



The purpose of the *Influenza Watch* is to summarize influenza surveillance in San Diego County. This summary report reflects the 2021-22 season.

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Season Highlights

- The season had lower influenza activity compared to other recent seasons, excluding the 2020-21 season, with 4,192 cases reported, 8 deaths, and 1 outbreak. San Diego, like the nation, experienced an unusual late-season surge in cases.
- Influenza cases peaked at 205 cases in week 51 (ending December 25, 2021), with a second peak of 203 cases in week 21 (ending May 28, 2022).
- Influenza A accounted for 92% of all reports, with Influenza A (H3) the most frequent subtype detected.
- There were 170 cases of influenza and SARS-CoV-2 co-infection, representing 4% of all influenza cases.
- Of the 8 influenza-associated deaths, 3 deaths were in persons 18-64 years of age and 5 deaths were in persons 65 years or older. One was known to have received the 2021-22 influenza vaccine, and all had underlying medical conditions. No persons were co-infected with SARS-CoV-2.
- The percent of emergency department visits for influenza-like illness (ILI) was higher than the previous season, peaking at 8% in week 1 (ending January 8, 2022). The percent of pneumonia and influenza (P&I) deaths registered this season peaked at 19% in week 6 (ending February 12, 2022), due to COVID-19-associated deaths.

2021-22 Season Summary

4,192

Total Cases

8

Deaths[†]

1

Outbreak^{*}

[†] 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

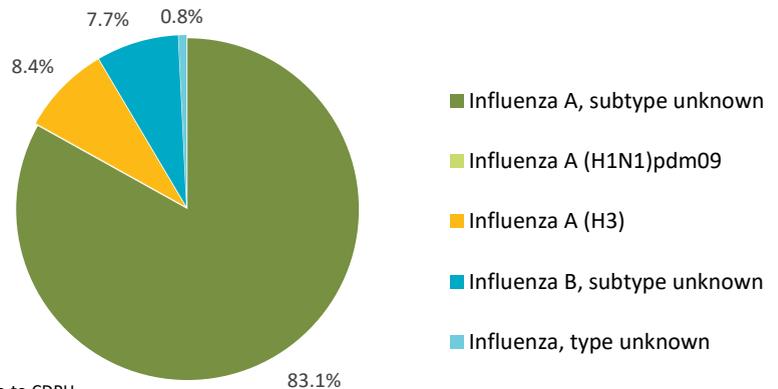


Table 1. Influenza Surveillance Indicators.

Surveillance Indicator	2021-22 Season	2020-21 Season	Prior 5-Season Average*
All influenza detections reported (rapid or PCR)	4,192	848	11,781
Number of influenza-related outbreaks reported [∞]	1	0	48
Number of influenza-related deaths reported [^]	8	2	123

*Includes FYs 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21. 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: 34 in 2016-17, 119 in 2017-18, 25 in 2018-19, 61 in 2019-20, and 0 in 2020-21.

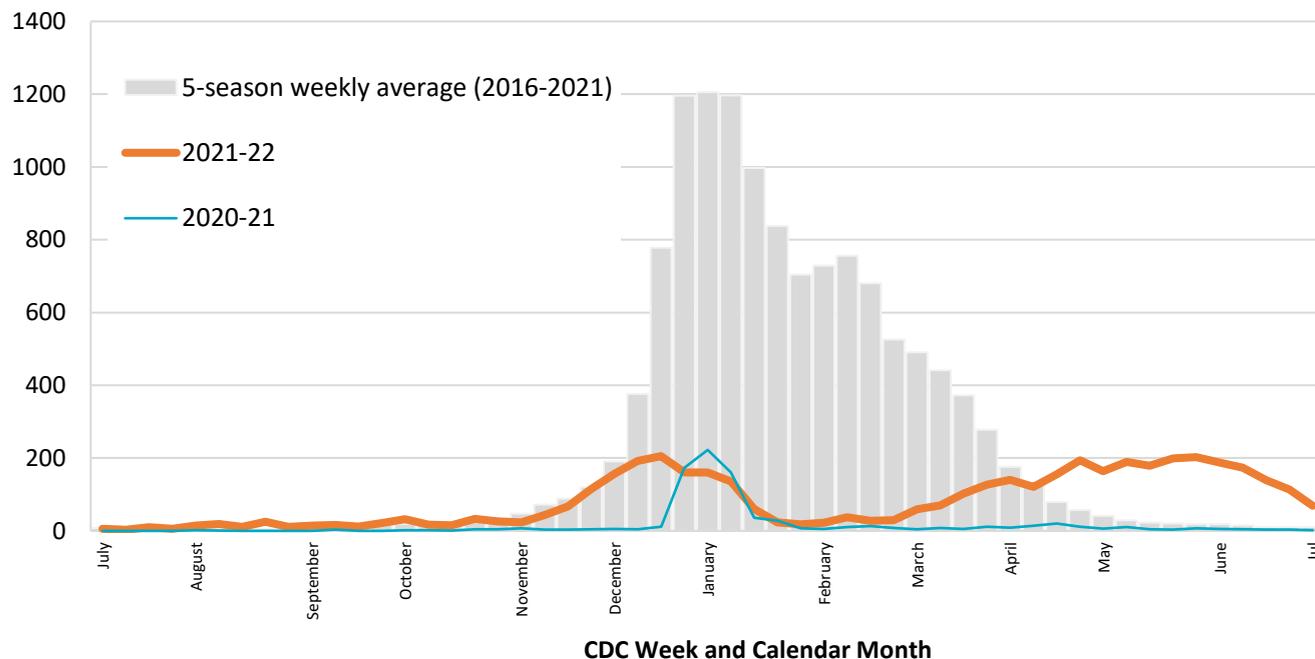
[^]Current FY deaths are shown by week of report; by week of death for prior FYs. Total deaths reported in prior seasons: 87 in 2016-17, 343 in 2017-18, 77 in 2018-19, 108 in 2019-20, and 2 in 2020-21.

