

Delaware's Respiratory Overview

2023 Immunization Summit

December 7, 2023

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DELAWARE HEALTH AND SOCIAL SERVICES

Division of Public Health

Viral Respiratory Season

RSV

Respiratory Syncytial Virus, also known as RSV, is a common respiratory illness that has cold-like symptoms such as coughing, sneezing, wheezing, runny nose, fever, or decrease in appetite.

COVID-19

SARS-CoV-2, also known as COVID-19, is a respiratory virus that can feel similar to cold, flu, or pneumonia. This respiratory virus is highly contagious and spreads quickly affecting an individual's lungs and respiratory system.

Influenza

Influenza, commonly known as Flu, is a respiratory illness caused by the influenza virus. This virus can infect the nose, throat, and sometimes the lungs in a mild to severe manner of the infected individual with fatality sometimes occurring.

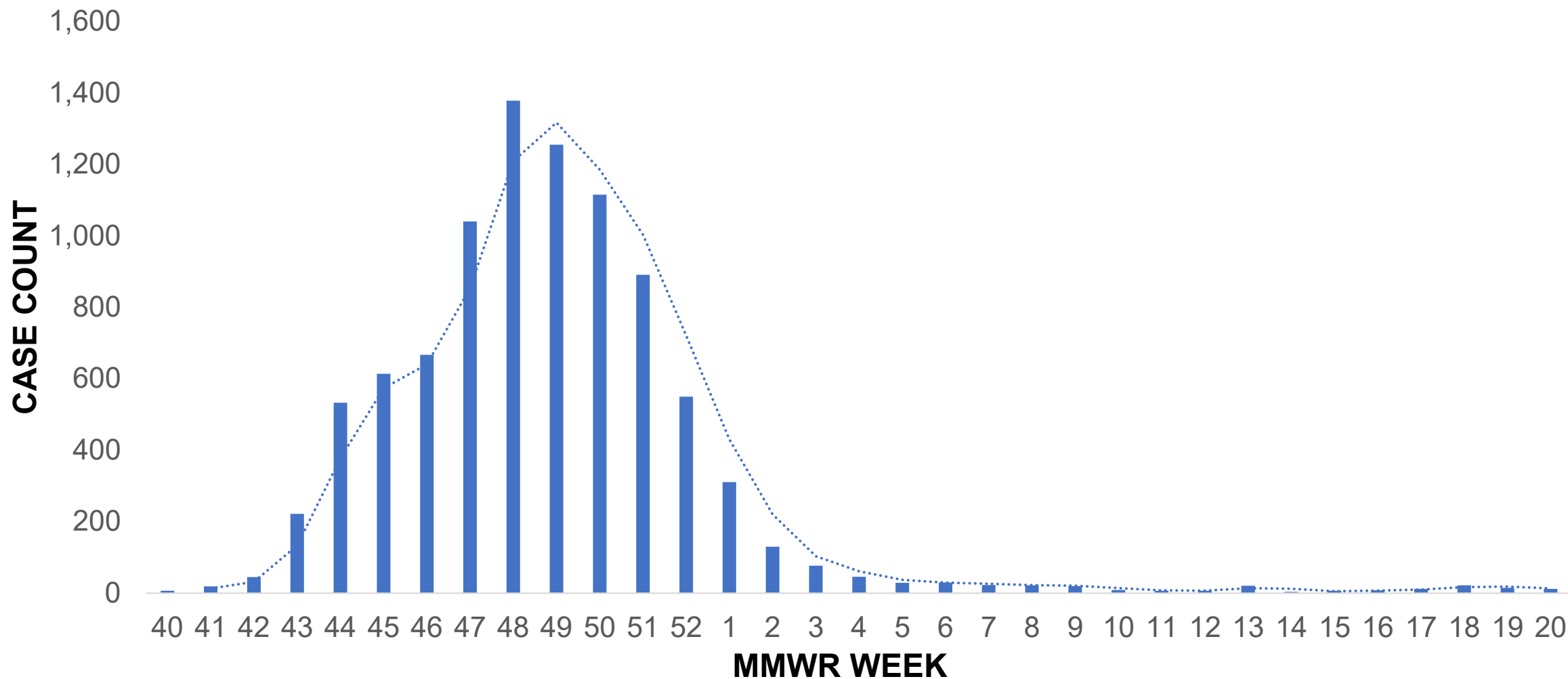
Influenza

Influenza Cases by County, Delaware, 2022-2023 Respiratory Season

Respiratory Season Dates
10/2/2022-5/20/2023

- **9,132** cases
 - **4,208** in New Castle County
 - **2,266** in Kent County
 - **2,660** in Sussex County
- Predominant strain **Influenza A (un-subtyped)** followed by **Influenza A(H3)**
- **72** Hospitalizations

