



INFLUENZA WATCH

2019-20 Season Summary
July 1, 2019 – June 30, 2020

The purpose of the *Influenza Watch* is to summarize influenza surveillance in San Diego County. This summary report reflects the 2019-20 season.

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Season Highlights

- The season overall was moderately severe with 20,711 cases reported and 108 deaths.
- Influenza cases peaked in week 3 (ending January 18, 2020) with 2,400 cases noted.
- Influenza A accounted for 63% of all reports, with influenza A/H1N1-pdm09 the most frequent subtype found.
- Influenza B activity was consistent throughout the season and made up 35% of all cases reported.
- The age range of influenza-associated deaths was 26-95 years (median 72 years). Of the 108 deaths, 42% had received the 2019-20 influenza vaccine and 94% had underlying medical conditions. The overall case fatality rate (CFR) among reported cases was 0.5%. The highest CFR was among reported cases 80+ years of age (4.1%).
- Influenza cases dropped off dramatically in week 13 (ending March 28, 2020), likely a result of the community non-pharmacologic interventions that began March 13 in response to the coronavirus (COVID-19) pandemic.
- Increased emergency department visits for influenza like illness (ILI) were noted in early 2020 due to influenza, with increased visits in March due to COVID-19. The high percentages of pneumonia and influenza (P&I) deaths registered during weeks 14-18 (March 29-May 2, 2020) were due to COVID-19.

2019-20
Season Summary

20,711

Total Cases

108

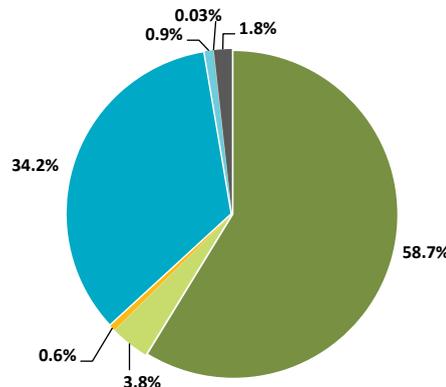
Deaths[†]

62

Outbreaks*

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

* In a congregate living setting, outbreaks are defined as at least one laboratory-confirmed influenza case in the setting of a cluster (≥2 cases) of influenza-like illness (ILI) within a 72-hour period.



Virus Characteristics

- Influenza A, subtype unknown
- Influenza A (H1N1)pdm09
- Influenza A (H3)
- Influenza B, subtype unknown
- Influenza B/Victoria
- Influenza B/Yamagata
- Influenza, type unknown

Table 1. Influenza Surveillance Indicators.

Surveillance Indicator	2019-20 Season	2018-19 Season	Prior 3-Season Average*
All influenza detections reported (rapid or PCR)	20,711	9,655	12,110
Number of influenza-related outbreaks reported [∞]	62	25	59
Number of influenza-related deaths reported [^]	108	77	169

*Includes FYs 2016-17, 2017-18, and 2018-19. Influenza season is July 1 – June 30, Weeks 27-26.

[∞]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.

Total confirmed influenza outbreaks in prior seasons: 25 in 2018-19, 119 in 2017-18, and 34 in 2016-17.

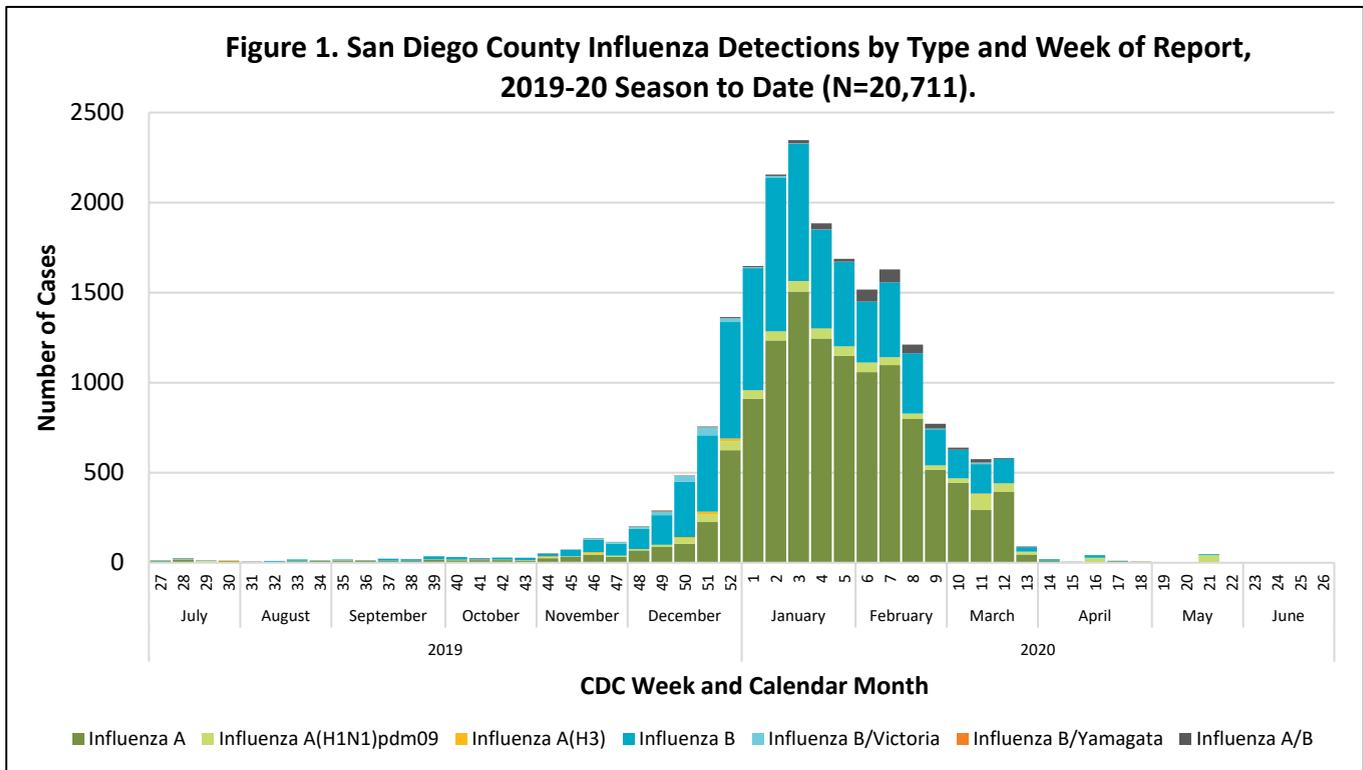
[^]Current FY deaths are shown by week of report; by week of death for prior FYs. Total deaths reported in prior seasons: 77 in 2018-19, 343 in 2017-18, and 87 in 2016-17.

