overly simple matched VE study designs may substantially under-estimate VE."

The study may be found at: [Assessing the effectiveness of high-dose influenza vaccine in preventing hospitalization among seniors, and observations on the limitations of effectiveness study design.](#)

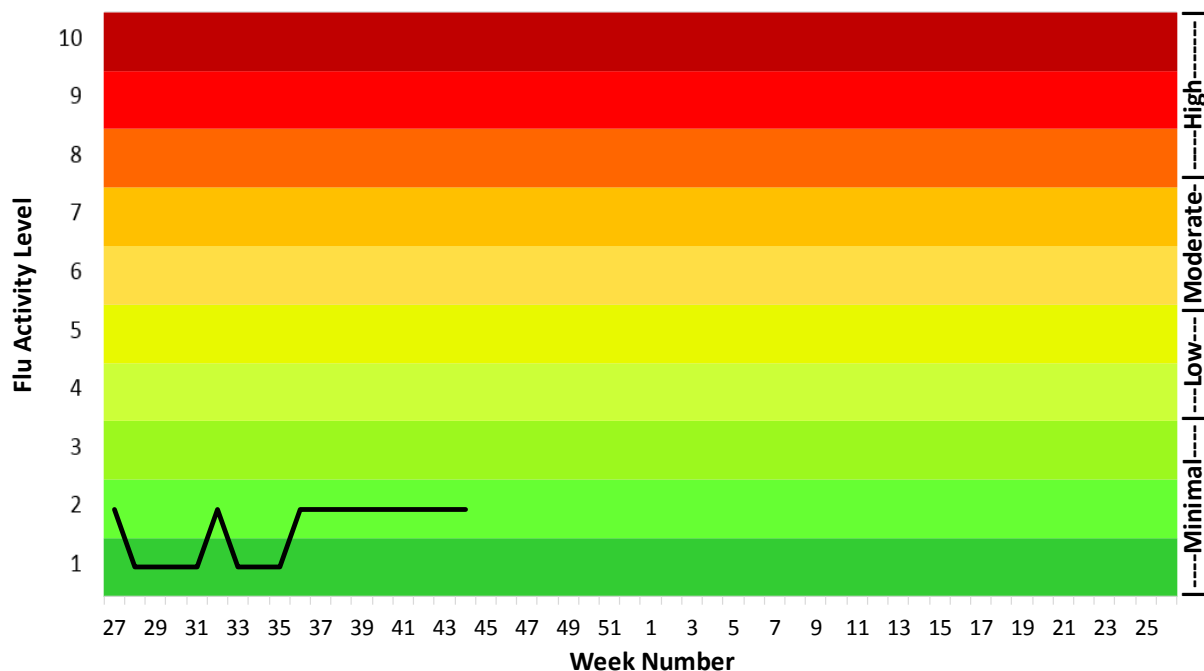
Table 2. Influenza Detections Reported, FY 2018-19*

Positive Test Type/Subtype	Count	Percent
Influenza A	88	56.8%
Influenza A (H1N1)pdm09	15	9.7%
Influenza A (H3) Seasonal	7	4.5%
Influenza B	41	26.5%
Influenza B/Yamagata	0	0.0%
Influenza B/Victoria	1	0.6%
Influenza A/B	3	1.9%
Total	155	100%

** Season is July 1 - June 30

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Figure 1. Influenza Activity Level: ED 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.

