



INFLUENZA WATCH

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 3-7: Trend graphs
- Page 7: Reporting Information

Current Week

Current Week 6 (ending 2/11/2017)

- 555 new influenza detections reported: *Elevated*
- 6% influenza-like-illness (ILI) among emergency department visits: *Expected level*
- 5 influenza-related deaths reported this week
- 7% of deaths registered with pneumonia and/or influenza: *Expected level*

Current Season Summary

3,335
Total Cases

72
ICU Cases

44
Deaths

27
Outbreaks

Virus Characteristics

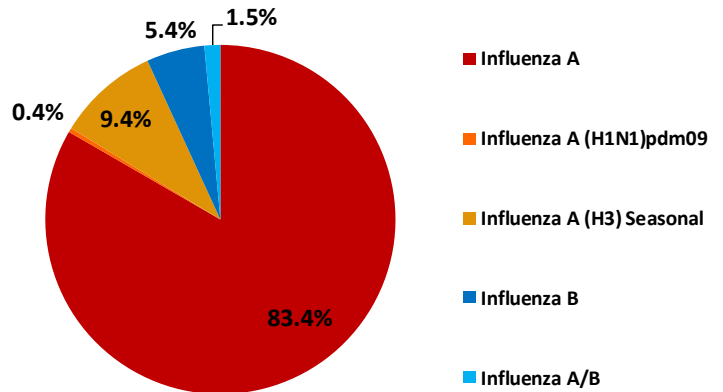


Table 1. Influenza Surveillance Indicators

Indicator	FY 2016-17*			FY 2015-16		Prior 3-Year Average**	
	Week 6	Week 5	FYTD#	Week 6	FYTD#	Week 6	FYTD#
All influenza detections reported (rapid or PCR)	555	379	3,335	616	1,939	472	3,806
Percent of emergency department visits for ILI	6%	5%		6%		7%	
Percent of deaths registered with pneumonia and/or influenza	7%	8%		7%		8%	
Number of influenza-related deaths reported^	5	6	44	2	12	7	44

* FYTD=Fiscal Year To Date (FY is July 1 - June 30, Weeks 27-26). Total deaths reported in prior years: 68 in 2015-16, 97 in 2014-15, and 70 in 2013-14.

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

** Includes FYs 2013-14, 2014-15, and 2015-16.

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

Intraseason Influenza Vaccine Protection

Recent studies suggest that influenza vaccine effectiveness (VE) may wane over the course of an influenza season, leading to suboptimal VE during late influenza seasons. A recent study published in *Clinical Infectious Diseases* examined the association between influenza VE and time since vaccination among patients ≥ 9 years old with medically-attended acute respiratory illness.

Using data in the US Influenza Vaccine Effectiveness Network pooled from the 2011-12 through 2014-15 influenza seasons, the researchers found decreasing VE with increasing time since vaccination for influenza A(H3N2), influenza A(H1N1)pdm09, and influenza B viruses. Maximum VE was observed shortly after vaccination, followed by a decline in VE of about 7% (absolute) per month for influenza A(H3N2) and influenza B and 6% – 11% per month for influenza A(H1N1)pdm09 viruses. VE remained greater than zero for at least six months for influenza A(H1N1)pdm09 and influenza B and at least five months for influenza A(H3N2) viruses.

The decreasing influenza vaccine protection observed with increasing time since vaccination is consistent with intraseason waning of host immunity, but bias or residual confounding could explain these findings. Given the uncertain timing of influenza activity each season, it is best to get the vaccine when available and to encourage those who remain unvaccinated to get the shot when they can do so.

For more information about the study may be found at: [Intraseason waning of influenza vaccine protection: Evidence from the US Influenza Vaccine Effectiveness Network, 2011-12 through 2014-15](#). More information about influenza VE is available at the Centers for Disease Control and Prevention [Influenza Vaccine Effectiveness website](#).

Anyone who has not gotten a flu shot this year can go to the [San Diego Immunization Program website](#) for some locations in the county where vaccine is currently available.

Table 2. Influenza Detections Reported, FY 2016-17*

Positive Test Type/Subtype	Week 6	Total To-Date
Influenza A†	448	2,780
Influenza A(H1N1) Pandemic 2009	1	13
Influenza A (H3) Seasonal	64	314
Influenza B†	38	179
Influenza B/Victoria	0	0
Influenza B/Yamagata	0	0
Influenza A/B†	4	49
Total	555	3,335

* 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.