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Table 2. Influenza Cases Reported, 2021-2022 Season

Positive Test Type/Subtype	Total	Percent
Influenza A, subtype unknown	3,483	83.1%
Influenza A (H1N1)pdm09	1	0.0%
Influenza A (H3)	352	8.4%
Influenza B, subtype unknown	324	7.7%
Influenza B/Victoria	0	0.0%
Influenza B/Yamagata	0	0.0%
Influenza, type unknown	32	0.8%
Total	4,192	100.0%

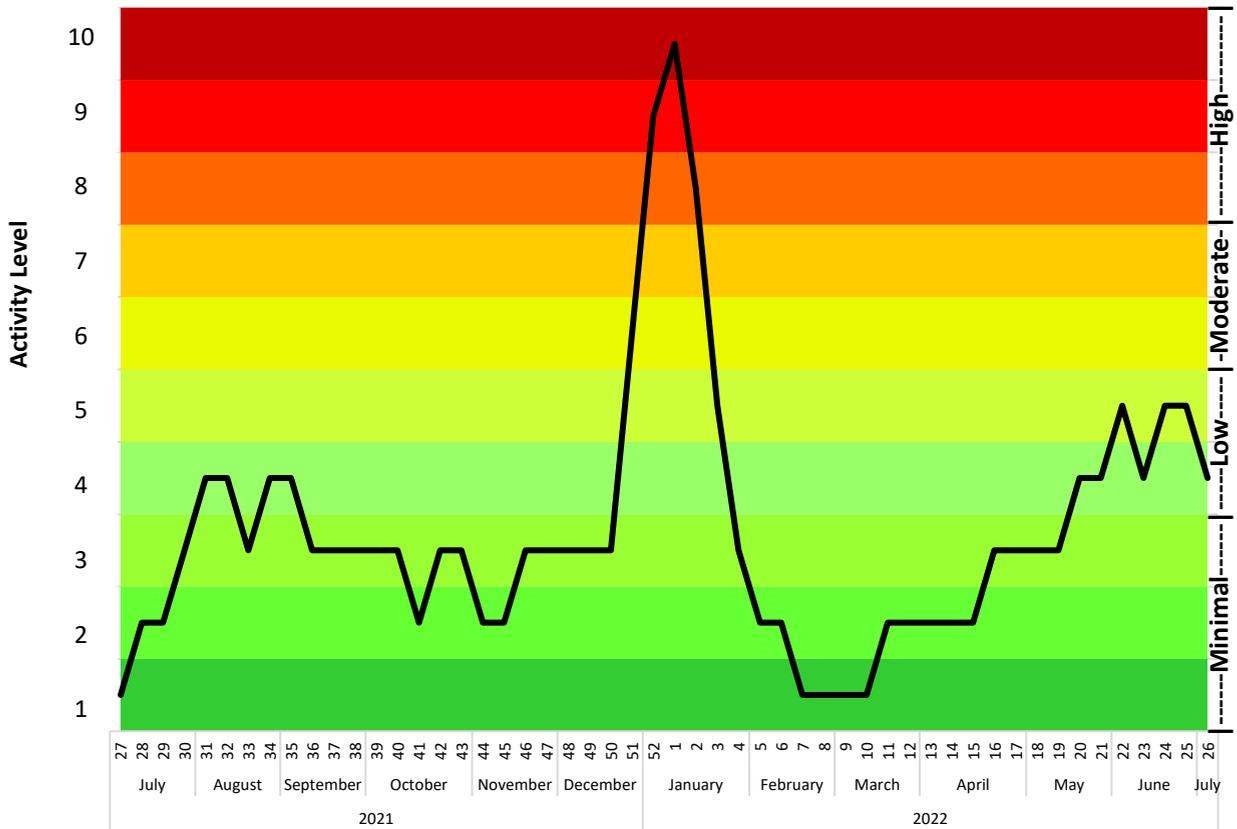
Figure 1. San Diego County Influenza Detections by CDC Episode Week* .



*If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

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Figure 2. Activity Level of Emergency Department Influenza-Like Illness (ILI), 2021-22.