Influenza Case Counts by MMWR Week, Delaware, 2022-2023 Respiratory Season



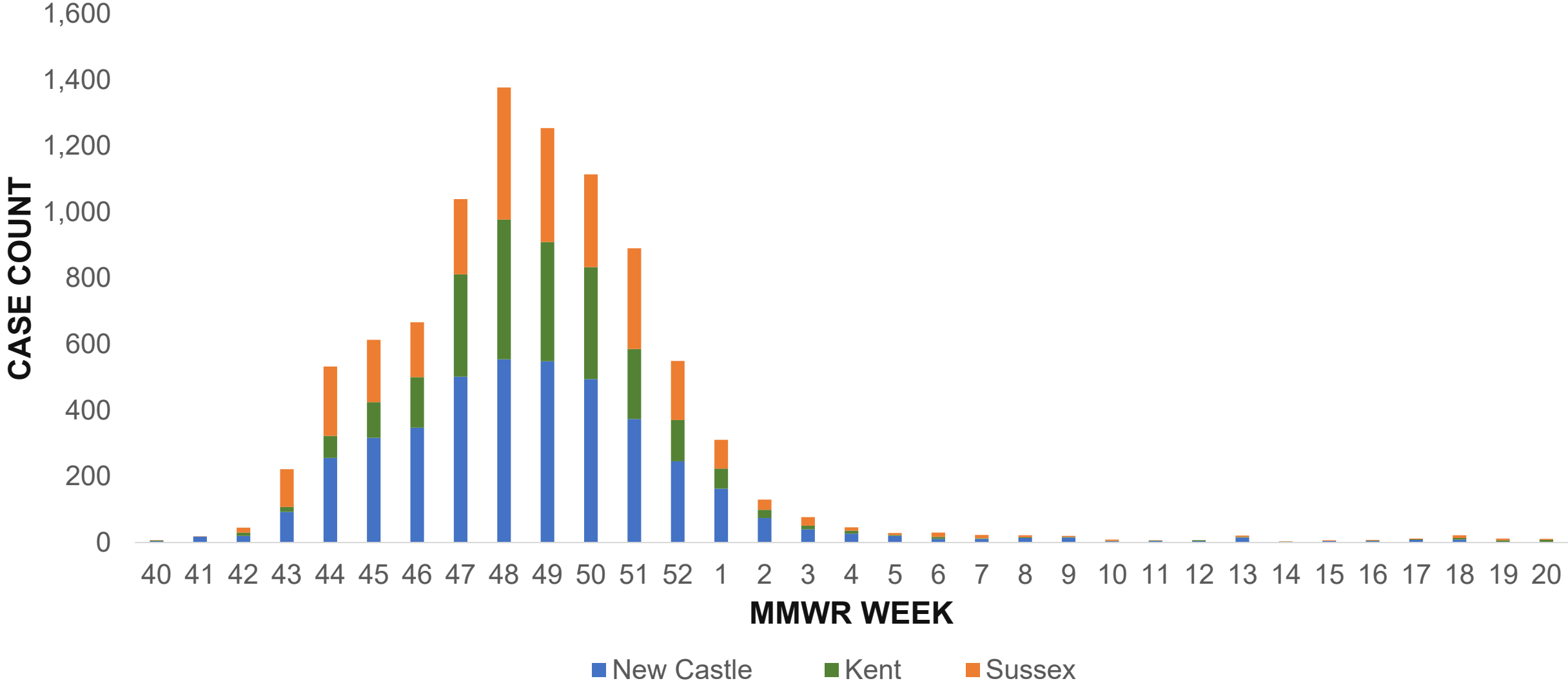
Note: Mortality and Morbidity Weekly Report (MMWR) numbers CDC reporting weeks