Influenza Watch

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

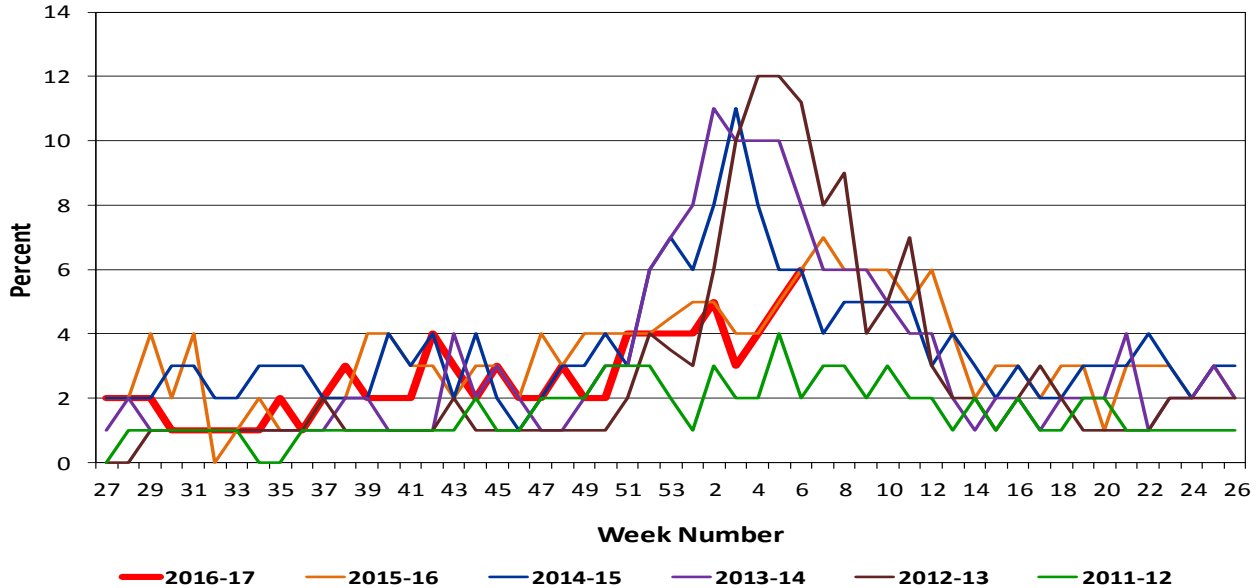
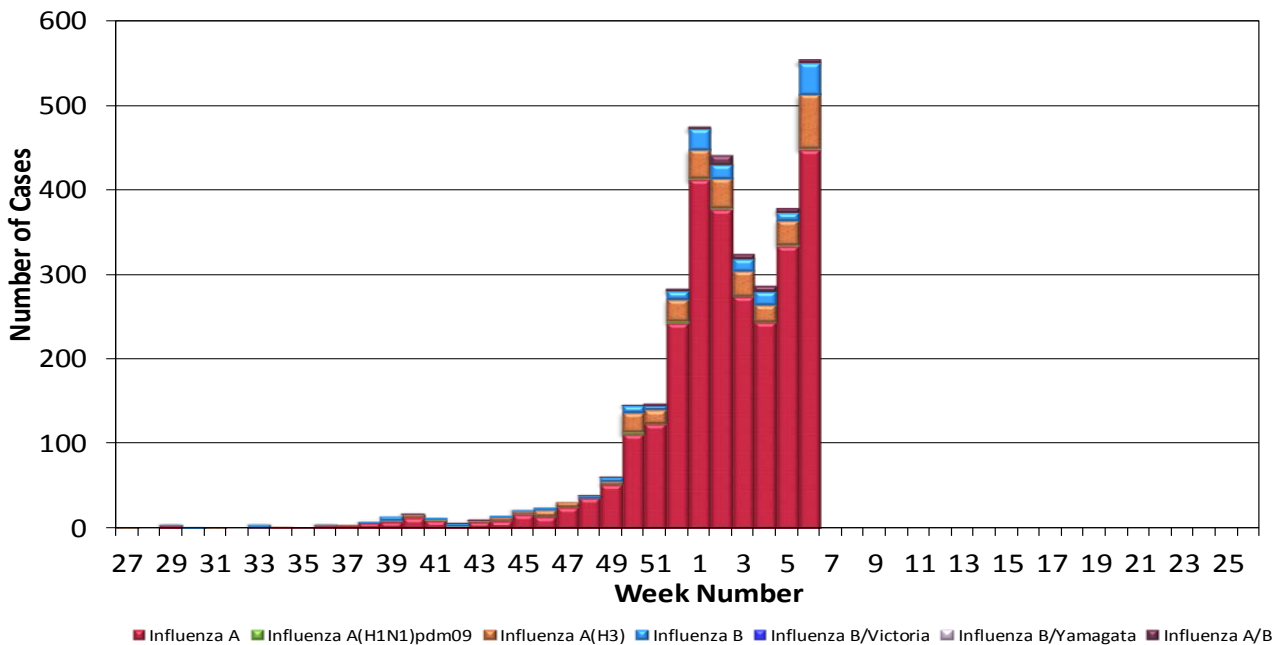


Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2016-17 (N=3,335)



Influenza Watch

Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2011-12 to 2016-17 YTD

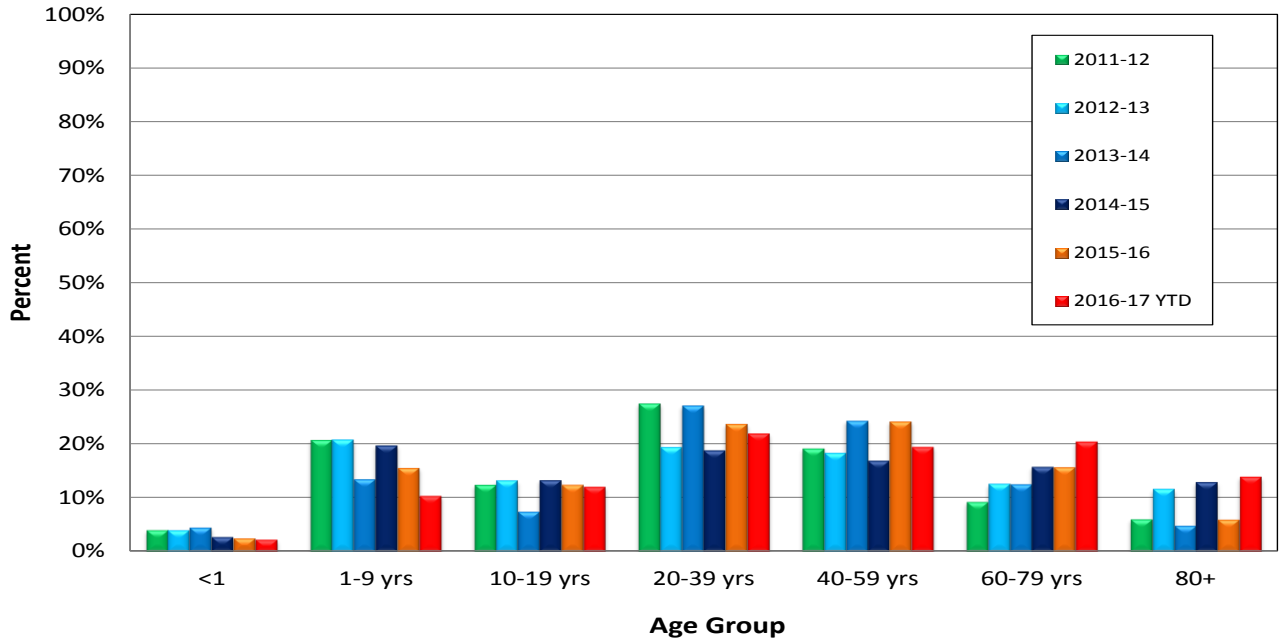