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

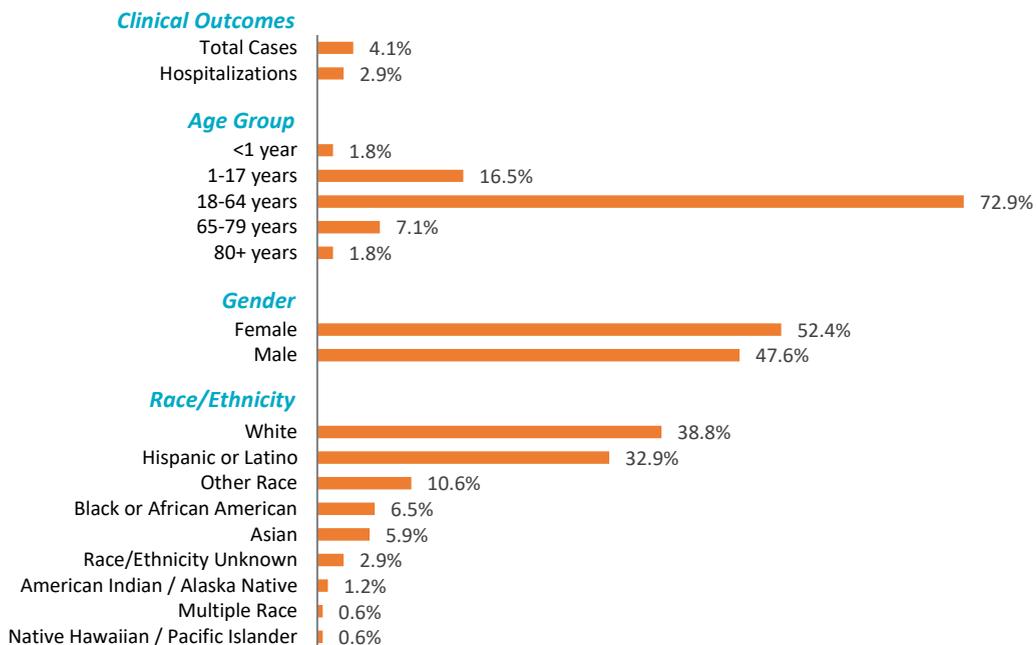
Influenza Activity Indicator:

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.

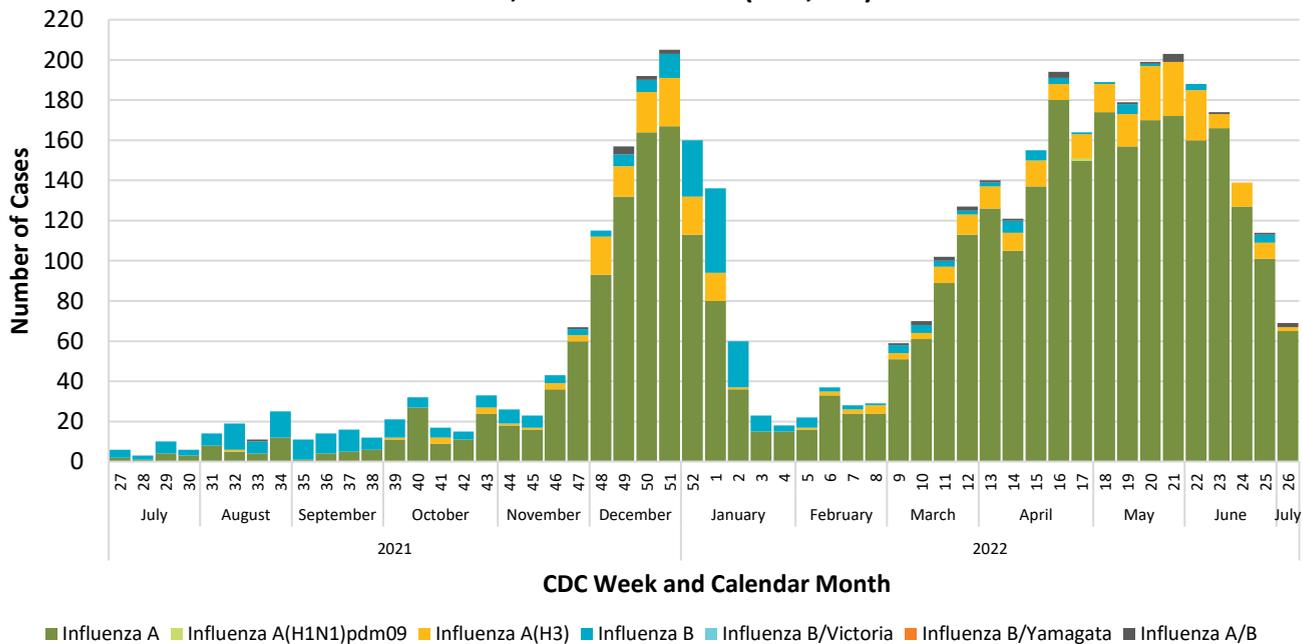
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Figure 3. Selected Characteristics of Influenza and SARS-CoV-2 Coinfections*, N=170.



*Co-infections were identified as any positive influenza tests and positive RT-PCR or antigen tests for SARS-CoV-2 (the causative agent of COVID-19) within one week of each other. There were 114 confirmed and 56 probable COVID-19 cases among the co-infections.