Table 2. Influenza Cases Reported, 2019-2020 Season

Positive Test Type/Subtype	Total	Percent
Influenza A, subtype unknown	12,163	58.7%
Influenza A (H1N1)pdm09	795	3.8%
Influenza A (H3)	123	0.6%
Influenza B, subtype unknown	7,079	34.2%
Influenza B/Victoria	181	0.9%
Influenza B/Yamagata	6	0.03%
Influenza, type unknown	364	1.8%
Total	20,711	100.0%

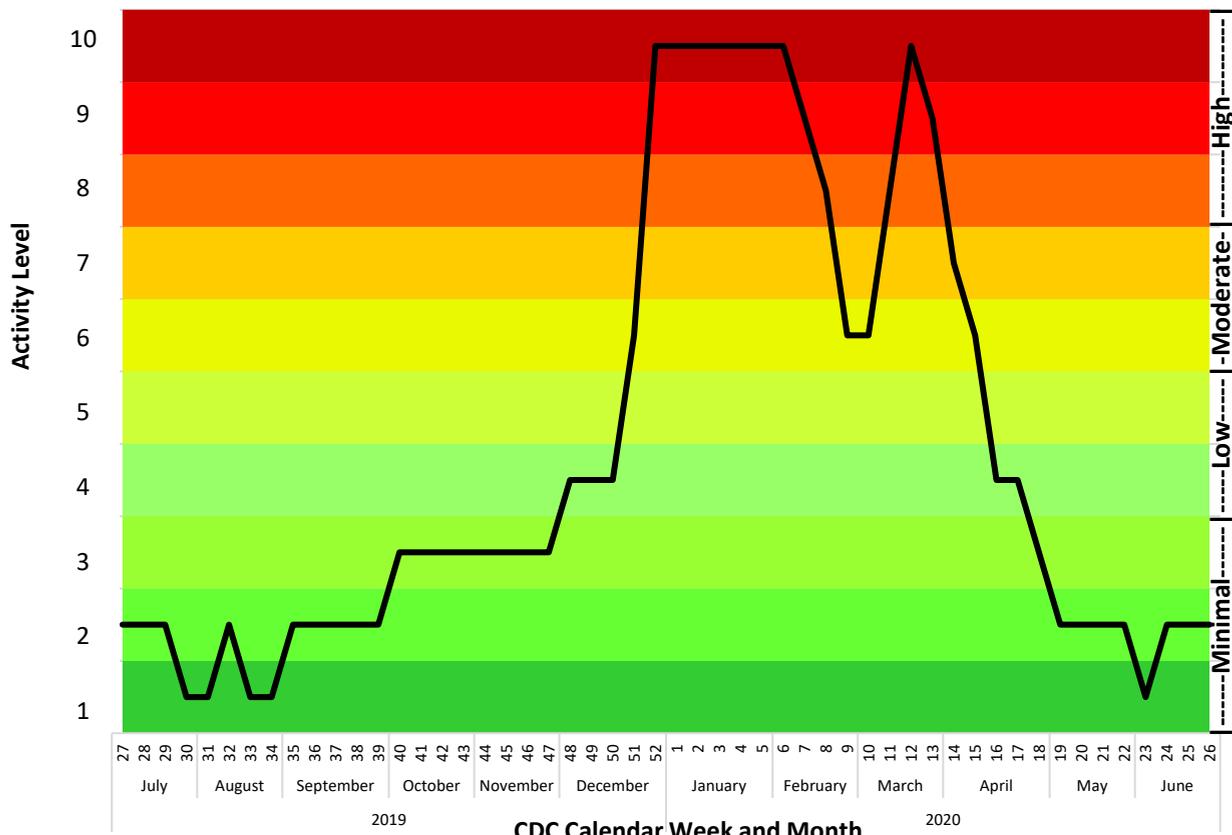
*Season is July 1- June 30, Weeks 27-26.

Figure 1. San Diego County Influenza Detections by Type and Week of Report, 2019-20 Season to Date (N=20,711).



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Figure 2. Activity Level of Emergency Department Influenza-Like Illness (ILI), 2019-20 Season.



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 level compares the current week’s ED ILI% (emergency department influenza-like illness, percent of all visits) to the mean and number of standard deviations above of the mean of the ED ILI% in non-influenza season weeks (CDC disease weeks 27-39) from the current and prior four 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 3. Cumulative Influenza Cases Reported by CDC Week and Season.