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

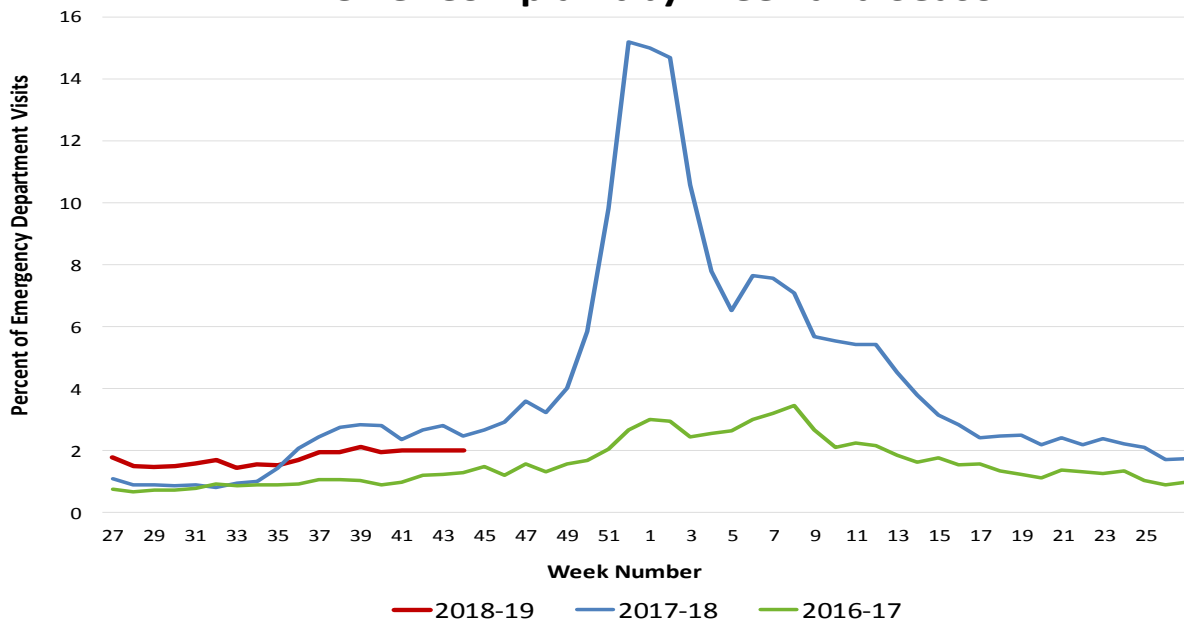
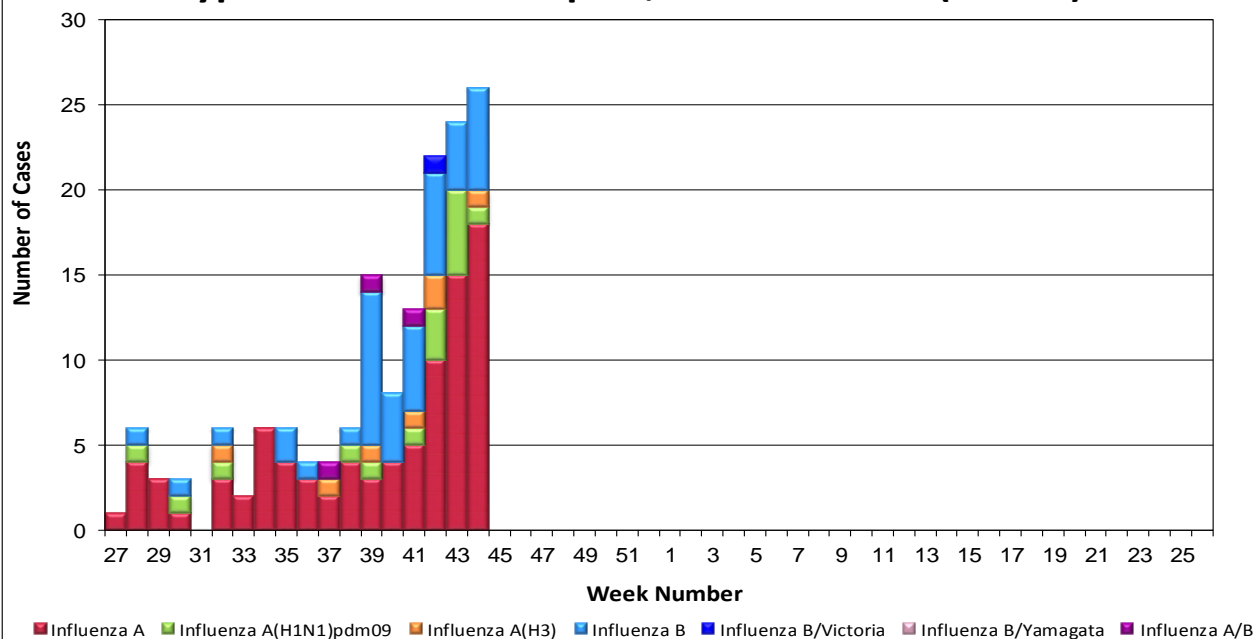


Figure 3. San Diego County Influenza Detections by Type and Week of Report, 2018-19 FYTD (N=155).