Figure 4. Cumulative Influenza Case Reports by Week & Season

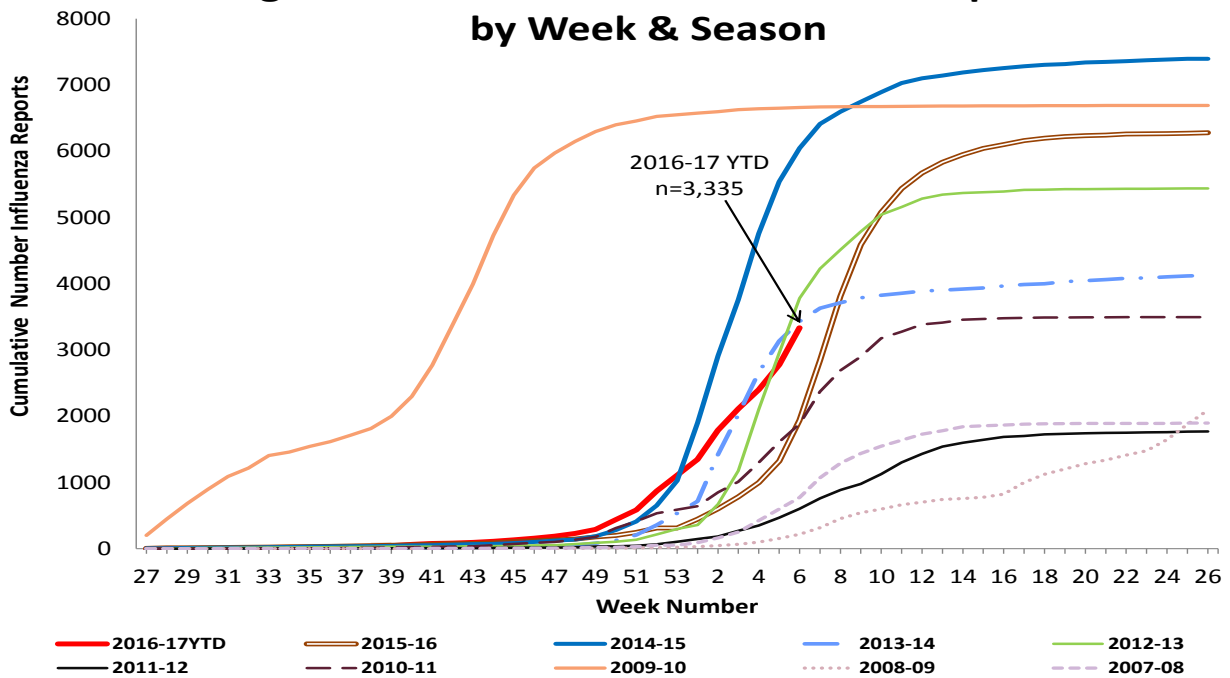


Figure 5. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by Week and FY Compared to 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

