



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.**

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Current Week

Current Week 10 (ending 3/11/2017)

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

Current Season Summary

4,692
Total Cases

94
ICU Cases

68
Deaths

31
Outbreaks

Virus Characteristics

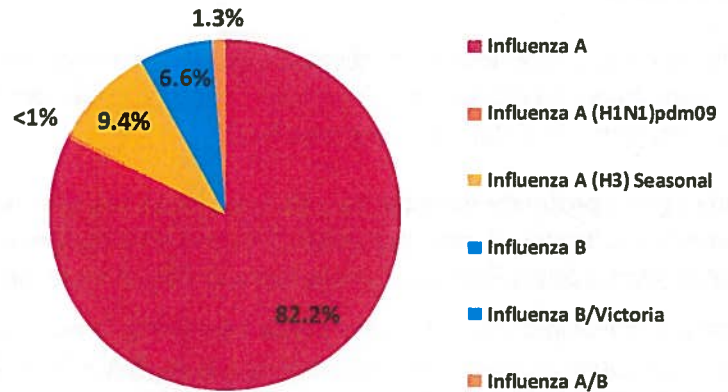


Table 1. Influenza Surveillance Indicators

Indicator	FY 2016-17*			FY 2015-16		Prior 3-Year Average**	
	Week 10	Week 9	FYTD#	Week 10	FYTD#	Week 10	FYTD#
All influenza detections reported (rapid or PCR)	260	327	4,692	490	5,081	225	5,267
Percent of emergency department visits for ILI	3%	3%		6%		5%	
Percent of deaths registered with pneumonia and/or influenza	8%	9%		14%		10%	
Number of influenza-related deaths reported^	7	4	68	14	53	7	69

* 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.

Standard or high-dose influenza vaccine?

According to the Centers for Disease Control and Prevention (CDC), the great majority of flu deaths occur in elderly patients over the age of 65. This has been true in recent years in San Diego County, as shown in Figure 8 on page 6 of this issue. A new study published, in March 2017, in the *Journal of Infectious Diseases* indicates that high-dose vaccine may do a better job than its standard-dose counterpart of reducing mortality in people over 65, at least in H3N2-dominated seasons.

The study was conducted with data gathered from more than 1 million Medicare recipients who received either the standard or high-dose vaccine at community pharmacies during the 2012-13 and 2013-14 flu seasons. The high-dose flu vaccine was 36.4% more effective at preventing deaths than the standard-dose vaccine among the patients during the 2012-13 flu season, when the H3N2 strain dominated. In 2013-14, when H1N1 dominated, the high-dose vaccine was only slightly (2.5%) more effective, and the difference was not statistically significant.

Besides reducing the risk of death, the high-dose vaccine reduced the chance of influenza-based hospitalizations by 22.1% and influenza-like illness (ILI) by 22% for the 2012-13 season. There was no reduction in hospitalizations or ILIs in 2013-14.

The high-dose vaccine is an inactivated vaccine containing four times more antigen than the standard dose (60 micrograms vs 15 micrograms per strain). The high-dose vaccine has more injection site reactions and is more expensive than the standard dose vaccine.

Any age-appropriate vaccine may be used for those over 65, and with the current H3N2-dominated season expected to last for several more weeks, it is important that everyone over 6 months of age be vaccinated. The [San Diego Immunization Program website](#) lists some locations in the county where vaccine is currently available.

The *Journal of Infectious Diseases* article may be found here: [Comparative Effectiveness of High-Dose Versus Standard-Dose Influenza Vaccines Among US Medicare Beneficiaries in Preventing Postinfluenza Deaths During 2012–2013 and 2013–2014](#)

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

Positive Test Type/Subtype	Week 10	Total To-Date
Influenza A†	199	3,857
Influenza A(H1N1) Pandemic 2009	5	19
Influenza A (H3) Seasonal	14	441
Influenza B†	40	310
Influenza B/Victoria	0	1
Influenza B/Yamagata	0	2
Influenza A/B†	2	62
Total	260	4,692

* 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.