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

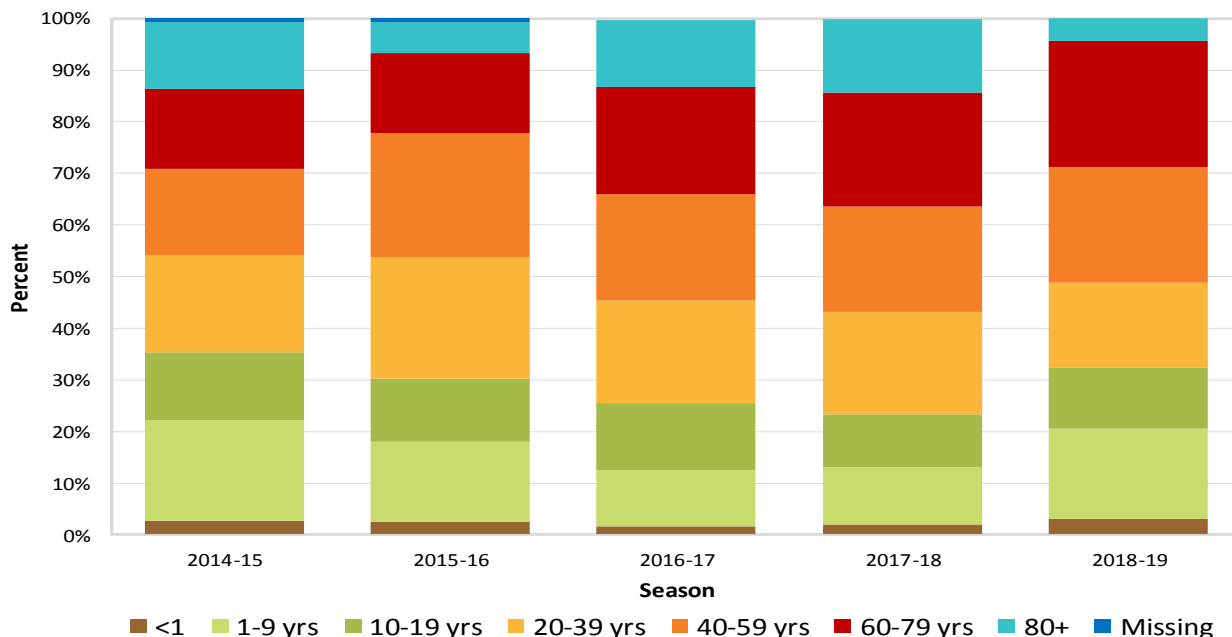
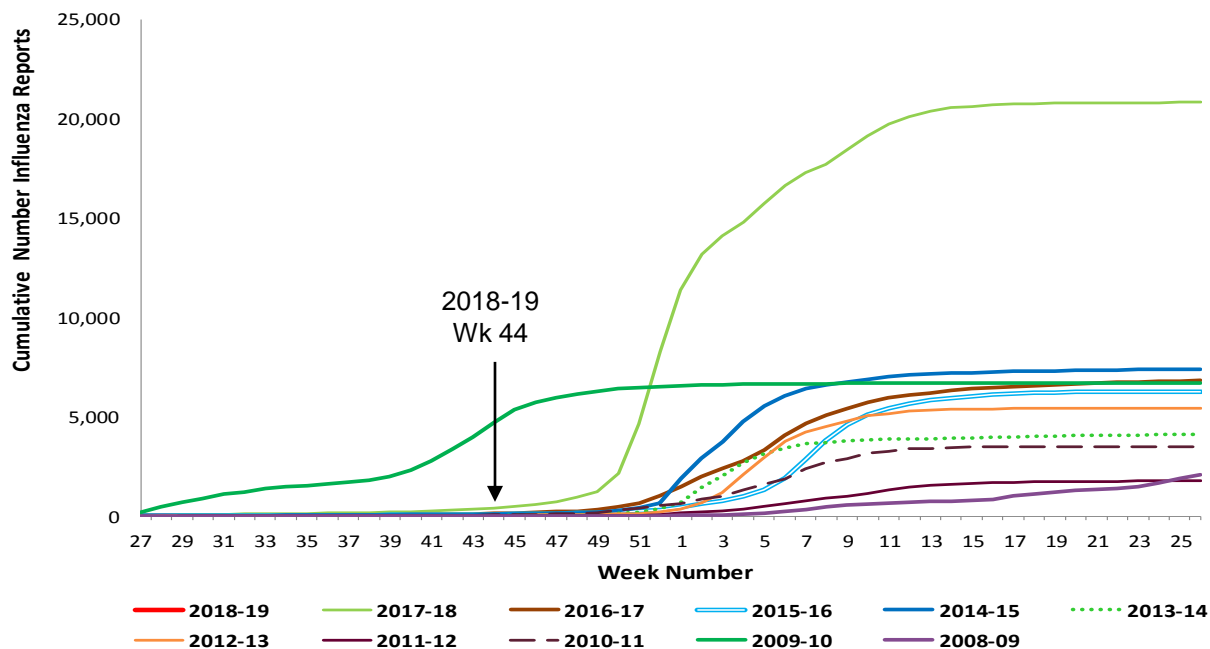