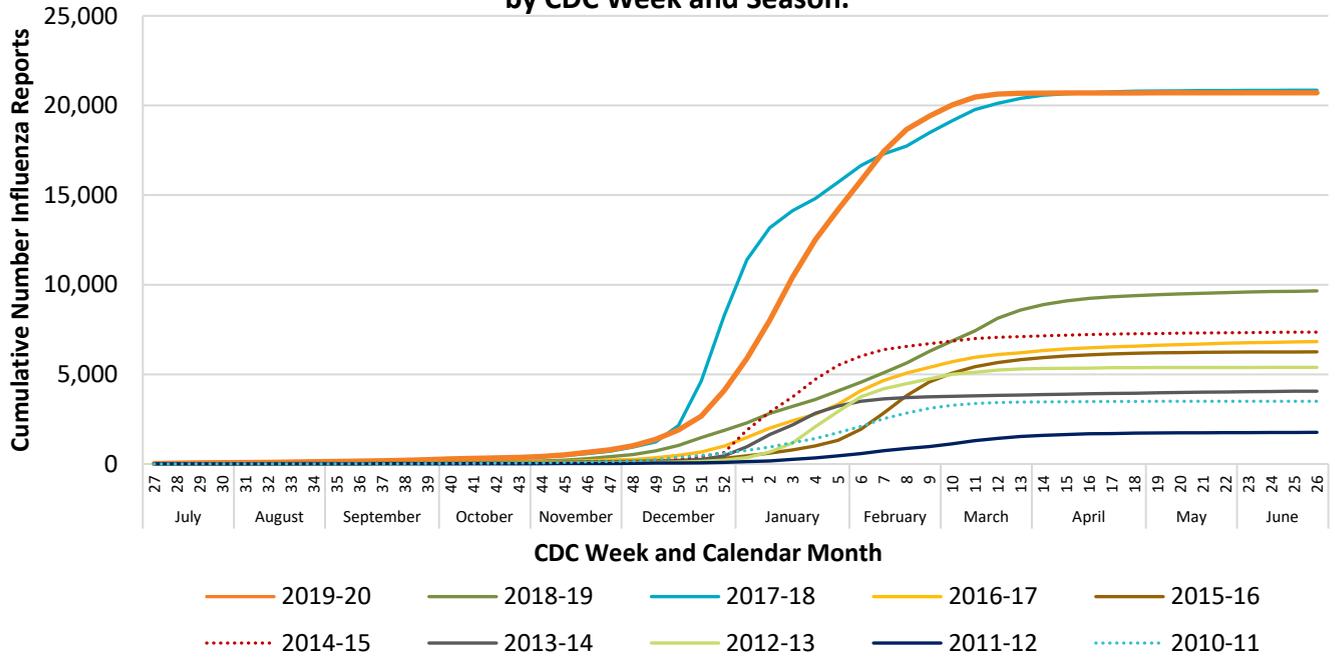
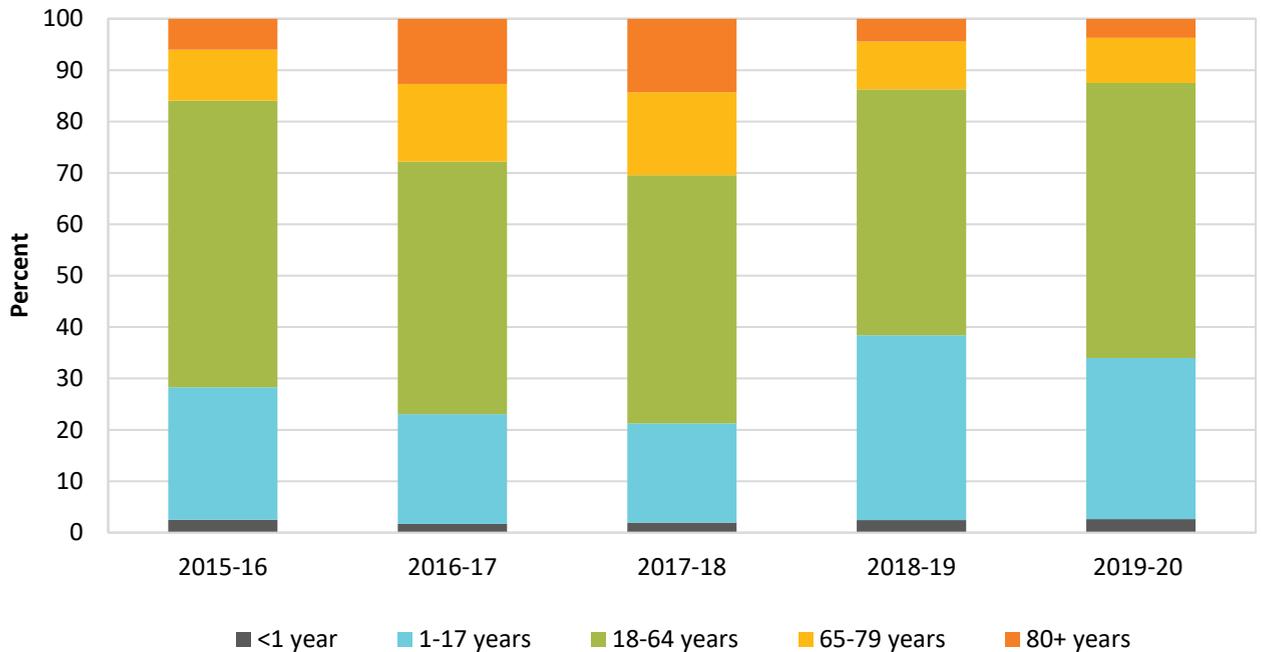


Figure 4. Proportion of Influenza Cases by Age Group and Season.