Dotted line indicates the epidemiological curve for the respiratory season displaying the disease trend for the respiratory season

2022-2023 respiratory season is from MMWR ~ Week 40 – Week 20 of following year

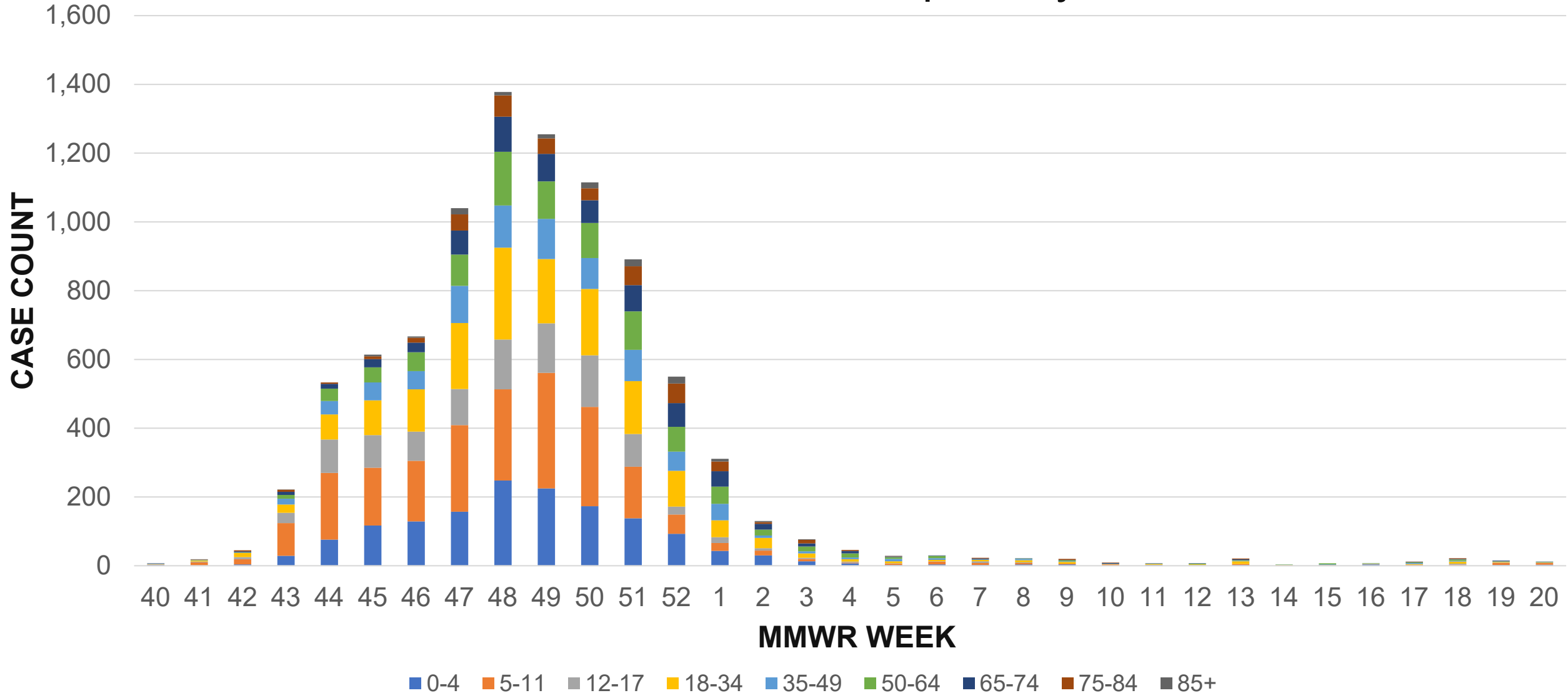
Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

Influenza Case Counts by County and MMWR Week, Delaware, 2022-2023 Respiratory Season