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

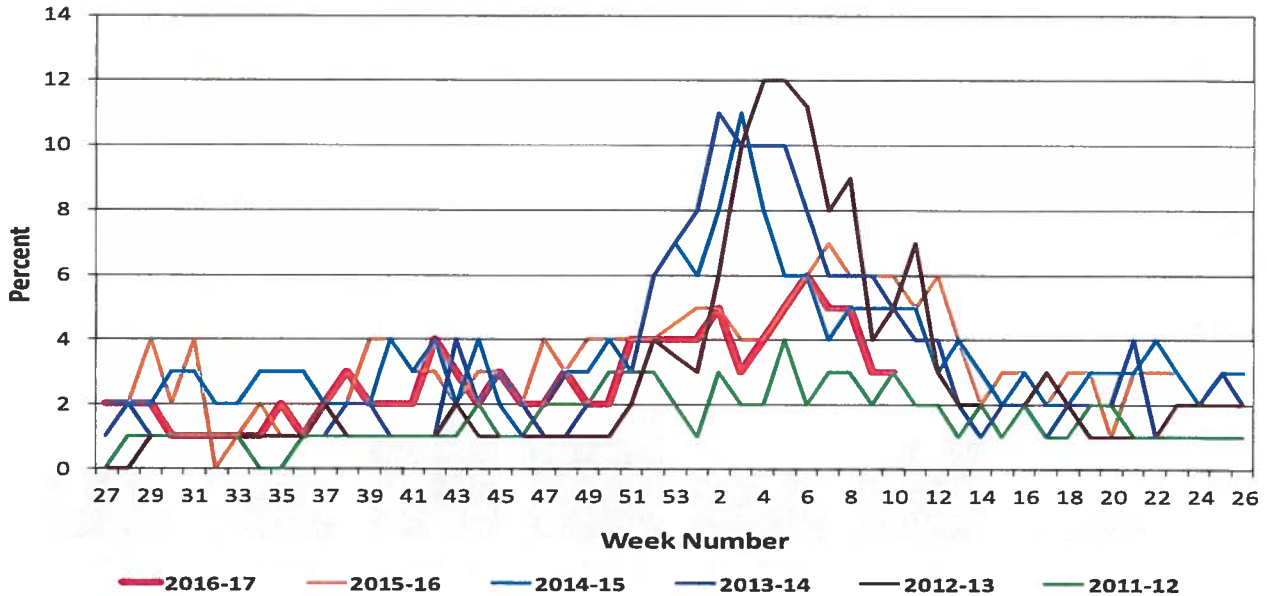
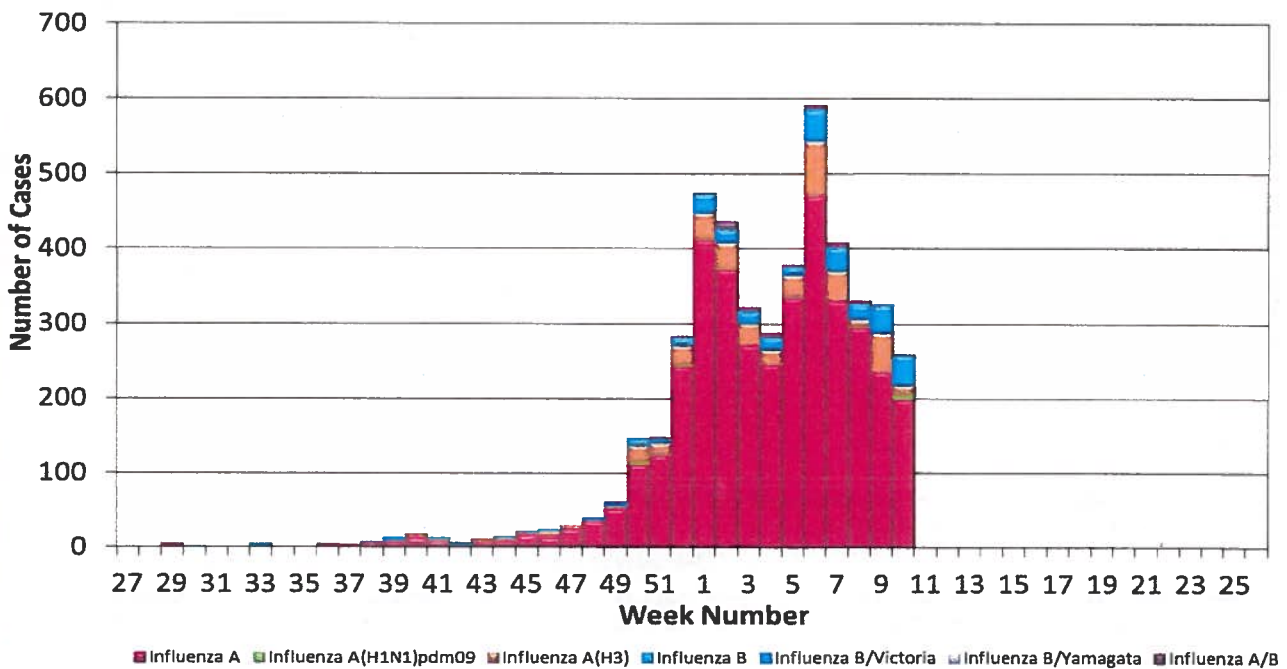


Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2016-17 (N=4,692)



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

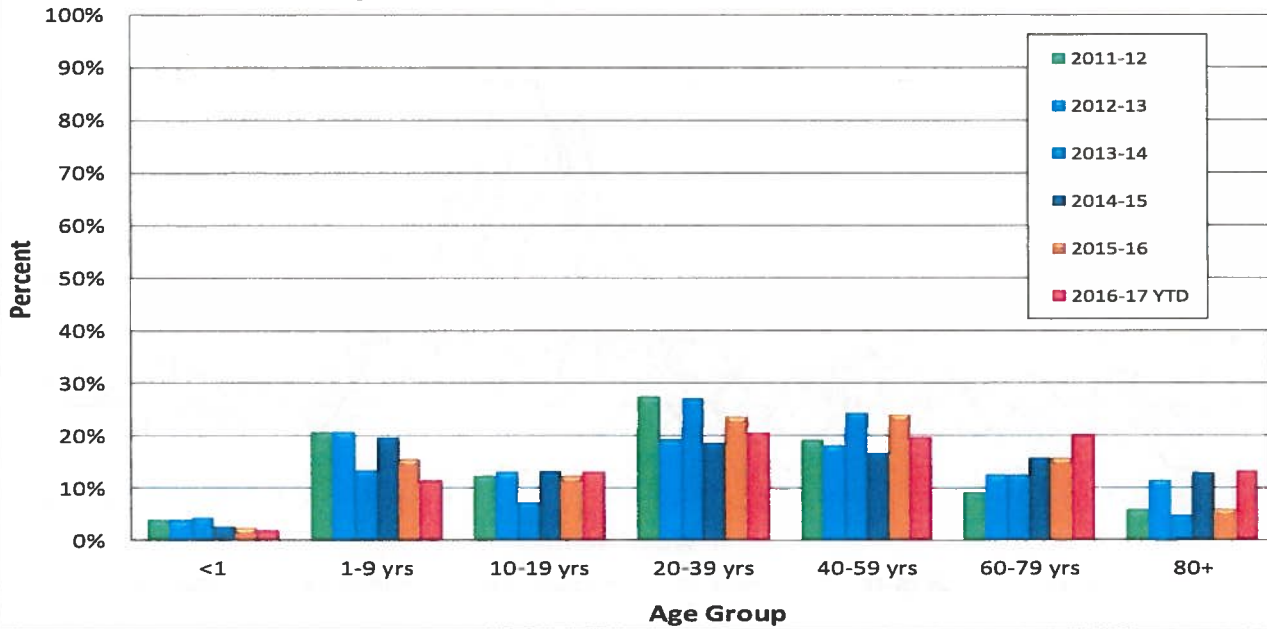


Figure 4. Cumulative Influenza Case Reports by Week & Season