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Figure 5. Number of Influenza Vaccinations Administered* by CDC Week and Season.

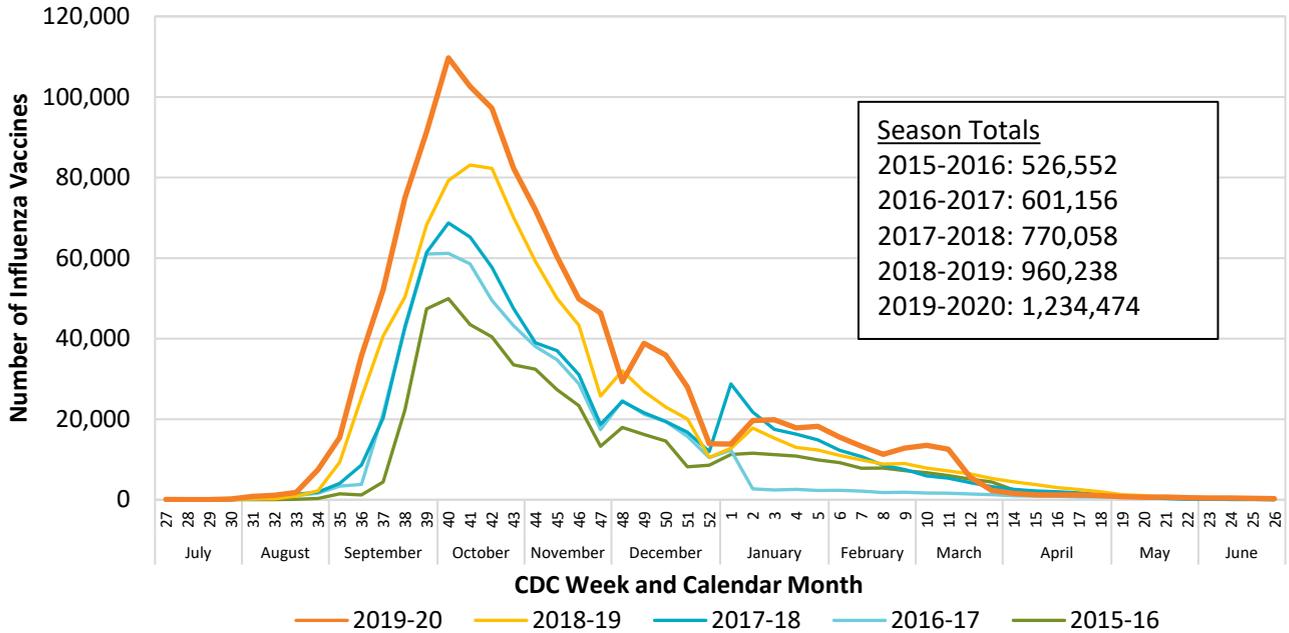
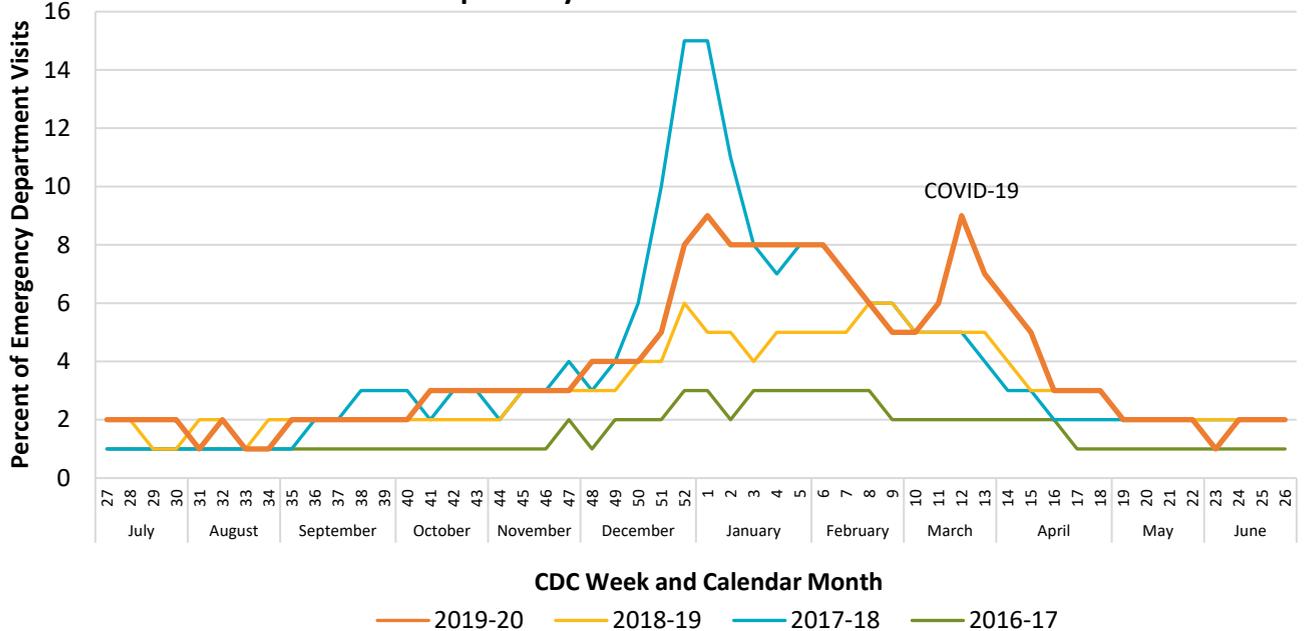


