



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 15 (ending 4/16/2016)

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

Current Season Summary

5,944
Total Cases

112
ICU Cases

63
Deaths

15
Outbreaks

Virus Characteristics

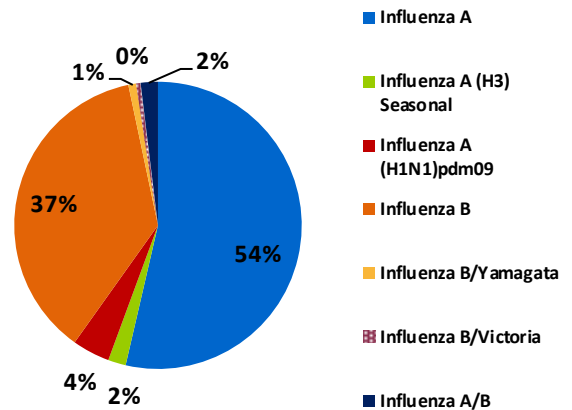


Table 1. Influenza Surveillance Indicators

Indicator	FY 2015-16*			FY 2014-15		Prior 3-Year Average**	
	Week 15	Week 14	FYTD#	Week 15	FYTD#	Week 15	FYTD#
	All influenza detections reported (rapid or PCR)	85	117	5,944	49	6,755	26
Percent of emergency department visits for ILI	3%	2%		2%		2%	
Percent of deaths registered with pneumonia and/or influenza	8%	6%		6%		5%	
Number of influenza-related deaths reported^	3	0	63	3	96	2	76

* FYTD=Fiscal Year To Date (FY is July 1- June 30, Weeks 27-26). Total deaths reported in prior years: 97 in 2014-15, 70 in 2013-14, 65 in 2012-13.

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

** Includes FYs 2014-15, 2013-14, and 2012-13.

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

Review Shows Best Flu Vaccine Protection Against H1N1 and Type B Viruses

A systematic review and meta-analysis of nearly a decade of influenza studies across the globe show influenza vaccines provided substantial protection against H1N1 strains and against type B viruses. The study also found that vaccination generates lower protection against H3N2 viruses.

The findings are based on a report published last week in *The Lancet Infectious Diseases*. The research team screened 3,368 studies from 2004 through early 2015 and selected 56 that met strict criteria for assessing vaccine effectiveness (VE) against different flu subtypes.

The researchers determined that pooled VE for the 56 studies was 61% (95% confidence interval [CI], 57%-65%) for pandemic 2009 H1N1, and 67% (95% CI, 29%-85%) for pre-pandemic H1N1, 54% (95% CI, 46%-61%) for type B, and 33% (95% CI, 26%-39%) for H3N2. Although VE can decline in older adults due to aging of the immune system, the review found that protection against H1N1 and type B was maintained even in the oldest age groups.

Influenza seasons are unpredictable with circulation of different virus subtypes. Seasons with mostly H3N2 viruses tend to be more severe, and H3N2 evolves more rapidly to evade the immune system compared to other flu viruses. Seasonal flu vaccines are updated each year, with two subtypes of influenza A virus (H3N2 and H1N1) and one or two strains of influenza B.

More information on the recent study may be found at:

[Variable influenza vaccine effectiveness by subtype: a systematic review and meta-analysis of test-negative design studies](#)

Table 2. Influenza Detections Reported, FY 2015-16*

Positive Test Type/Subtype	Week 15	Total To-Date
Influenza A †	35	3,187
Influenza A(H1N1) Pandemic 2009	5	251
Influenza A (H3) Seasonal	1	119
Influenza B †	37	2,190
Influenza B/Victoria	0	29
Influenza B/Yamagata	1	53
Influenza A/B †	6	115
Total	85	5,944