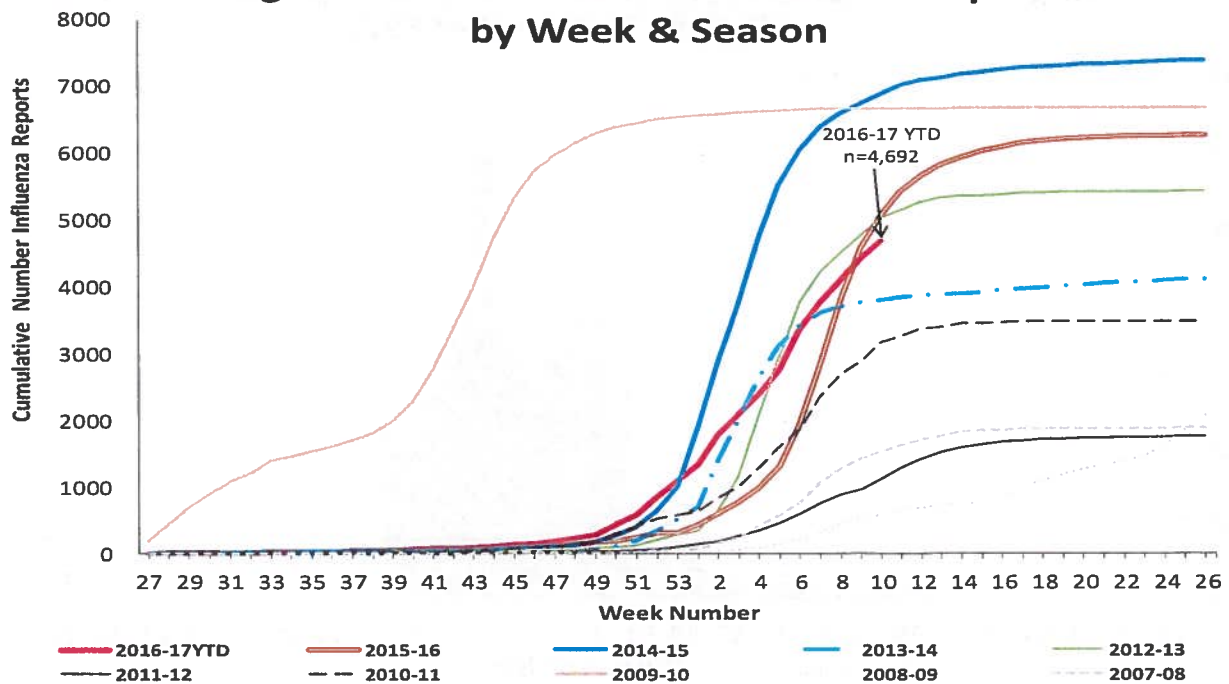


Figure 5. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by Week and FY Compared to 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)