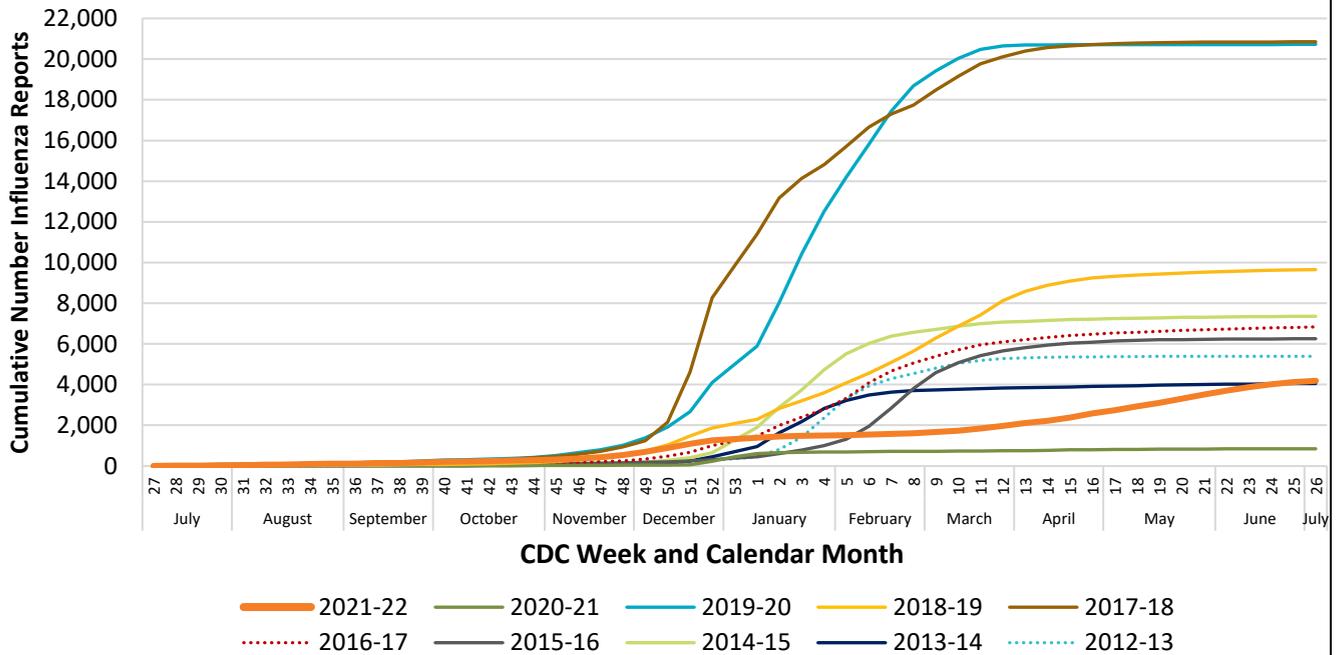
Figure 4. San Diego County Influenza Detections by Type and CDC Episode Week*, 2021-22 Season (N=4,192).



*If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

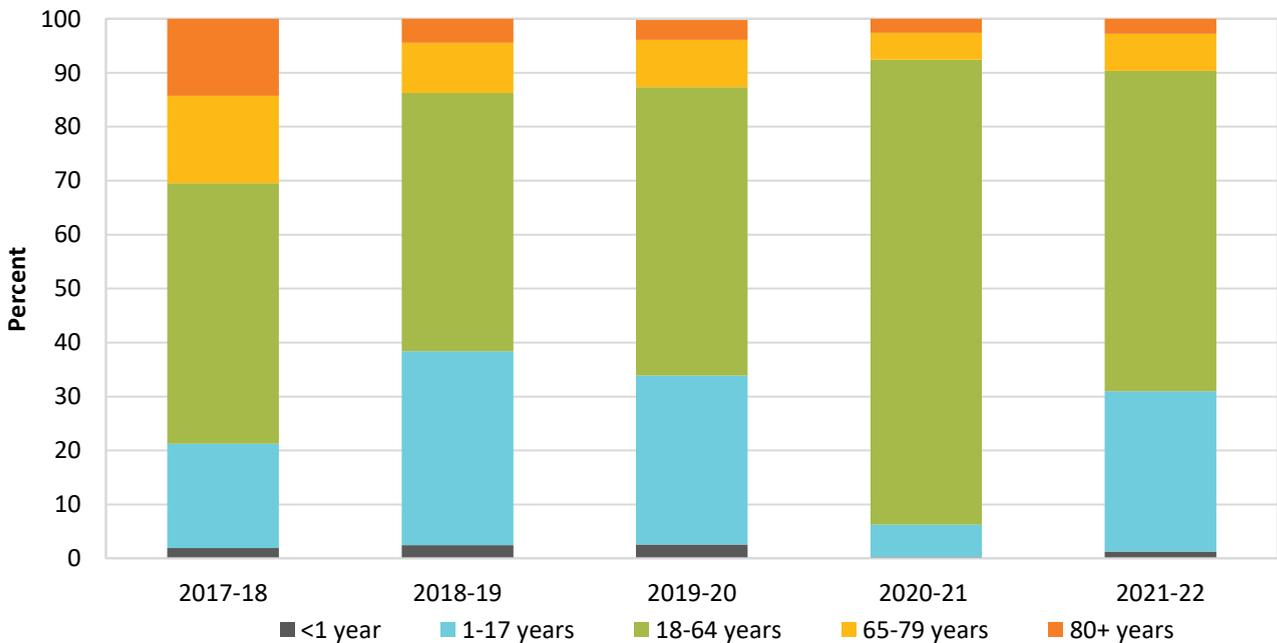
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Figure 5. Cumulative Influenza Cases by CDC Episode Week* and Season.