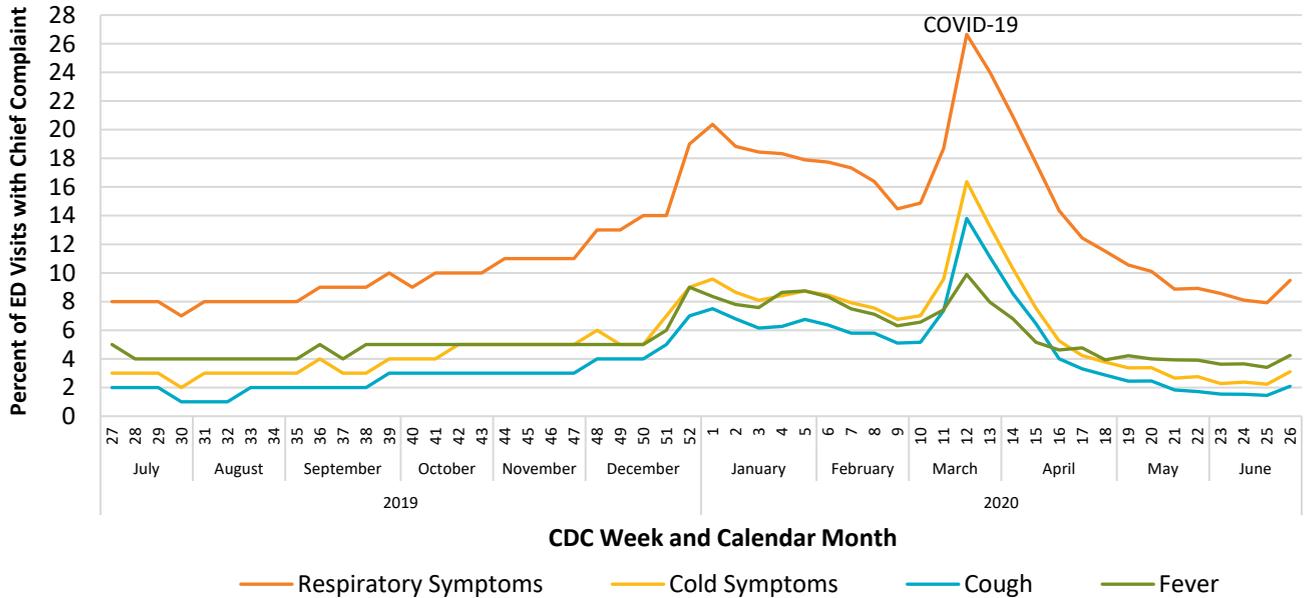
Figure 6. Percent of Emergency Department Visits for ILI Chief Complaint by CDC Week and Season.



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

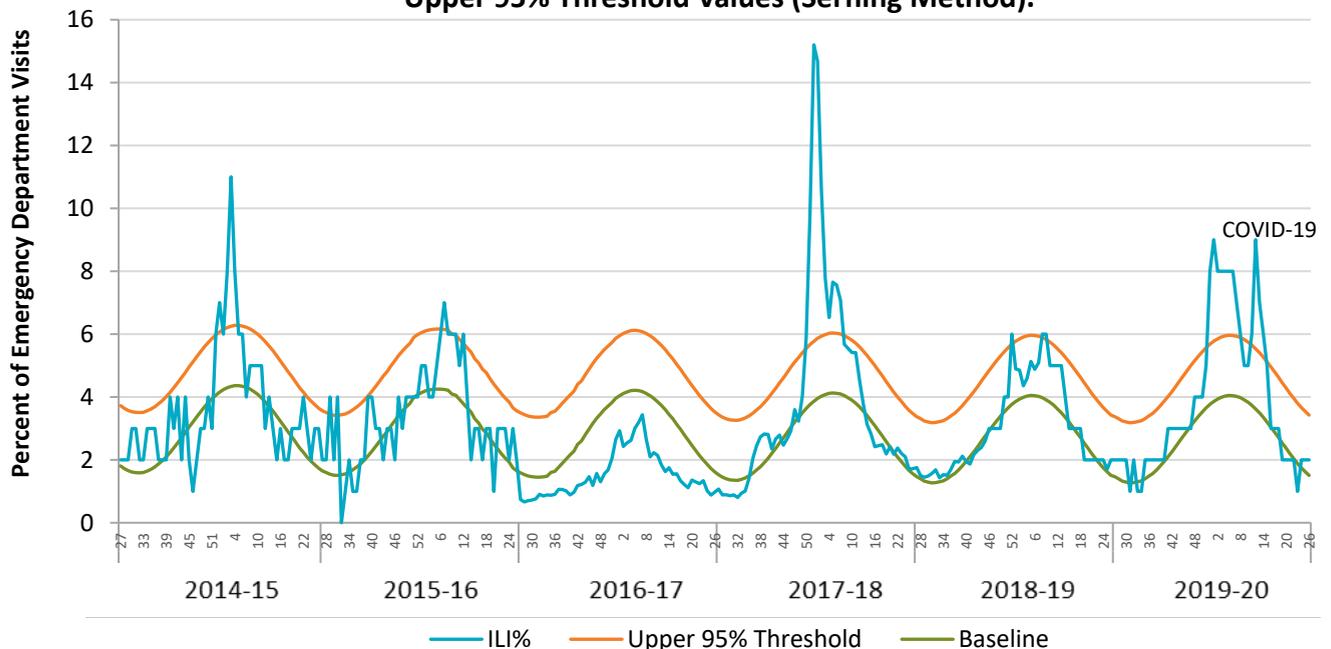
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Figure 7. Percent of Emergency Department Visit Chief Complaints for Cough, Cold, Fever, or Respiratory Symptoms* by CDC Week, 2019-20 Season to Date.