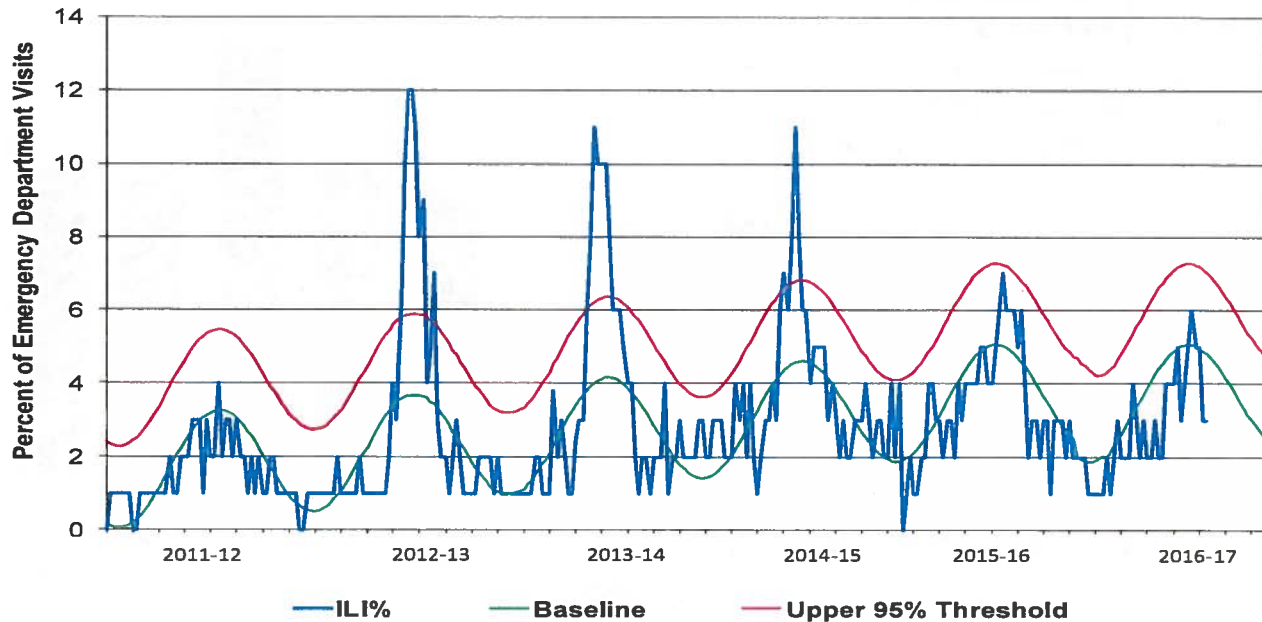
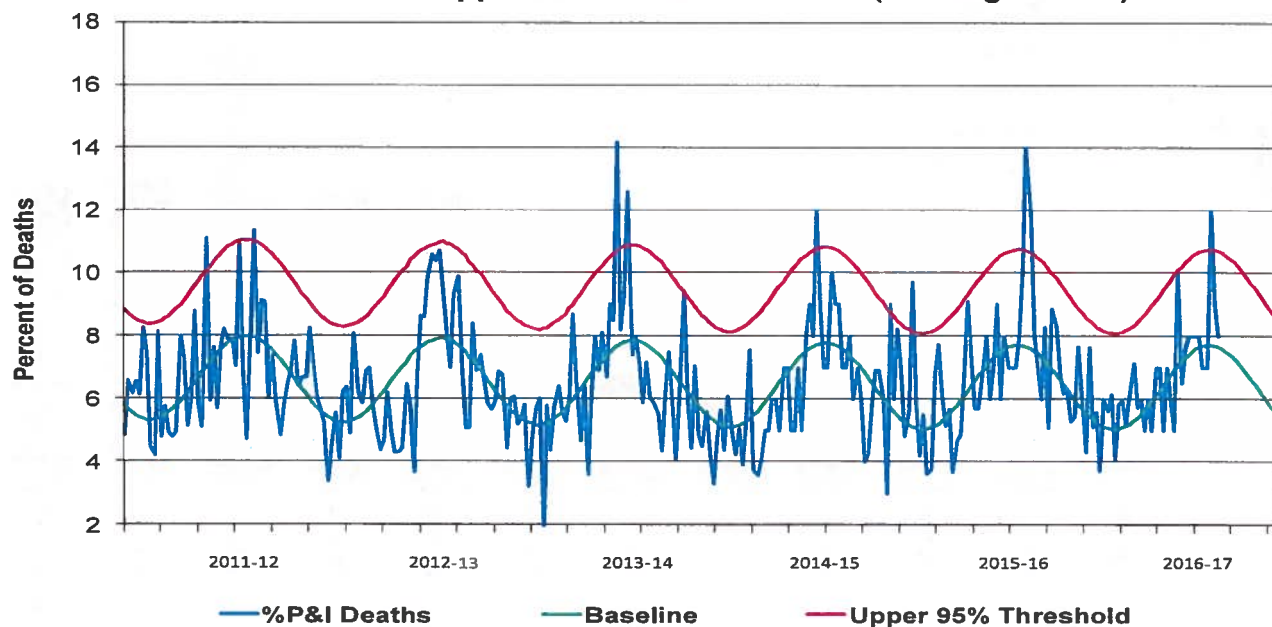


Figure 6. Percent of San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and FY Compared to Prior 5-Year Baseline & Upper 95% Threshold Values (Serfling Method)



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Figure 7. Influenza Deaths by Type, and Season