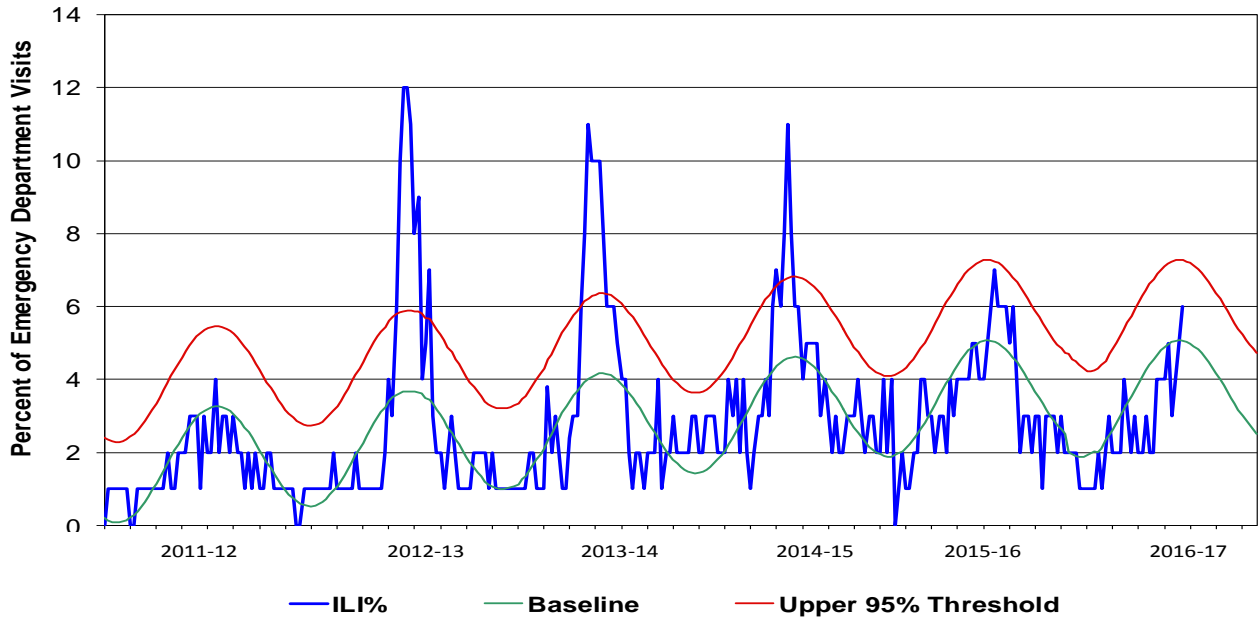
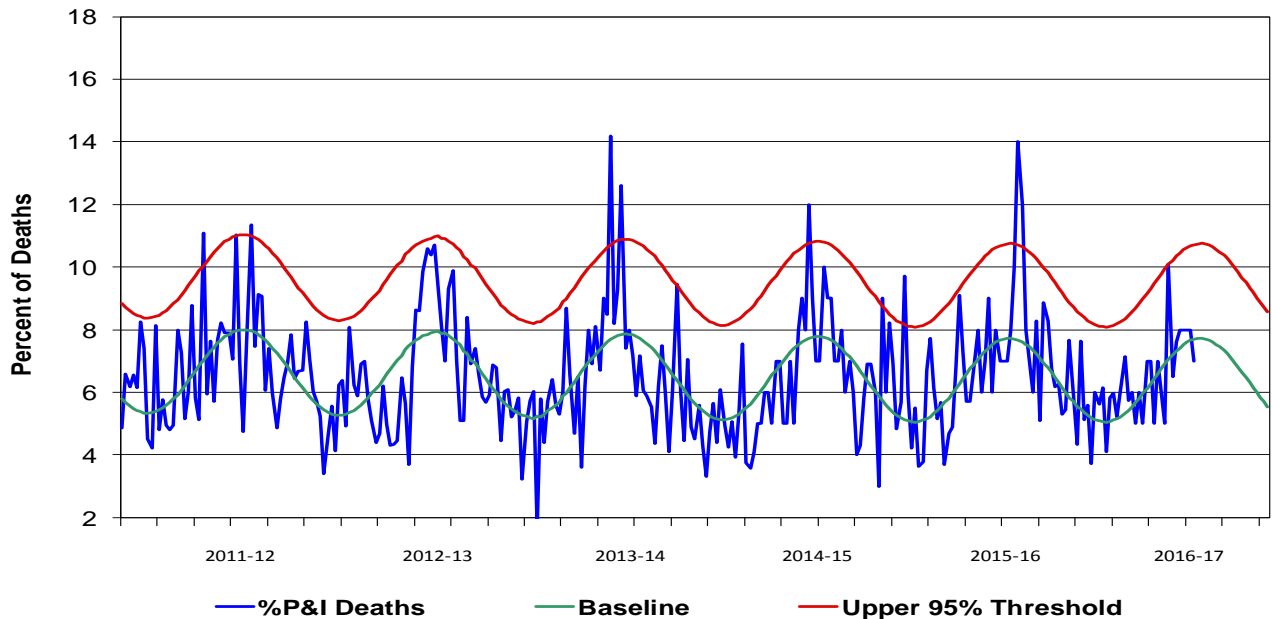


Figure 6. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and FY Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)