* 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

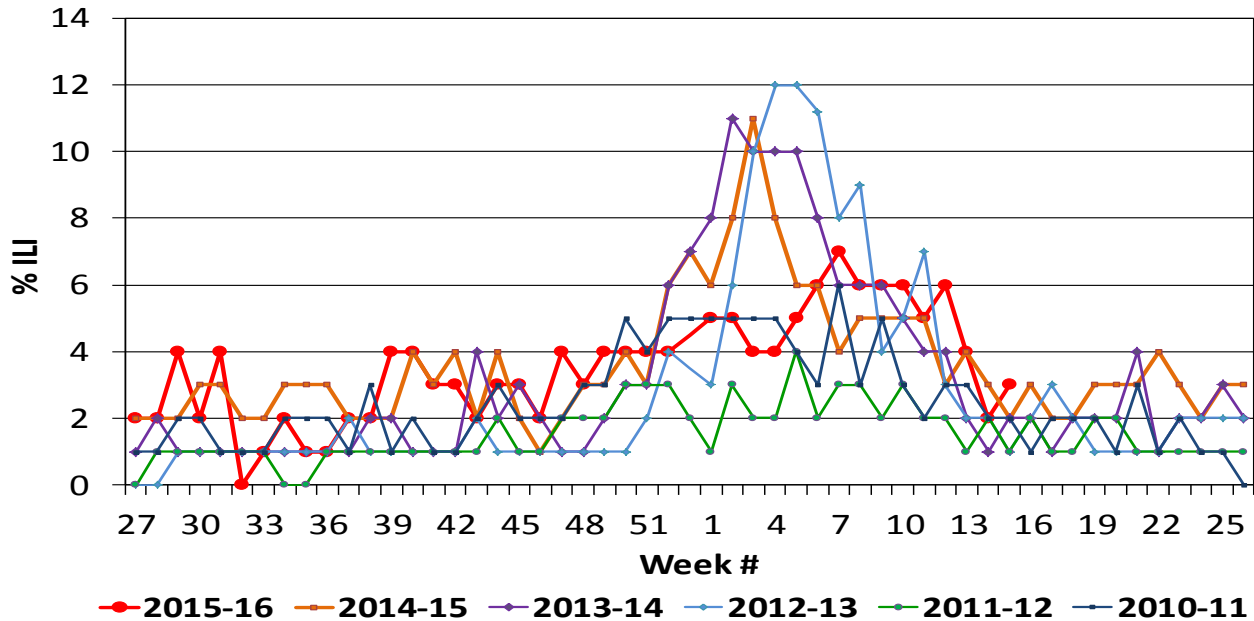
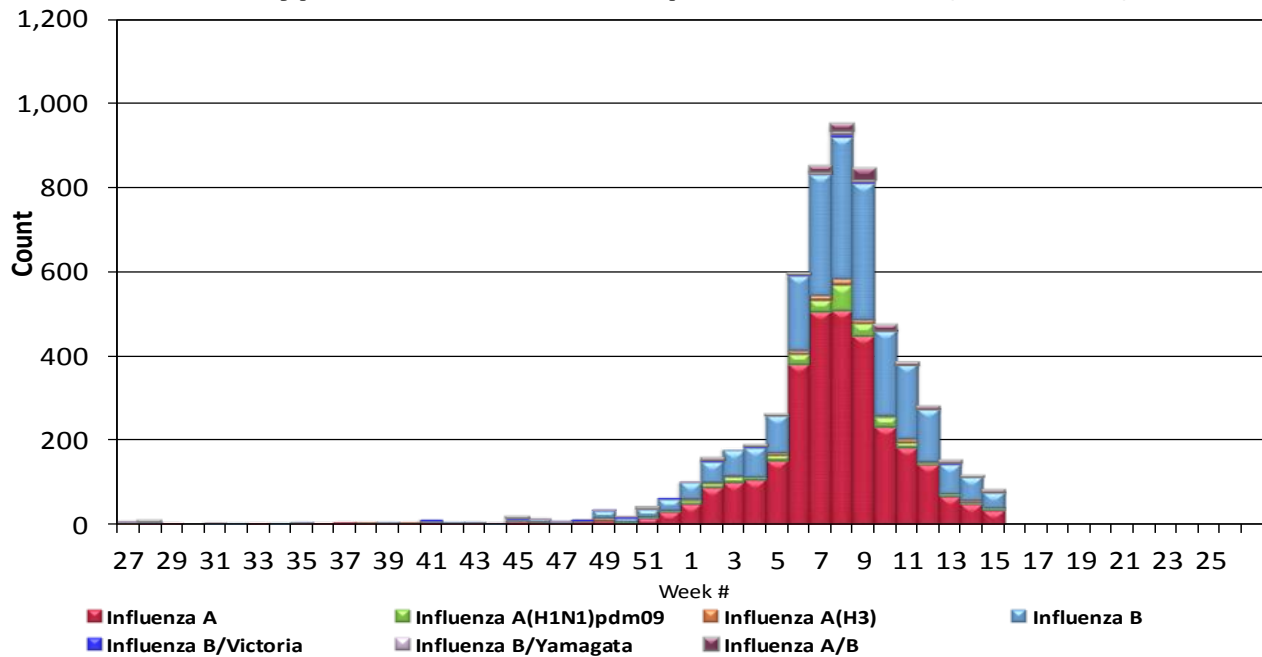