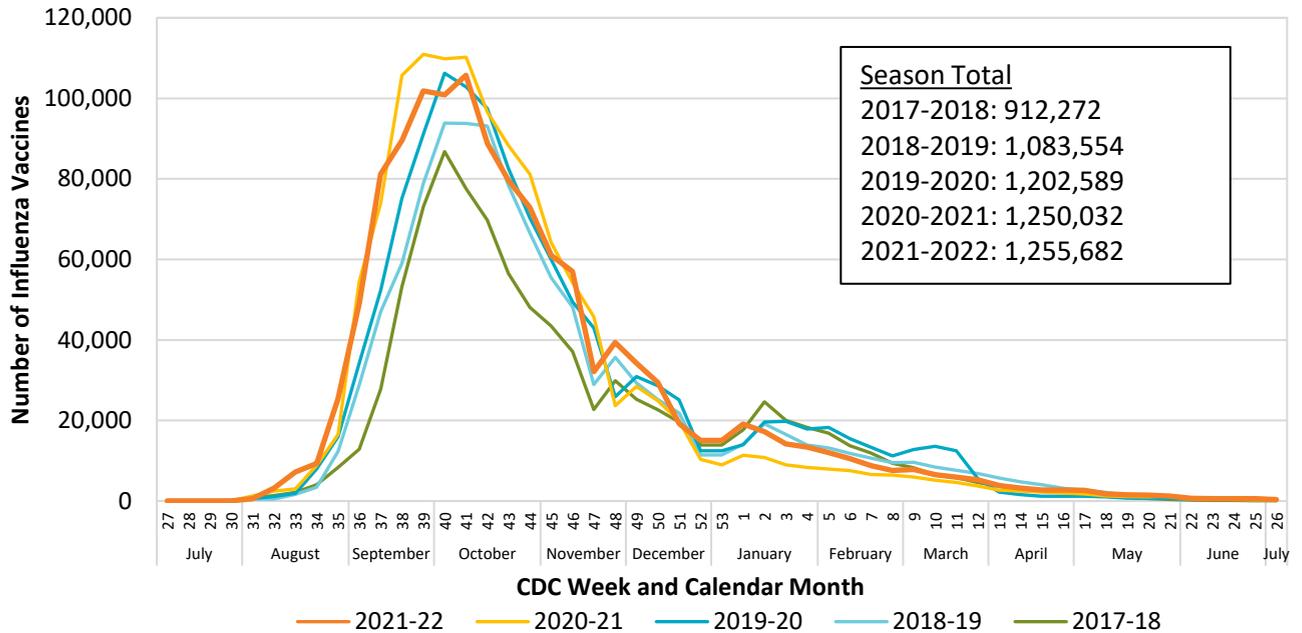
*If case did not have symptoms or illness onset date is unavailable, the earliest of specimen collection date, date of death, or date reported is used instead.

Figure 6. Proportion of Influenza Cases by Age Group and Season.



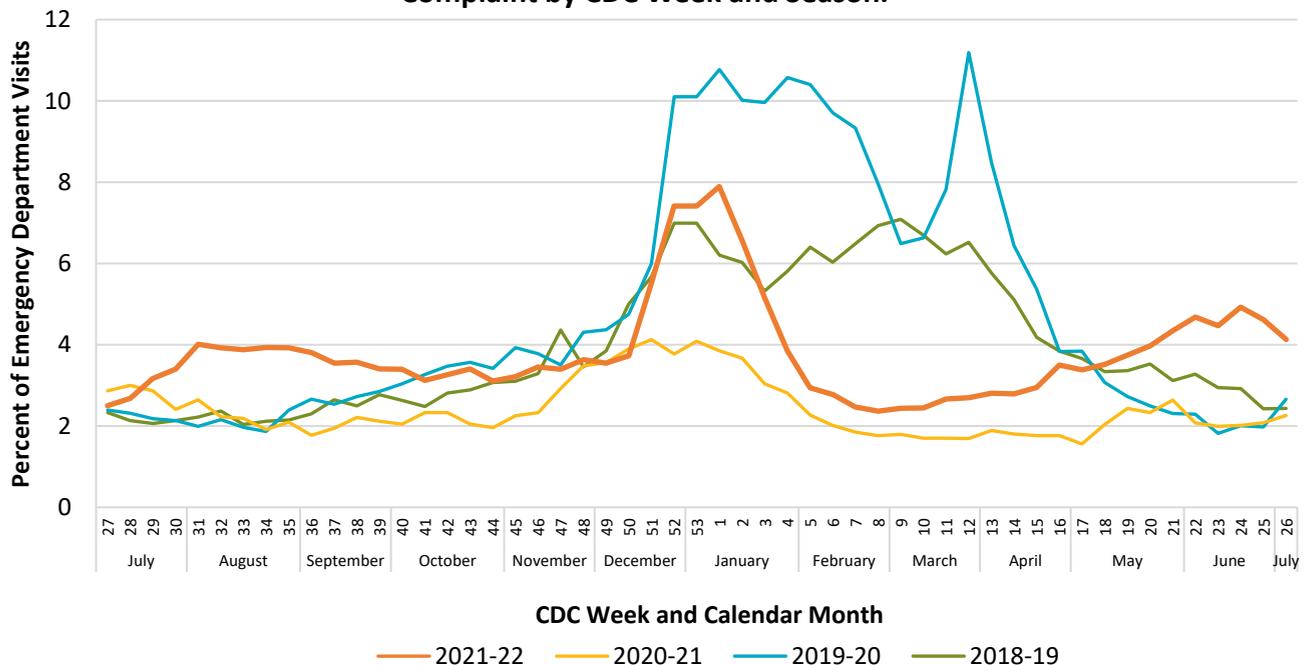
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Figure 7. Number of Influenza Vaccinations Administered* by CDC Week and Season.