Figure 5. Cumulative Influenza Case Reports by Episode Week & Season.



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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).

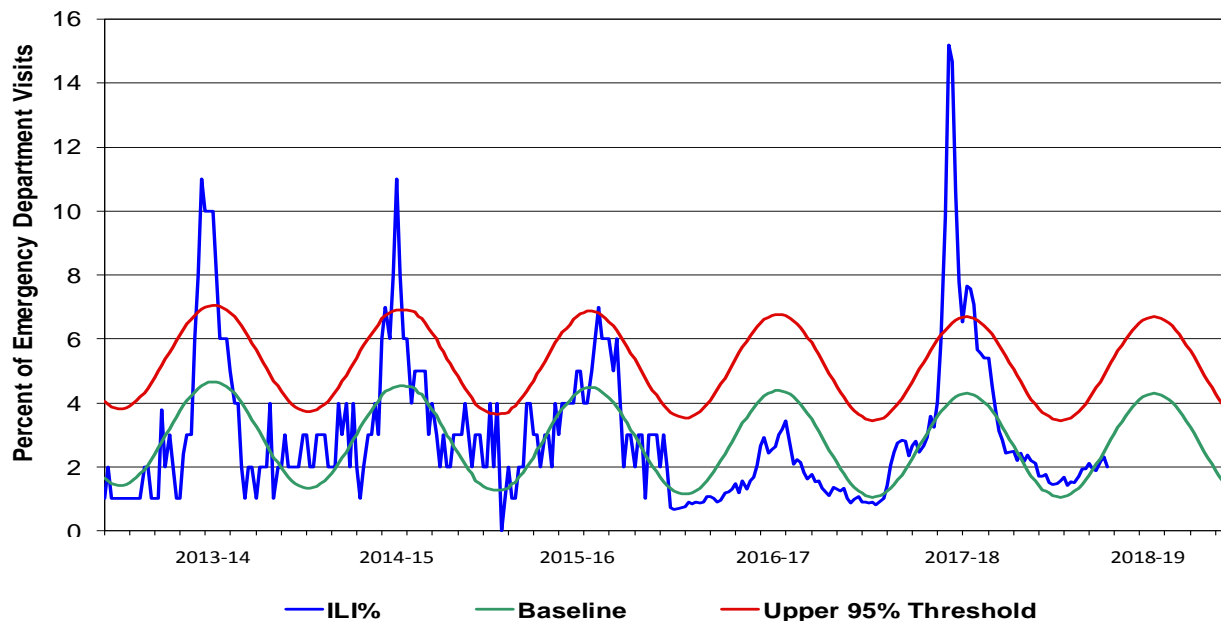
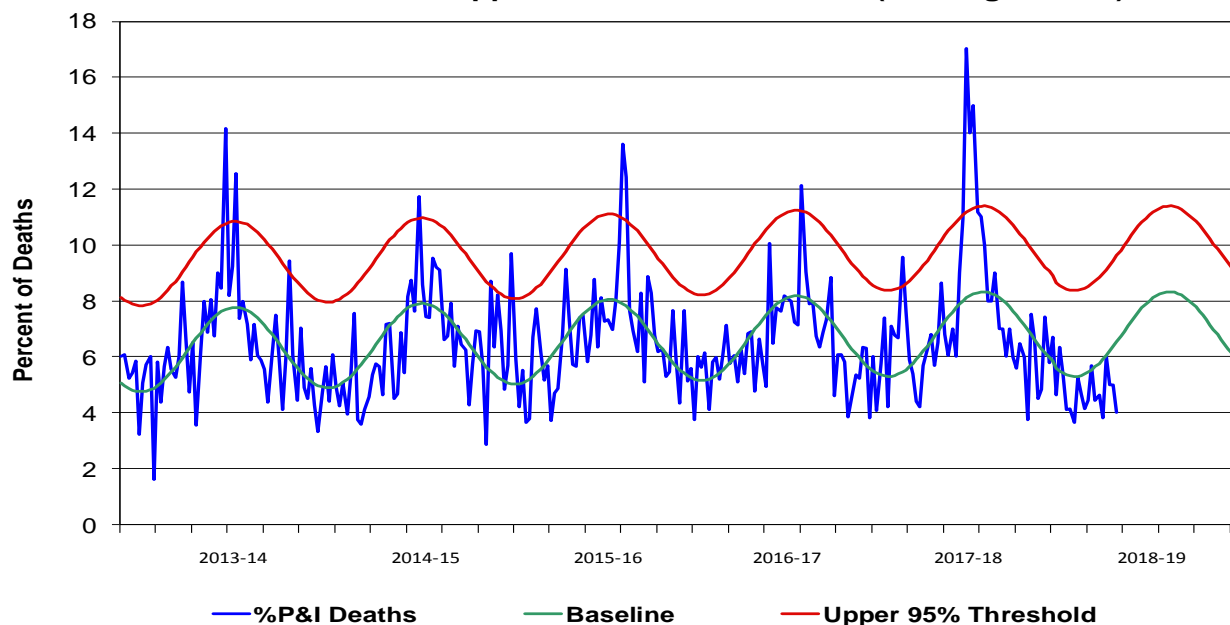


Figure 7. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and Season Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method).



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Figure 7. Influenza Deaths by Type and Season.