Figure 2. San Diego County Influenza Detections by Type and Week of Report, 2015-16 (N=5,944)



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Figure 3. Percent of Reported Influenza Cases by Age Group and Season, 2009-10 to 2015-16 YTD

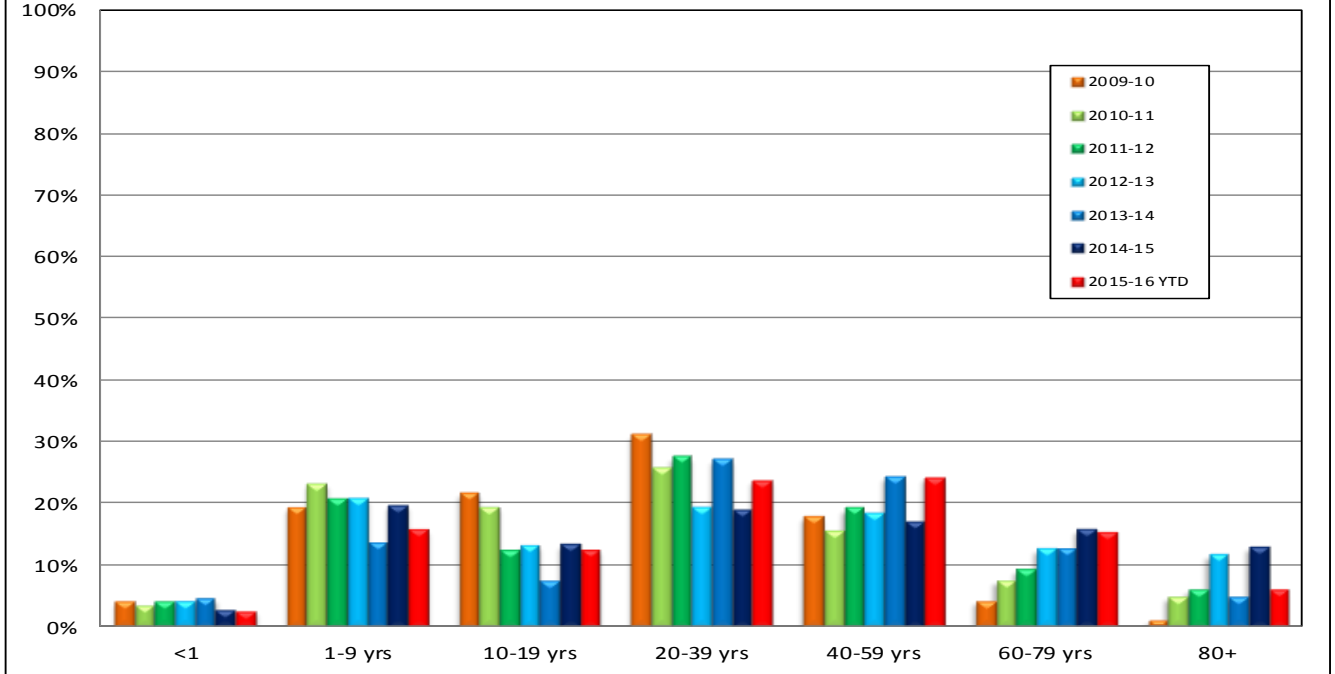
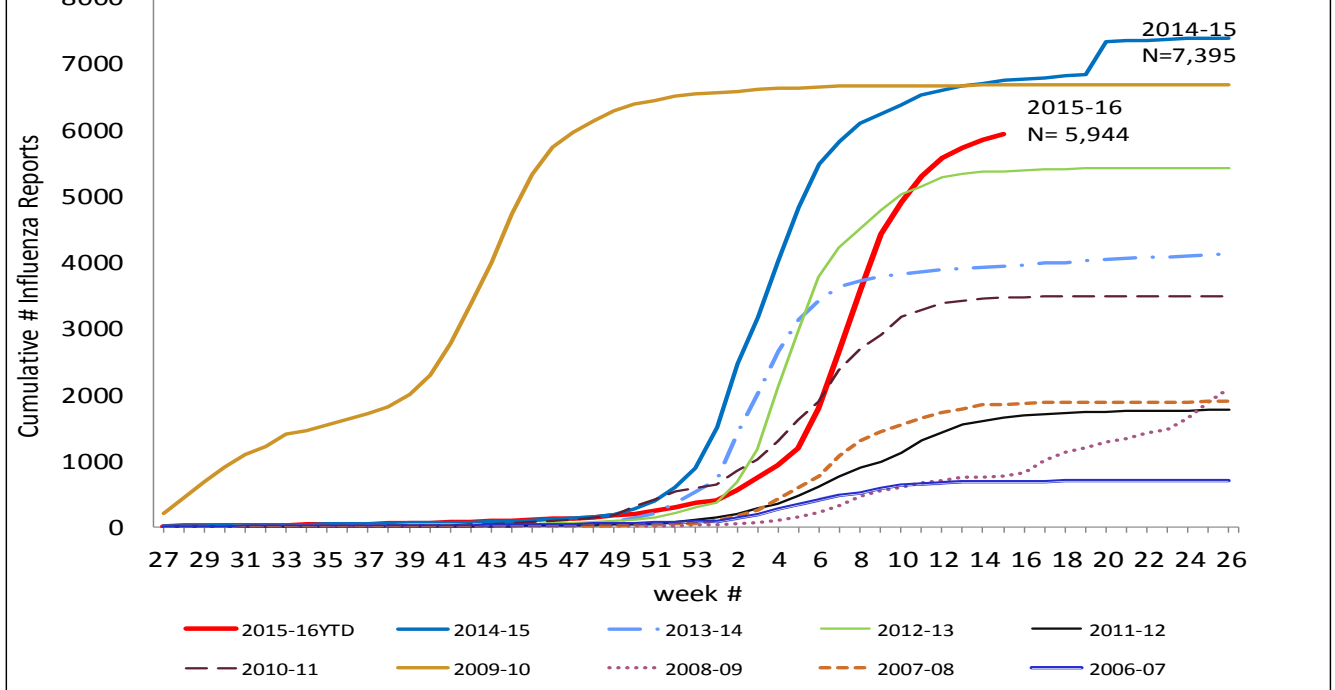