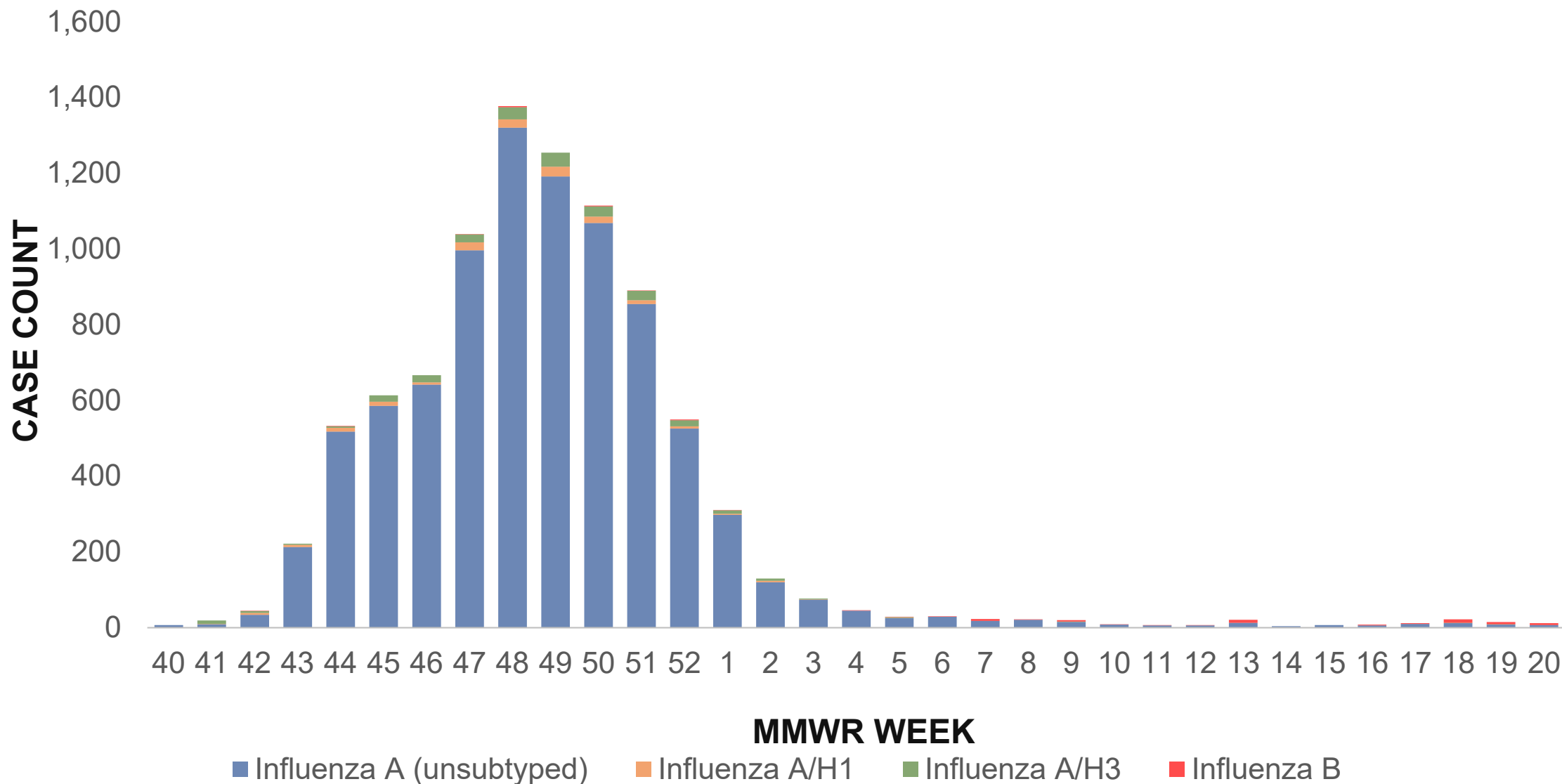
Note: Mortality and Morbidity Weekly Report (MMWR) numbers CDC reporting weeks
 Respiratory Season October – May (MMWR ~ Week 40 – Week 20 of following year)
 Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

Influenza Case Counts by Age Group and MMWR Week, Delaware, 2022-2023 Respiratory Season



Note: Mortality and Morbidity Weekly Report (MMWR) numbers CDC reporting weeks
 Respiratory Season October – May (MMWR ~ Week 40 – Week 20 of following year)
 Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