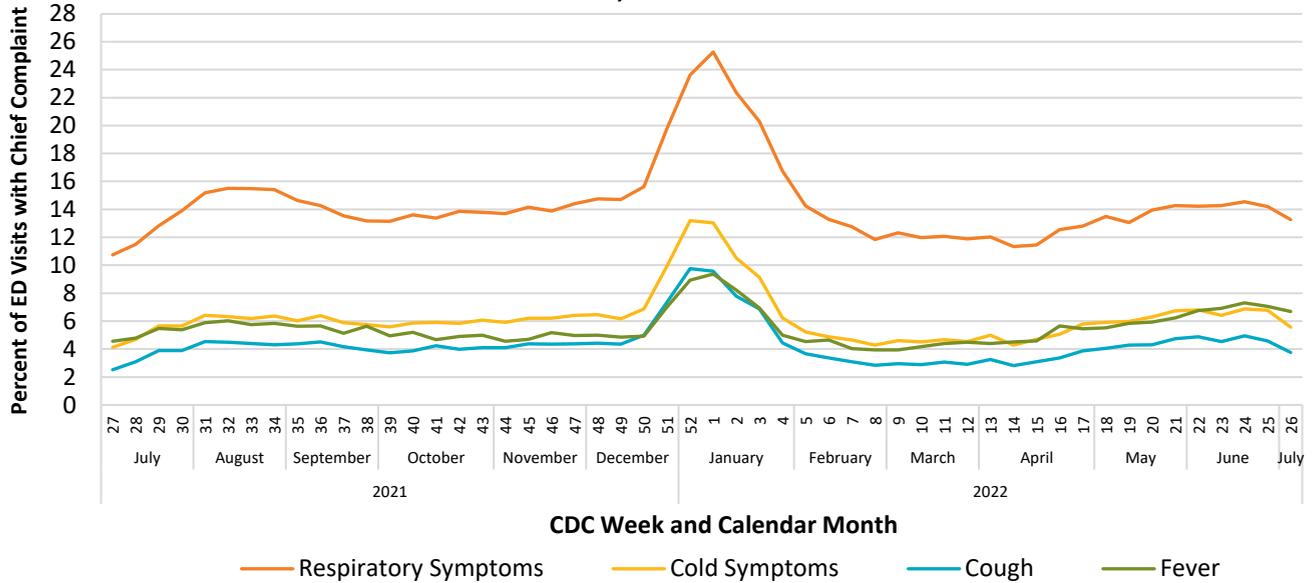
*Influenza vaccinations administered and entered into the California Immunization Registry (CAIR2). The San Diego Immunization Registry (SDIR) transitioned to the California Immunization Registry (CAIR2) on Monday, April 25, 2022. All vaccination data is now being pulled from CAIR2. Due to differences in the programming of each system, the overall count of vaccinations may differ slightly from previously-reported data. Week 52 data are repeated for week 53 for seasons that do not include week 53.

Figure 8. Percent of Emergency Department Visits for ILI Chief Complaint by CDC Week and Season.



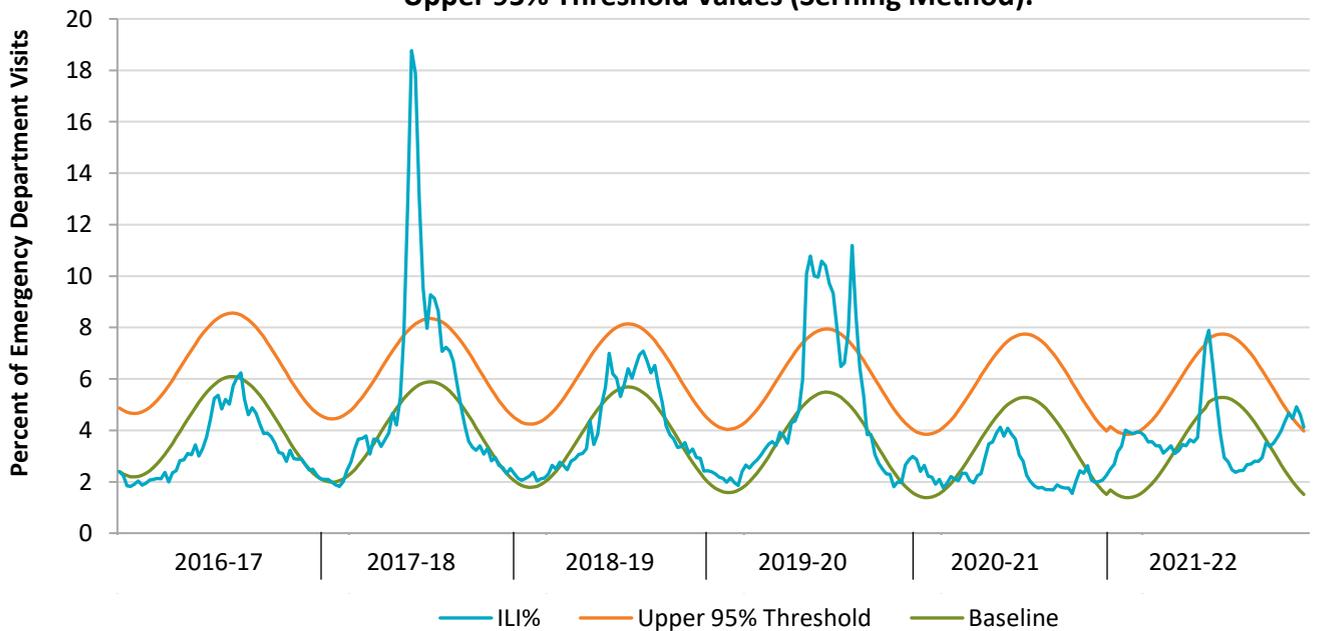
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Figure 9. Percent of Emergency Department Visit Chief Complaints for Cough, Cold, Fever, or Respiratory Symptoms* by CDC Week, 2021-22 Season.