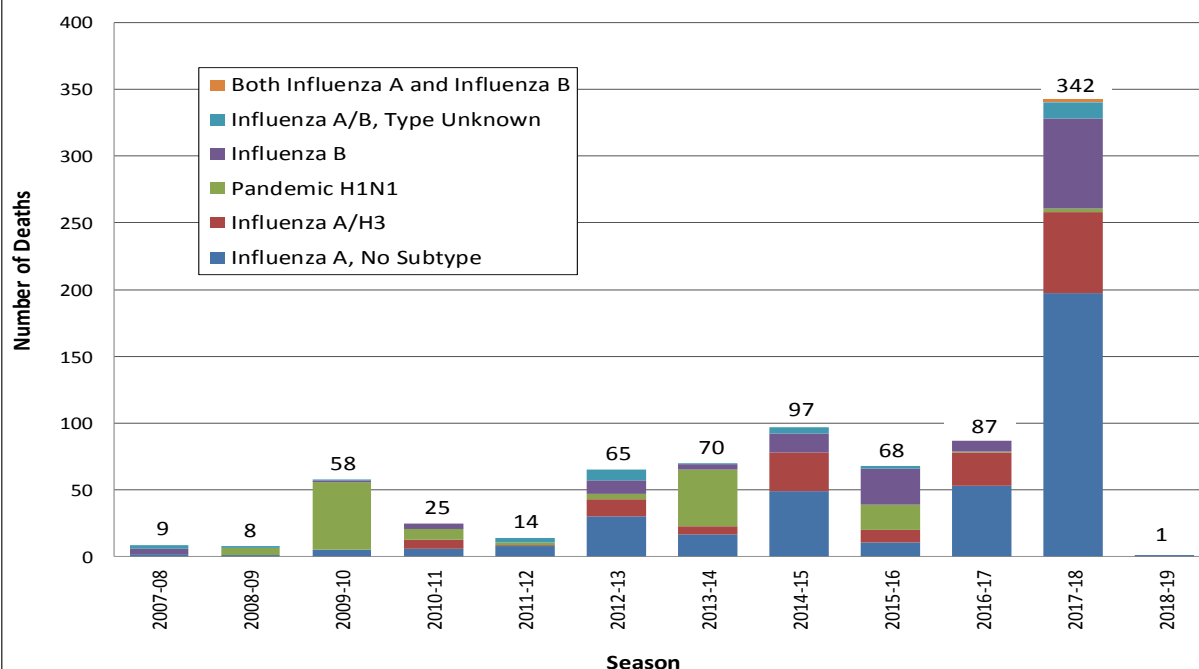


Figure 8. Influenza Deaths by Age and Season.