* Respiratory category includes cough, cold symptoms, influenza-like illness, and other respiratory symptoms.

Figure 8. Percent of San Diego County Emergency Department Visits for Influenza-like Illness by CDC Week and Season Compared to 5-Year Baseline and Upper 95% Threshold Values (Serfling Method).



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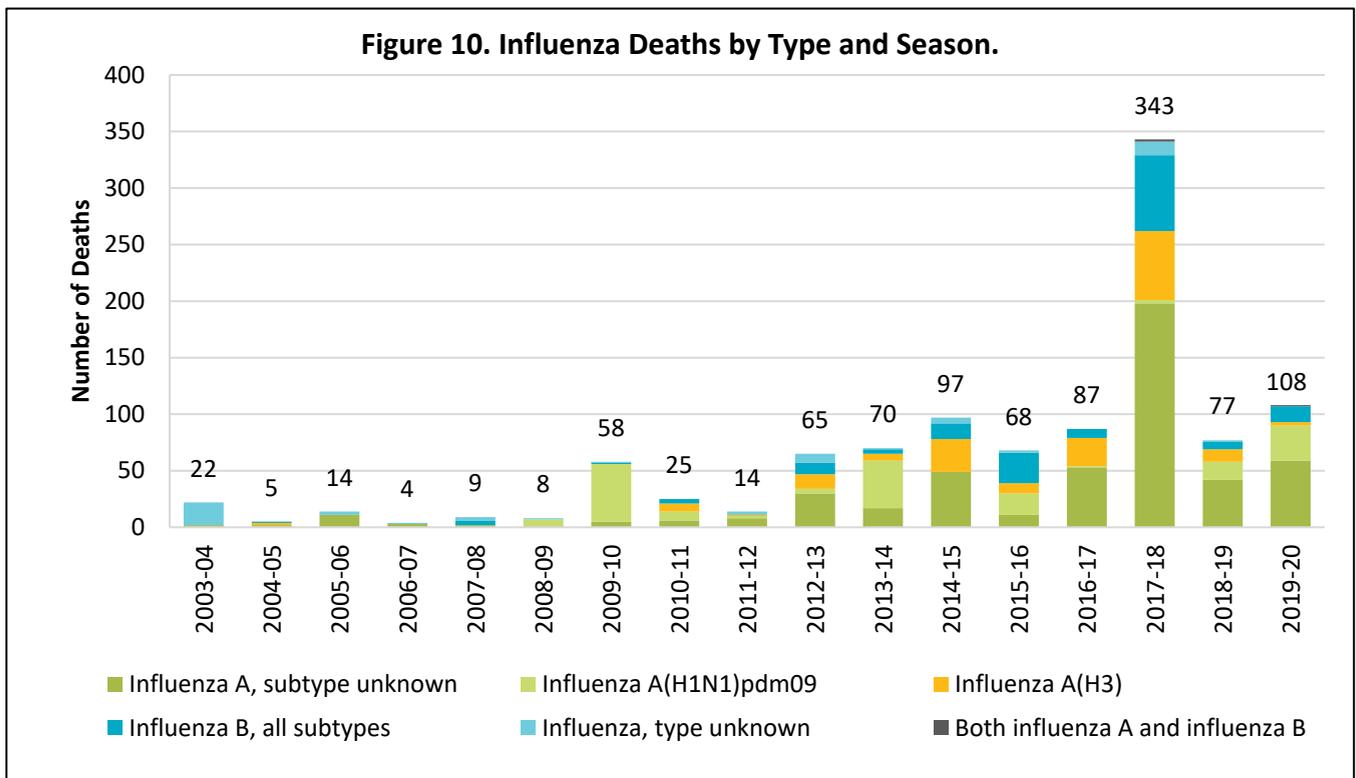
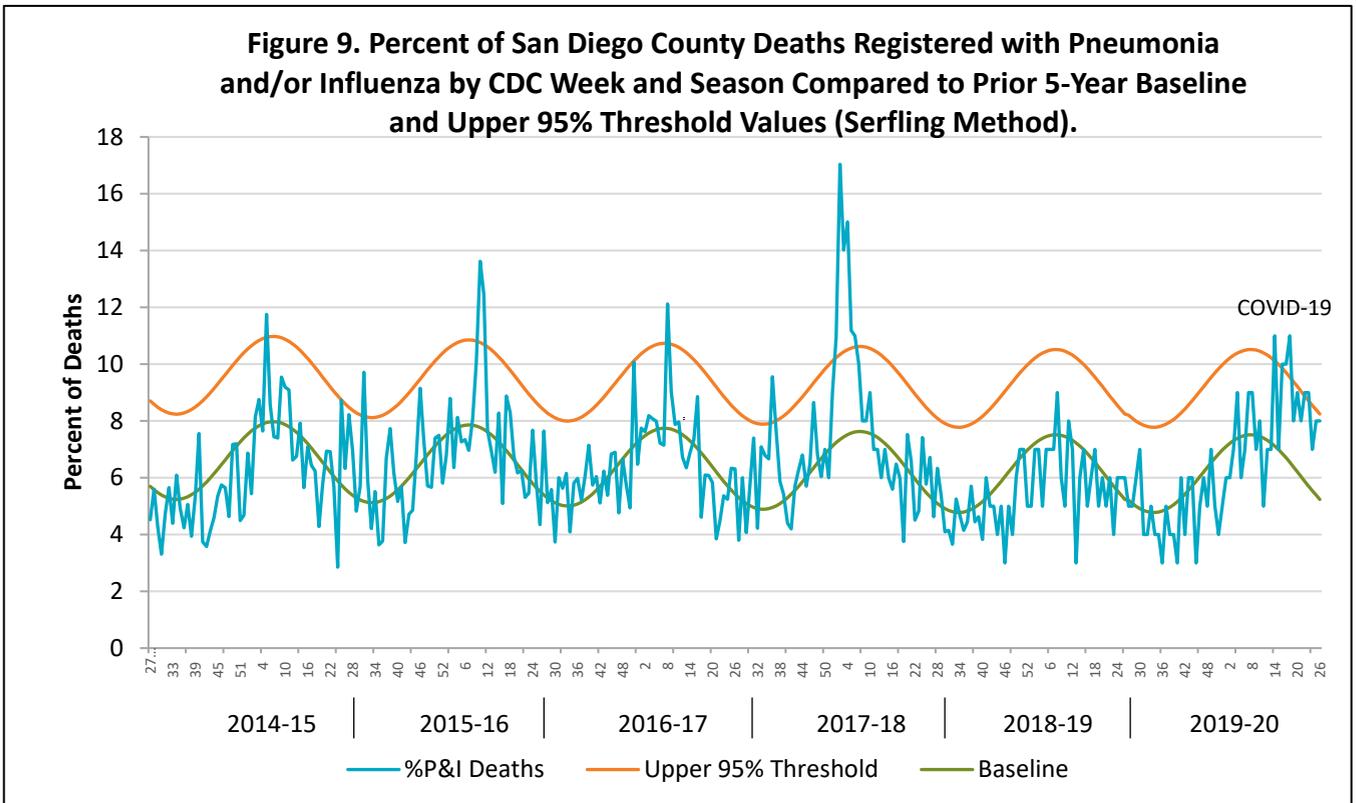
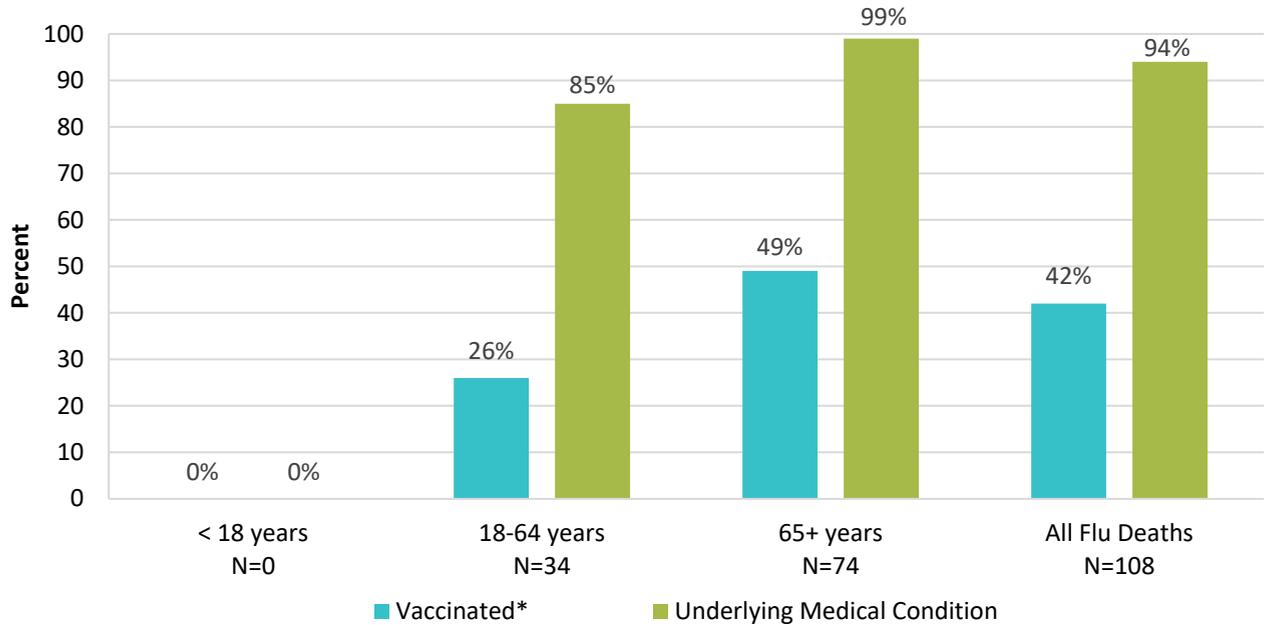
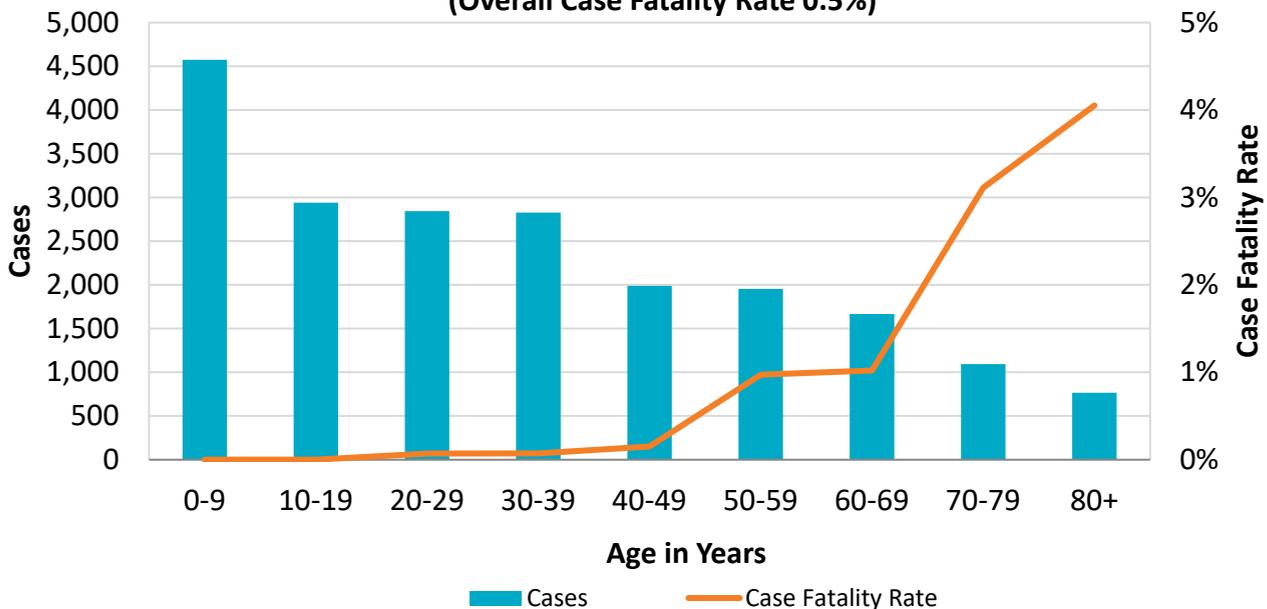