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

Figure 10. 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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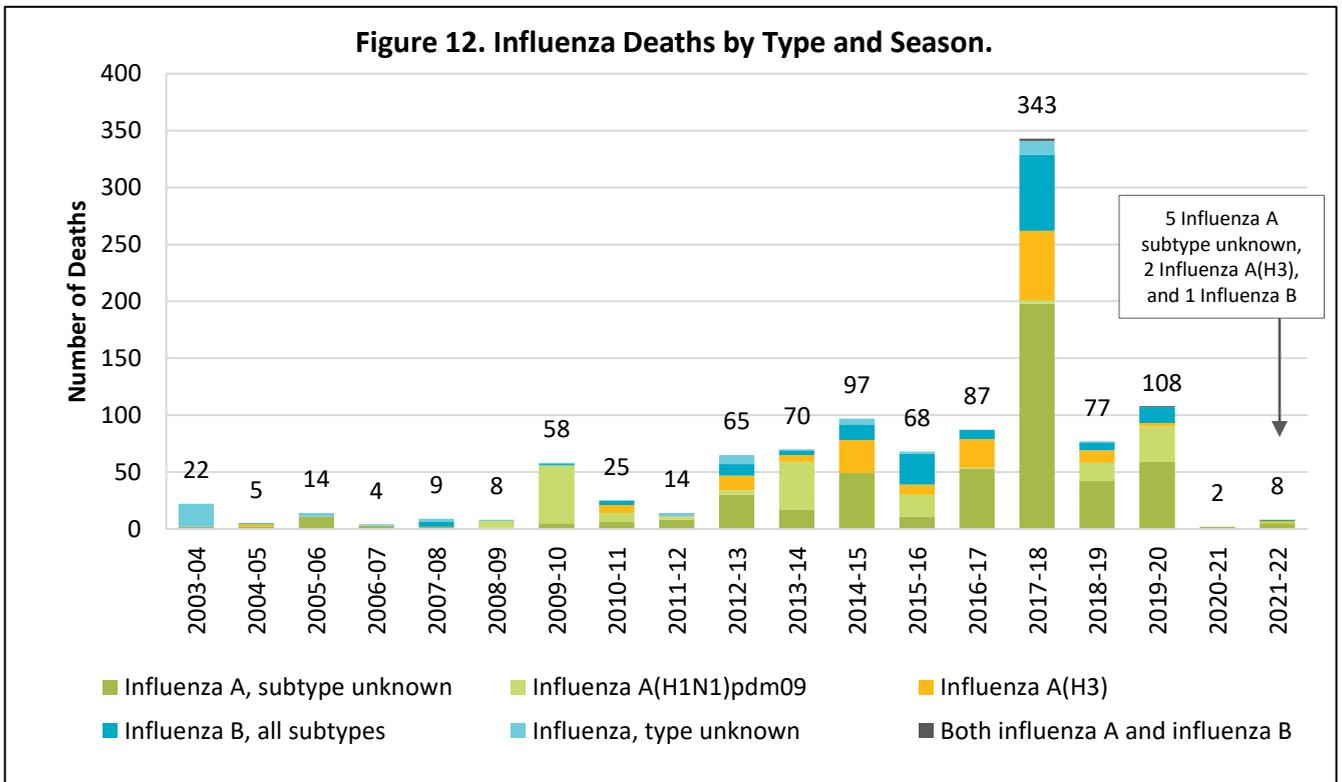
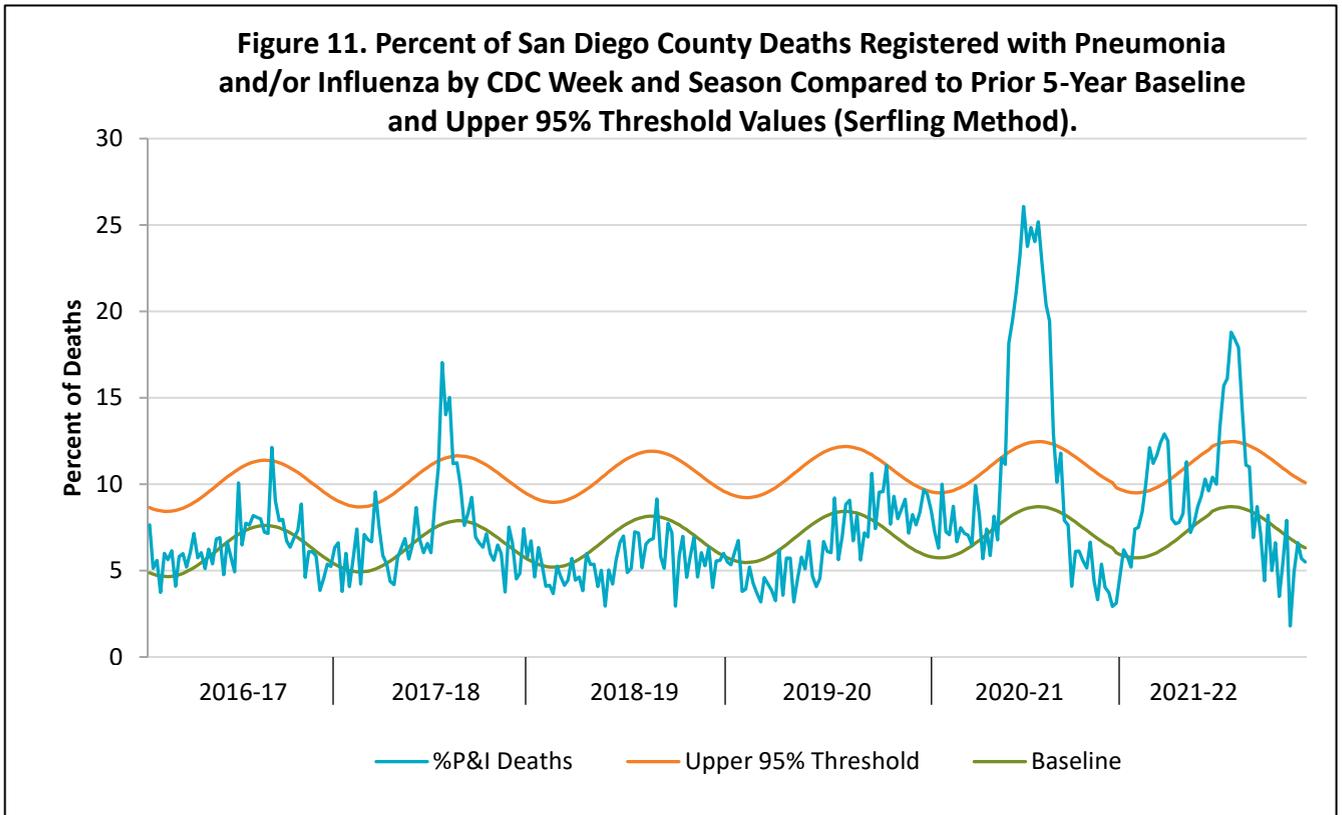
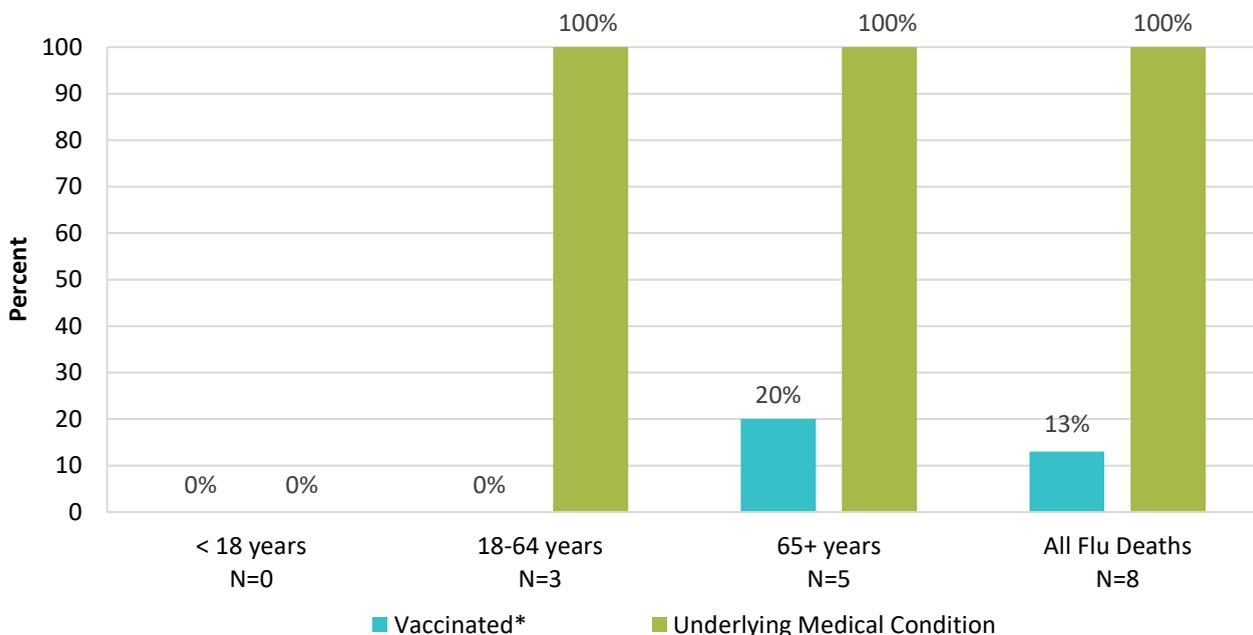