Figure 4. Cumulative Influenza Case Reports by Week & Season



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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)

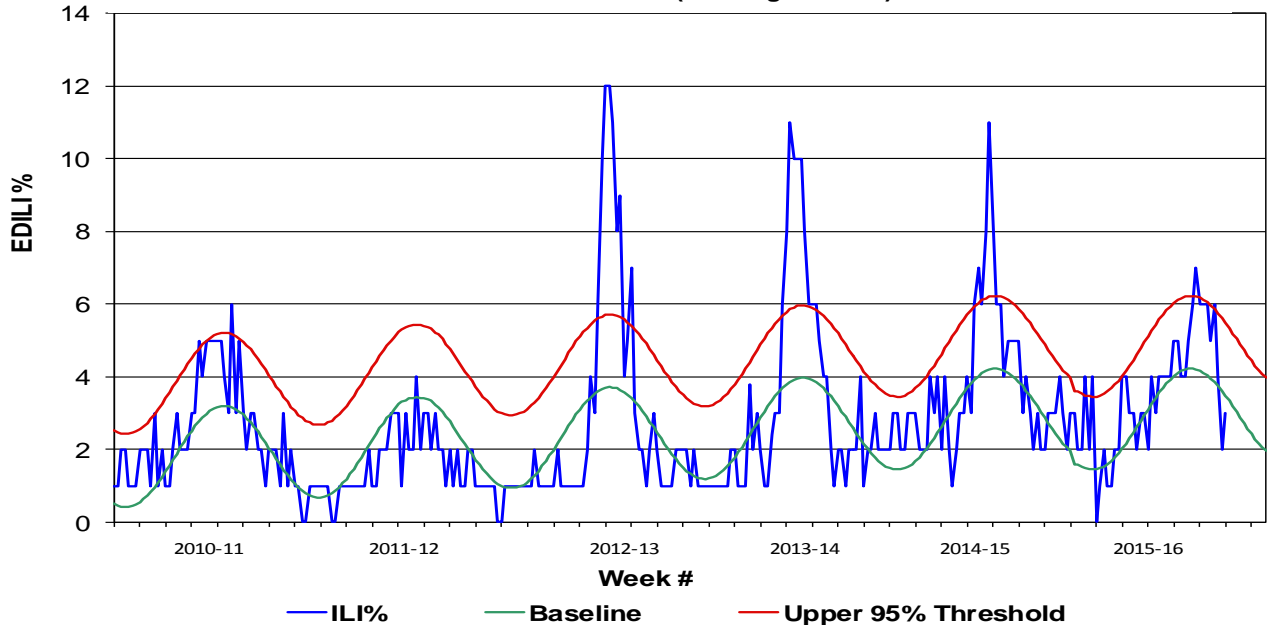
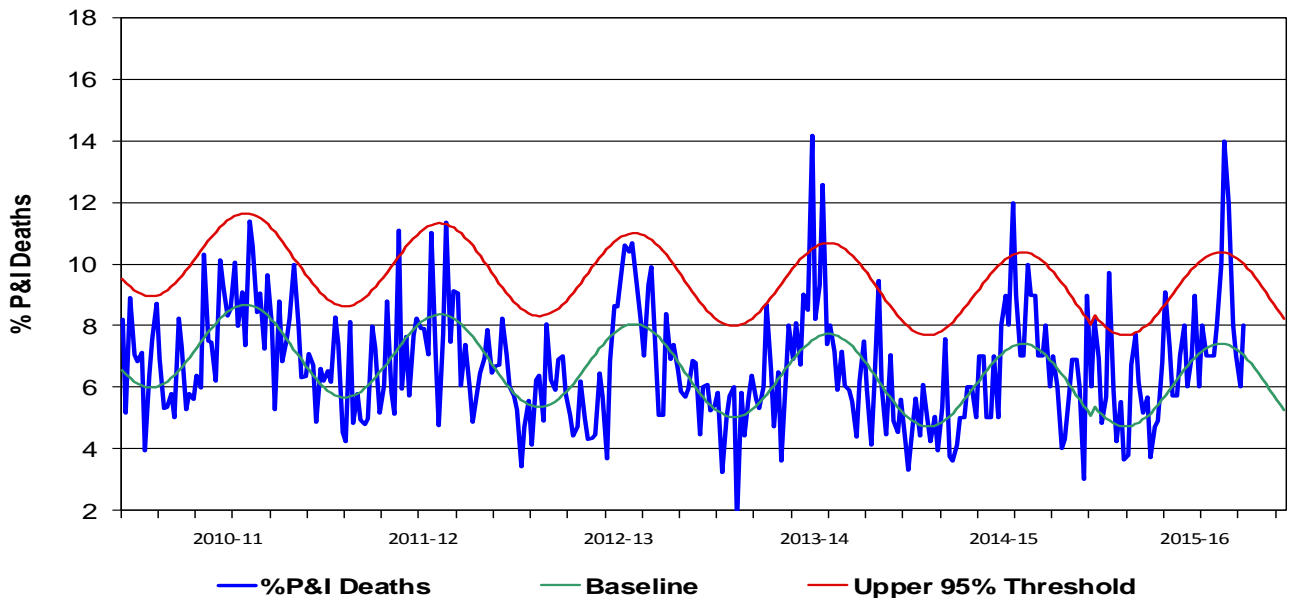


Figure 6. Percent of All San Diego County Deaths Registered with Pneumonia and/or Influenza by Week and FY Compared to Prior 5-Year Baseline & Upper 95% Threshold (Serfling Method)



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Figure 7. Influenza Deaths by Type, and Season