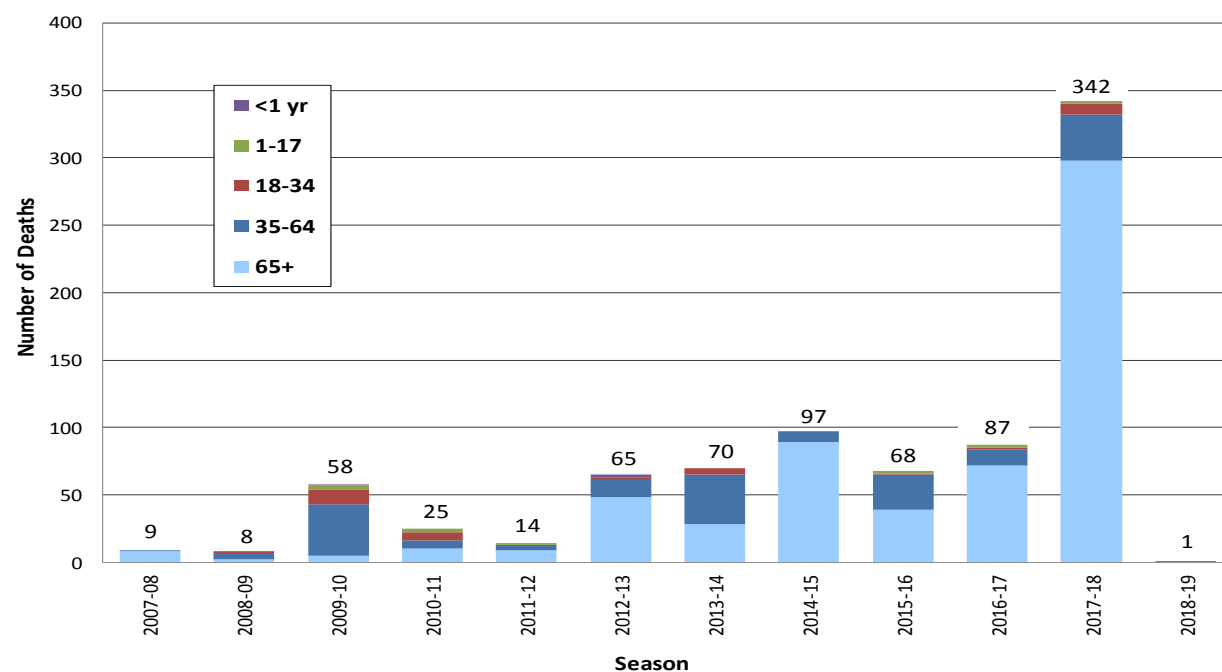
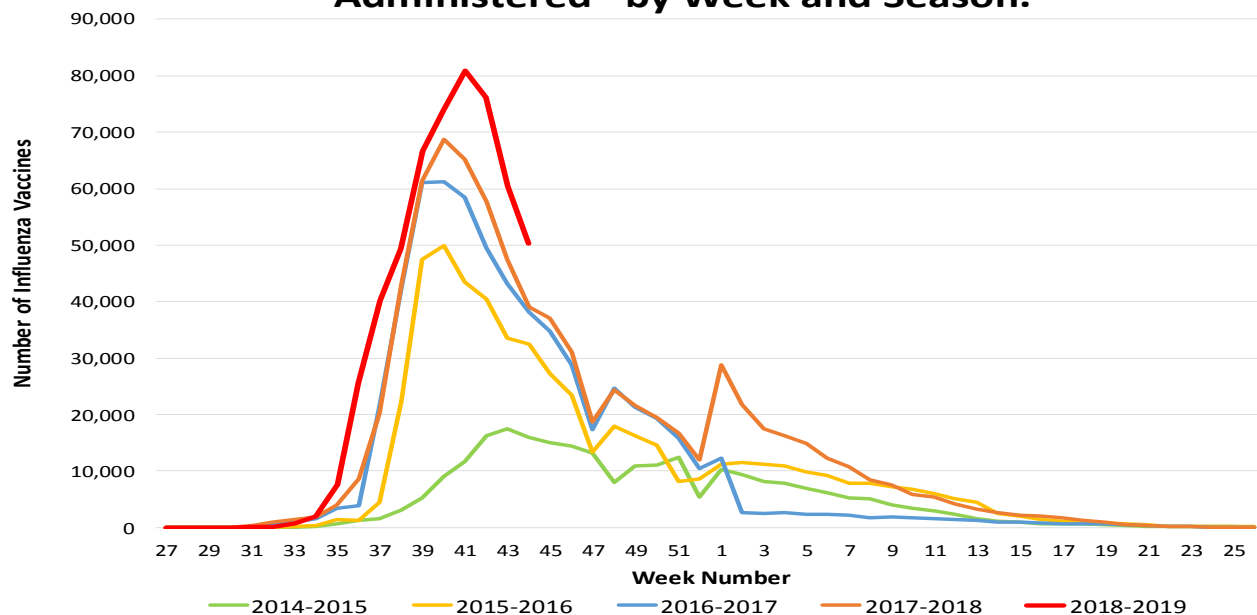
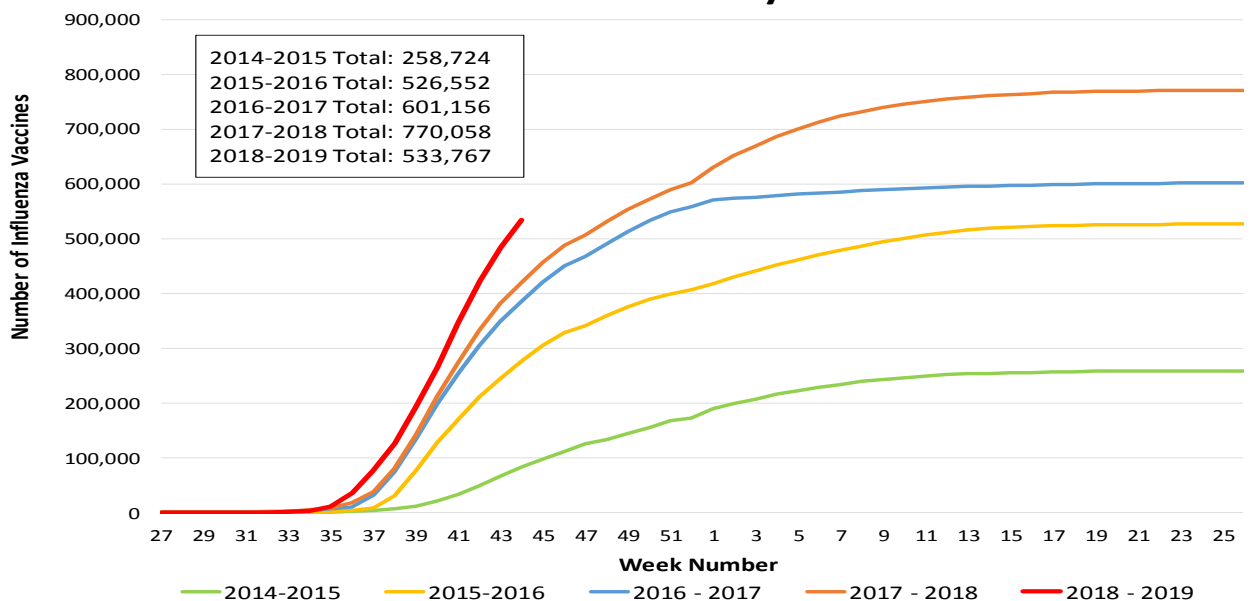