Figure 13. Percent of Influenza Deaths by Age Group, Vaccination Status, and Underlying Medical Condition, 2021-22 Season.



*known to be vaccinated

Influenza Reporting in San Diego County

Individual influenza cases are reportable to the County of San Diego Epidemiology and Immunization Services Branch. Please report laboratory-positive influenza results to the County Epidemiology Unit 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 Requisition Form](#). Contact the Epidemiology Unit 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 Unit www.sdepi.org
- County of San Diego [2020-21 Influenza Season Summary](#)
- County of San Diego Immunization Unit (SDIZ) www.sdiz.org
- California [Immunization Registry](#) (CAIR2)
- 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 Unit (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 contributing condition. In addition, influenza case reports are compared to death data for San Diego County, and matches are evaluated to determine if 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 data system on a weekly basis.
- **Influenza-like illness (ILI):** Electronic emergency department (ED) visit data are submitted to Epidemiology daily. The percent of ED visits for ILI or flu (based on chief complaints or diagnosis) is calculated for each week. ILI is defined as fever and cough and/or sore throat.
- **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 California Immunization Registry (CAIR2) provides weekly updates on the number of flu vaccinations given based on the number of flu vaccinations registered by participating providers. The San Diego Immunization Registry (SDIR) transitioned to the California Immunization Registry (CAIR2) on Monday, April 25, 2022. All vaccination data, previously pulled from SDIR, is now being pulled from CAIR2. Due to differences in the programming of each system, the overall count of vaccinations may differ slightly from previously-reported data.