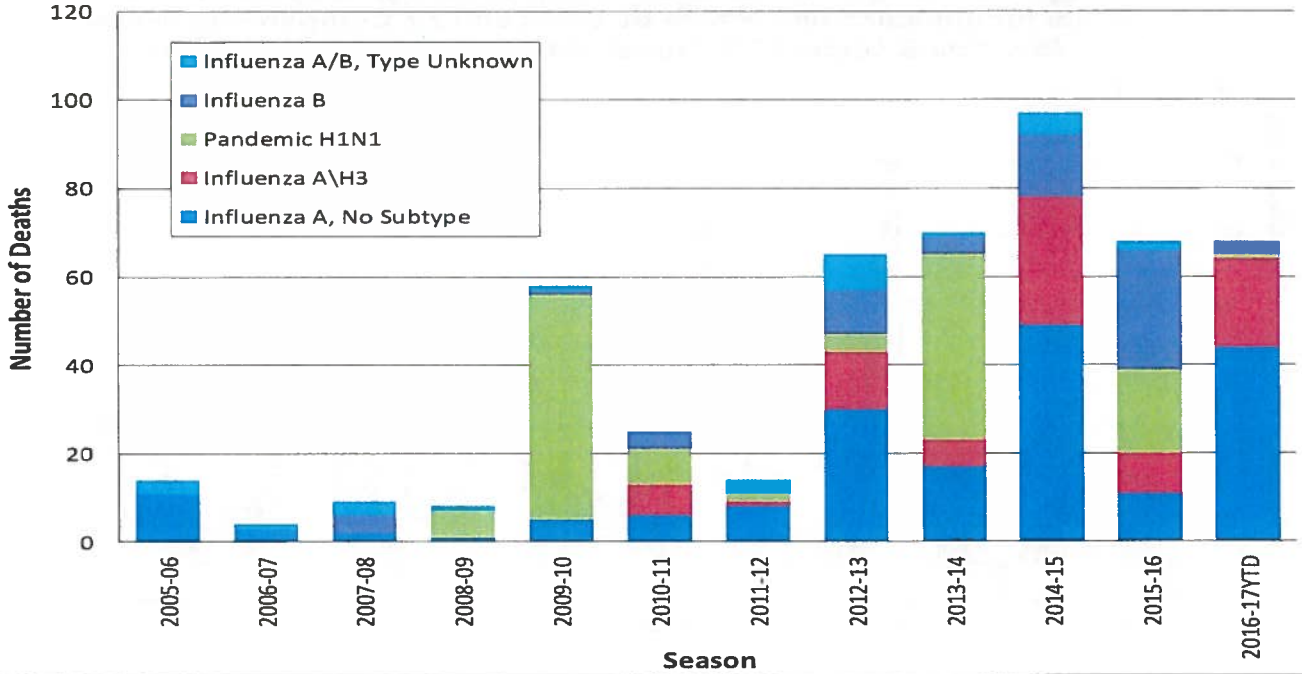


Figure 8. Influenza Deaths by Age and Season

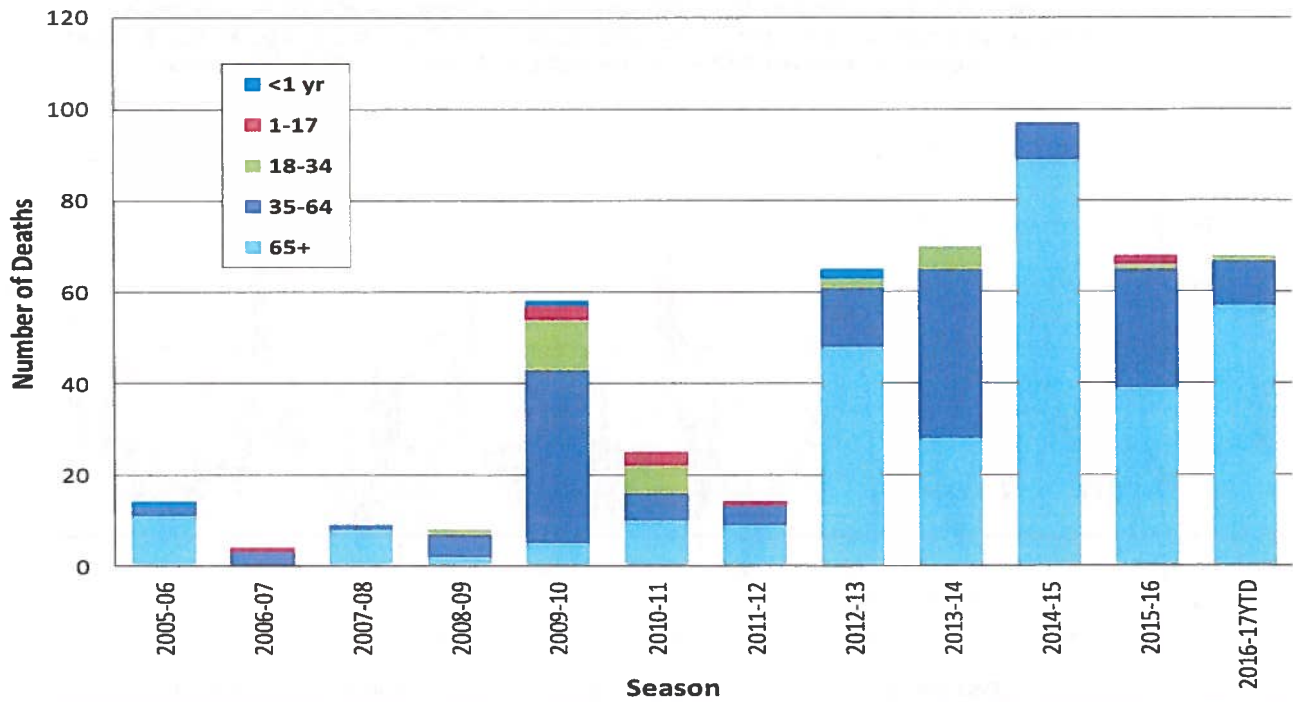
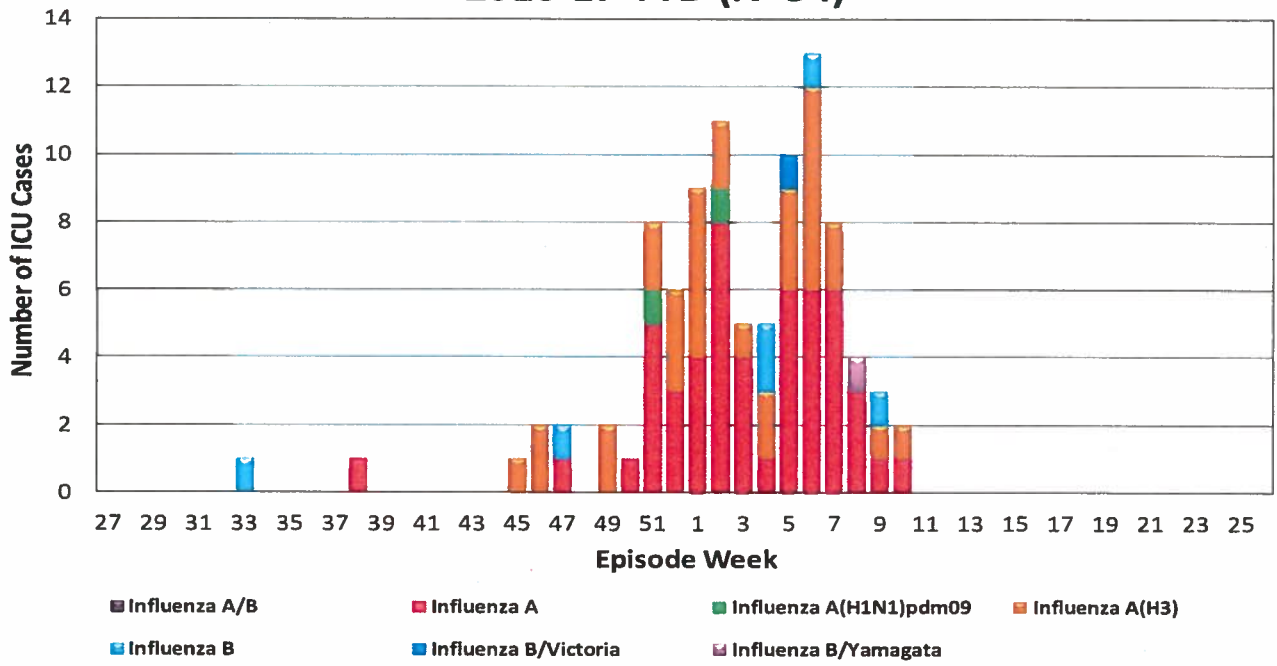


Figure 9. Number of Influenza Cases Requiring ICU Care by Episode Week and Type of Influenza, 2016-17 YTD (N=94)



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](#)