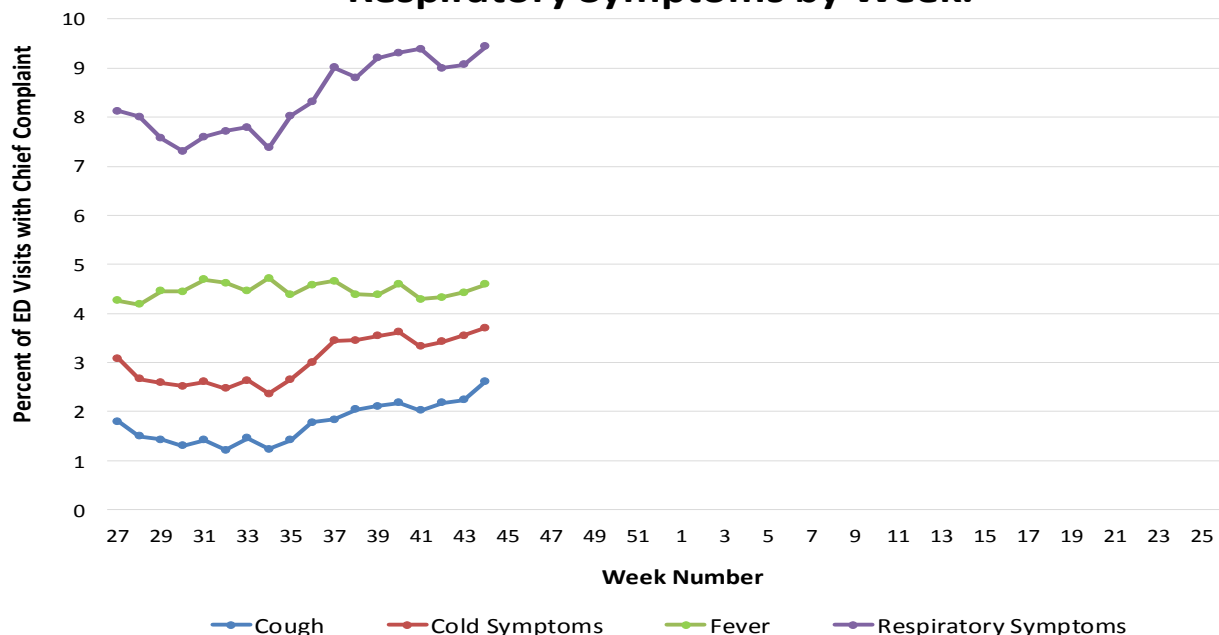


Figure 10. Number of Influenza Vaccinations Administered* by Week and Season.**Figure 11. Cumulative Number of Influenza Vaccinations Administered* by Week and Season.**

* 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](#)