Figure 11. Percent of Influenza Deaths by Age Group, Vaccination Status, and Underlying Medical Condition, 2019-20 Season.



* known to be vaccinated

Figure 12. Influenza Cases and Case Fatality Rates by Age Group San Diego County Residents, 2019-20 Season. (Overall Case Fatality Rate 0.5%)



Influenza Reporting in San Diego County

Individual influenza cases are reportable to Public Health as of October 1, 2019. Please report laboratory-positive influenza results to the County Epidemiology Program by **FAX (858) 715-6458** using a [Confidential Morbidity Report Form](#), or an [Influenza Case Report Form](#), and/or a copy of the laboratory results. Also, please indicate if the patient died and/or is a resident of a congregate living facility (if known).

Influenza specimens may be sent to [Public Health Laboratory](#) (PHL) for confirmation and subtyping. Please contact PHL at **(619) 692-8500 before submitting** or for questions and use the current PHL Test Request Form found at https://www.sandiegocounty.gov/hhsa/programs/phs/phs_laboratory/. Contact the Epidemiology Program by telephone **(619) 692-8499** or email (EpiDiv.HHSA@sdcounty.ca.gov) with questions about influenza data. Influenza outbreaks should be reported by telephone to **(619) 692-8499**.

Resource Links

- County of San Diego Epidemiology Program www.sdepi.org
- County of San Diego [2018-19 Influenza Season Summary](#)
- County of San Diego Immunization Program (SDIZ) www.sdiz.org
- San Diego Regional Immunization Registry (SDIR) <http://www.sdiz.org/CAIR-SDIR/index.html>
- California Department of Public Health (CDPH) [Influenza Update](#)
- Centers for Disease Control and Prevention (CDC) [Influenza Surveillance](#)

Influenza Watch Data Sources

The following sources of data are used to produce this report:

- **Influenza case reports:** Medical providers and laboratories report individual cases of confirmed influenza via fax or electronic laboratory reporting (ELR) to Public Health Services Epidemiology Program (Epidemiology).
- **Influenza deaths:** Hospital infection control professionals report influenza-related deaths. Pediatric flu deaths (under 18 years of age) are legally reportable in California; however, San Diego County requests that all influenza-related deaths be reported for surveillance purposes. Influenza-related deaths are also identified through death certificate registration. The County Office of Vital Records notifies Epidemiology when a new death is registered with influenza listed as a cause of death or underlying condition. In addition, influenza case reports are compared to death data for San Diego County, and matches are evaluated to determine if their influenza infection was related to the cause of death.
- **Percent pneumonia and influenza deaths:** The percentage of all deaths registered that had either pneumonia and/or influenza listed as a cause of death is obtained directly from the Vital Records VRIS data system on a weekly basis.
- **Influenza-like illness (ILI):** Electronic emergency department (ED) visit data is submitted to Epidemiology daily, and the number of all ILI chief complaints and total visits are used to calculate the ED ILI percentage for each week. ILI is defined as fever (>100°F or 37.8°C) and cough and/or sore throat, in the absence of a known cause.
- **Influenza outbreaks:** In a congregate living setting, outbreaks are defined as at least one laboratory-confirmed influenza in the setting of a cluster (≥2 cases) of influenza-like illness (ILI) within a 72-hour period. Influenza outbreaks are reportable in California. Epidemiology identifies outbreaks when facilities call to report. Other potential outbreaks are identified when multiple cases share an address or have a residential address that matches a skilled nursing or long-term care facility.
- **Number of vaccines:** The San Diego Immunization Registry (SDIR) provides weekly updates on the number of flu vaccinations given based on the number of flu vaccinations registered by participating providers.

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.