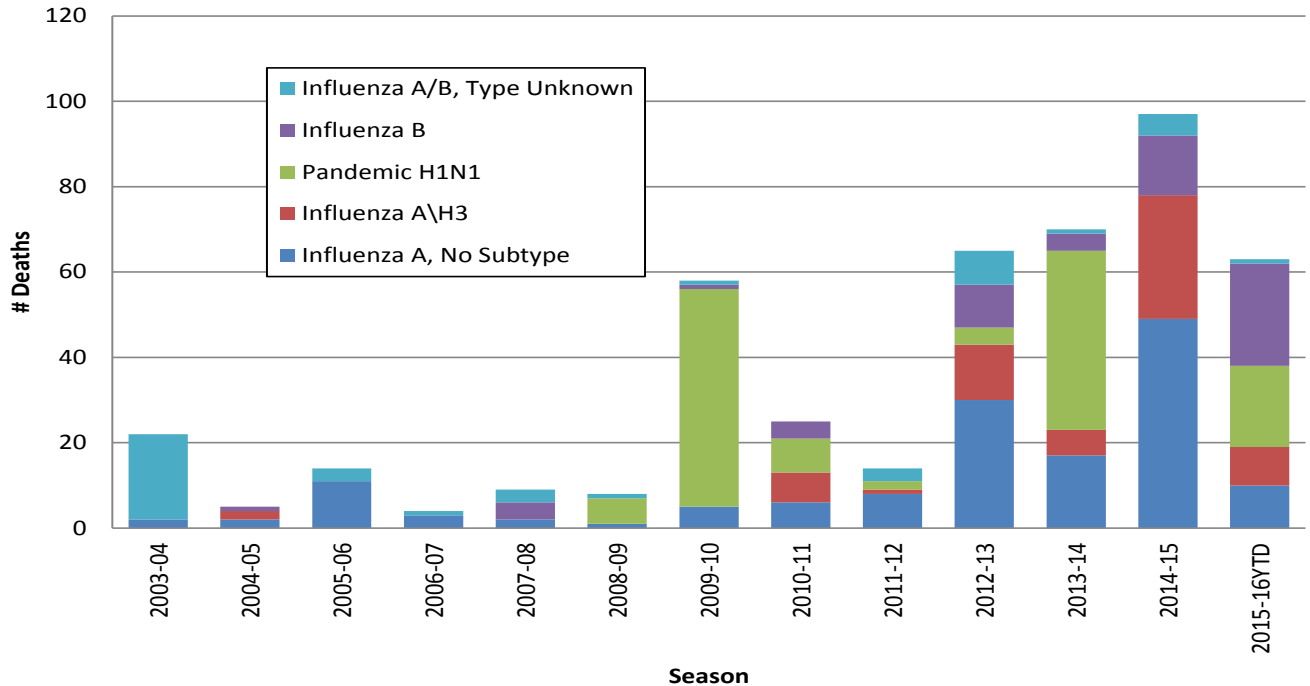


Figure 8. Influenza Deaths by Age and Season

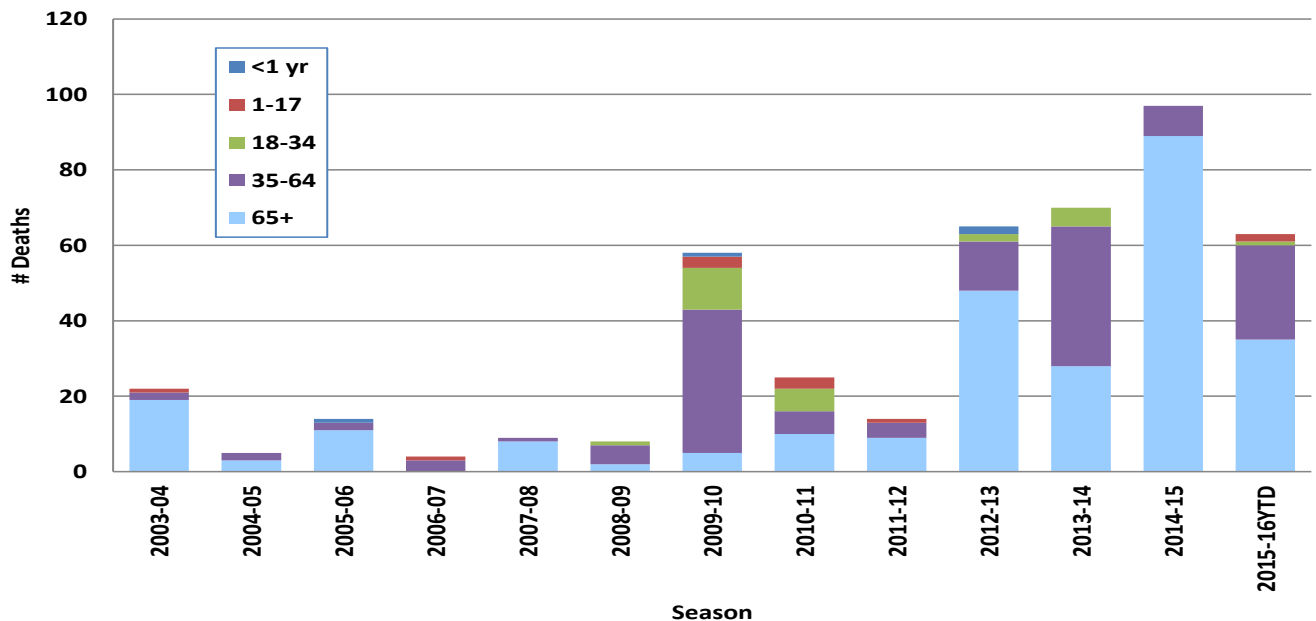
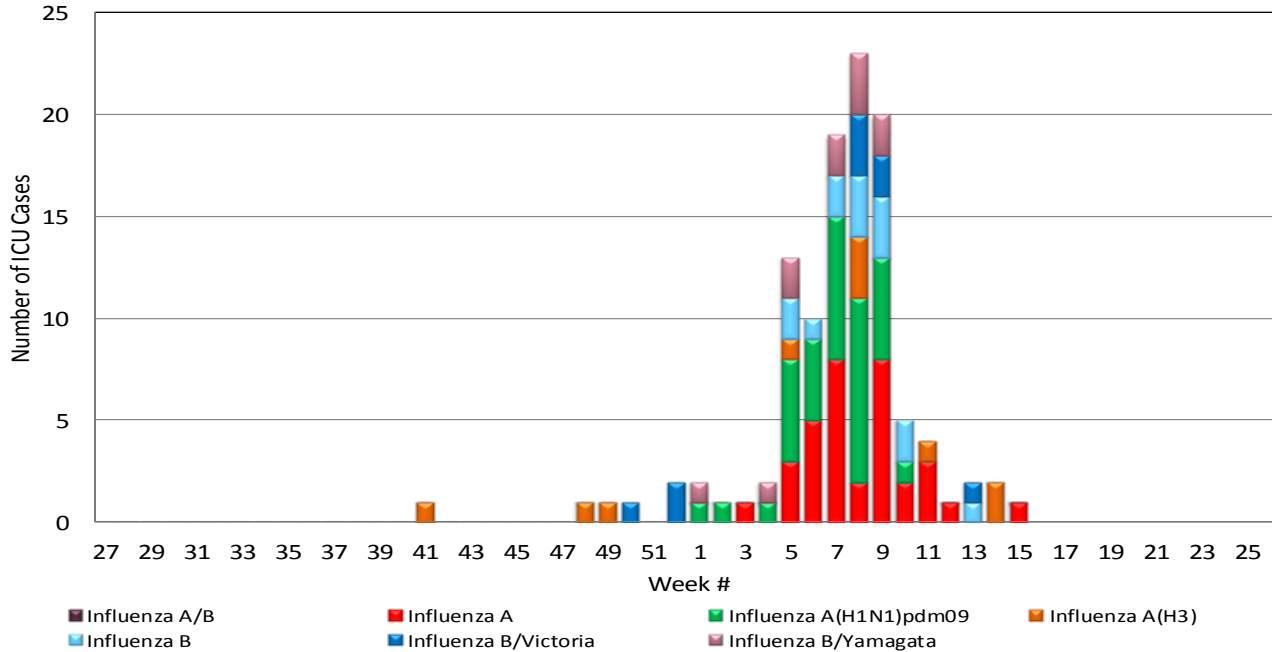


Figure 9. Number of Influenza Cases Requiring ICU Care by Episode Week and Type of Influenza, 2015-16 YTD (N=112)



Episode Week is the Week of 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 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 Epidemiology with any questions at **(619) 692-8499** or by email to: EpiDiv.HHSA@sdcounty.ca.gov.

Resources

County of San Diego Immunization Branch www.sdiz.org

California Department of Public Health [Influenza](#)

CDC Influenza Surveillance [Weekly Report](#)