Influenza Watch

Figure 7. Influenza Deaths by Type, and Season

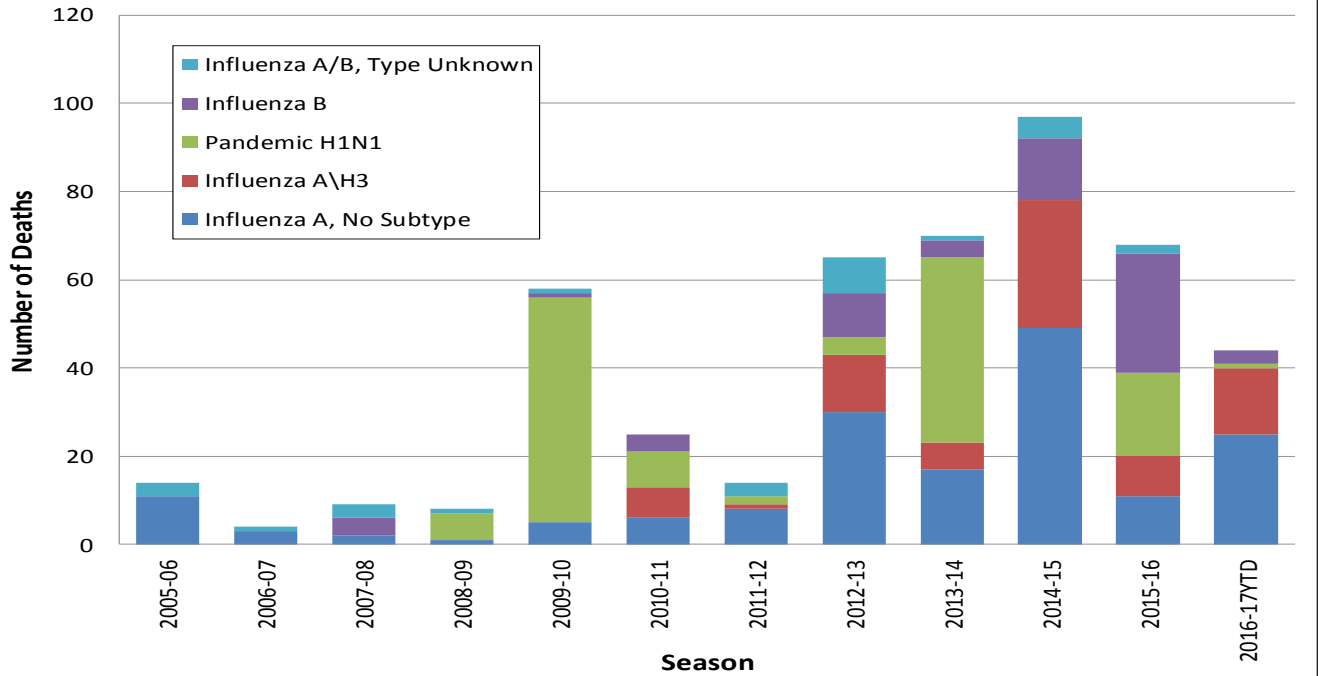
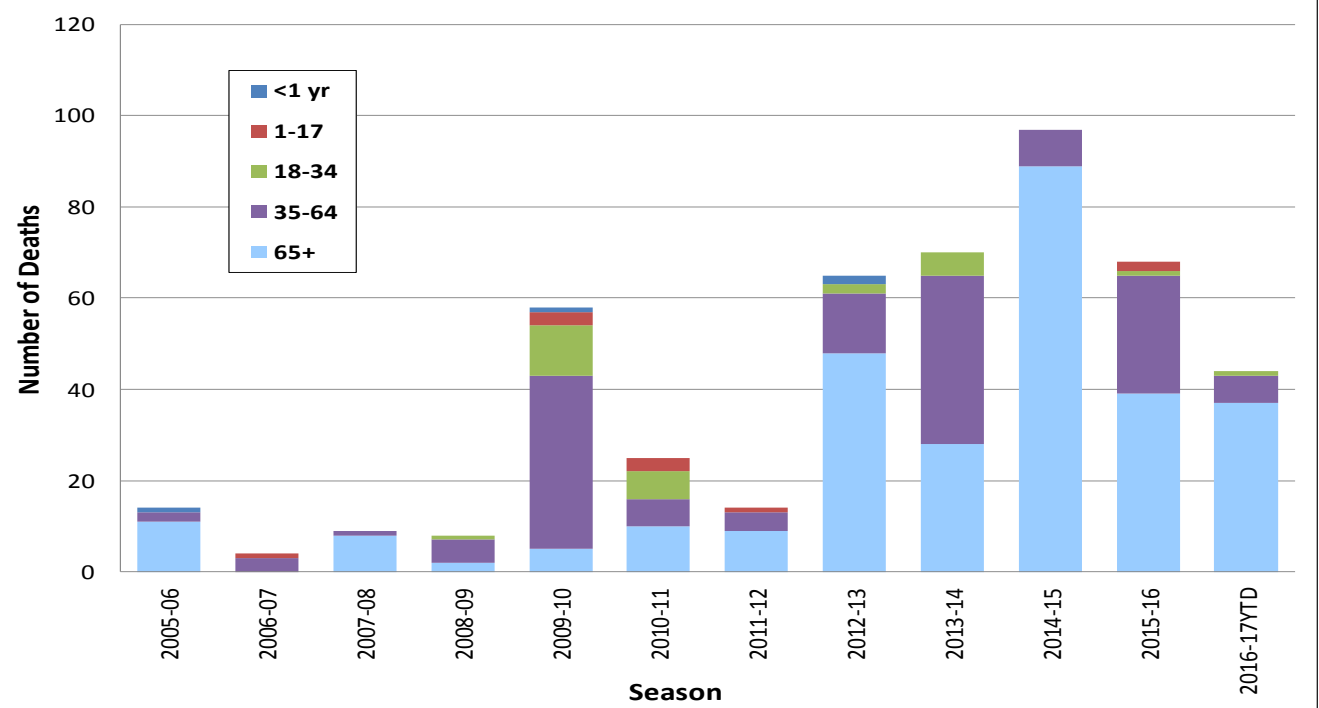
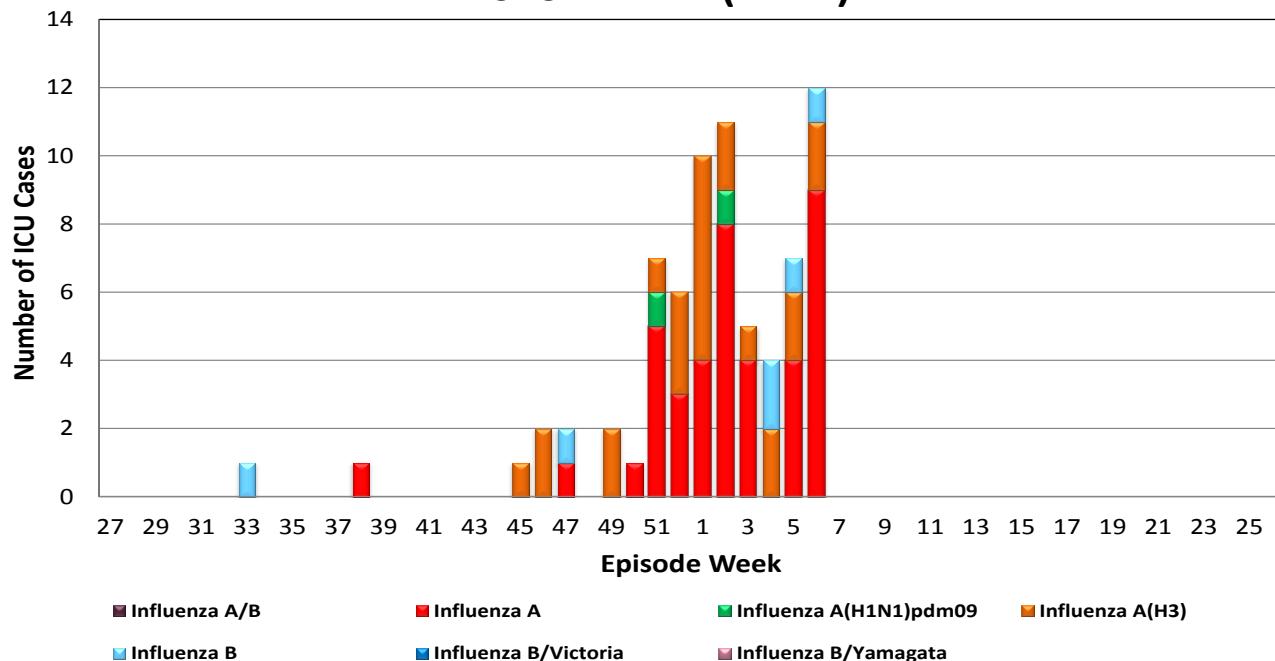


Figure 8. Influenza Deaths by Age and Season



Influenza Watch

Figure 9. Number of Influenza Cases Requiring ICU Care by Episode Week and Type of Influenza, 2016-17 YTD (N=72)



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](#)