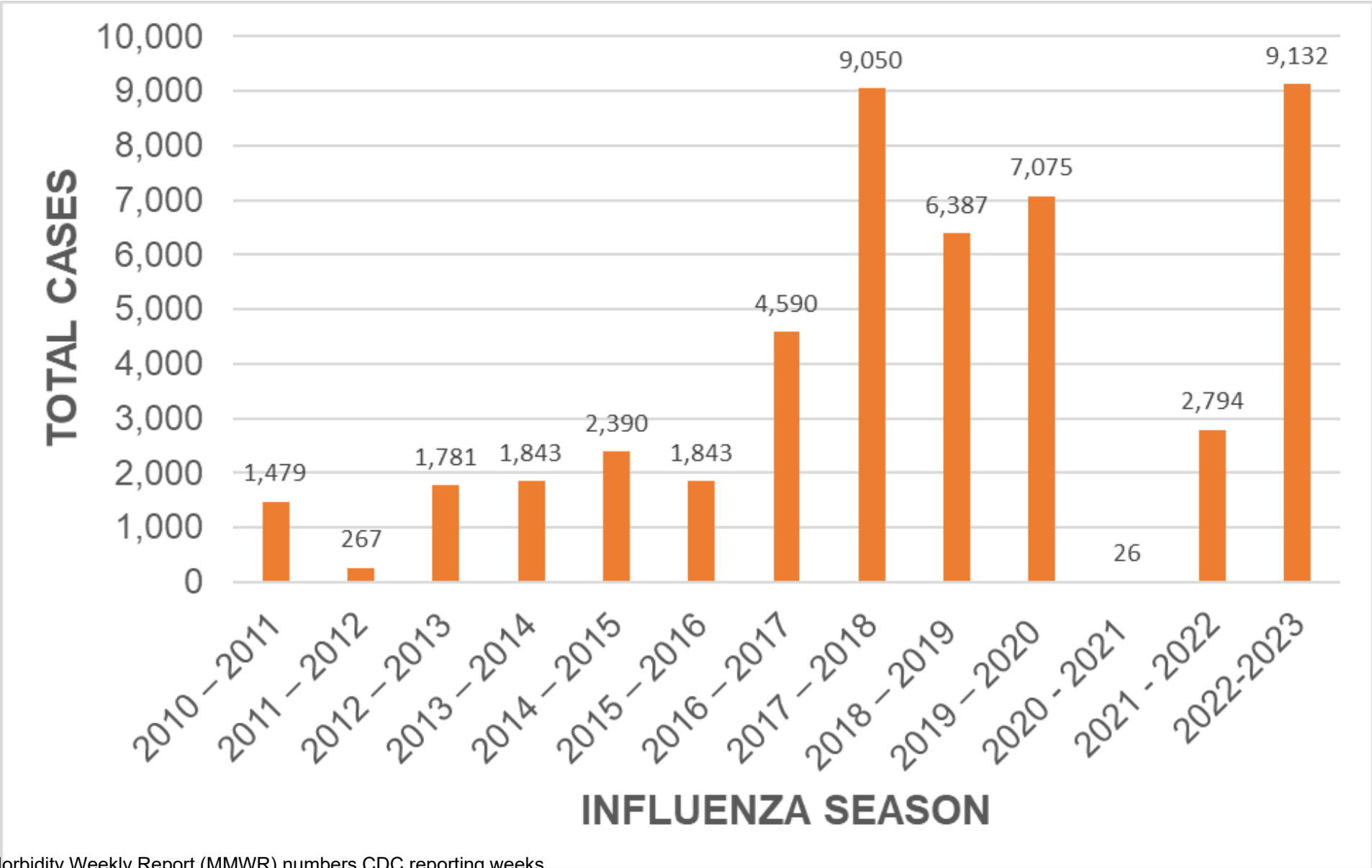
Influenza Case Counts by Strain and MMWR Week, Delaware 2022-2023 Respiratory Season



Note: Mortality and Morbidity Weekly Report (MMWR) numbers CDC reporting weeks
Respiratory Season October – May (MMWR ~ Week 40 – Week 20 of following year)

Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

Influenza Cases by Respiratory Season, Delaware, 2010 -2023

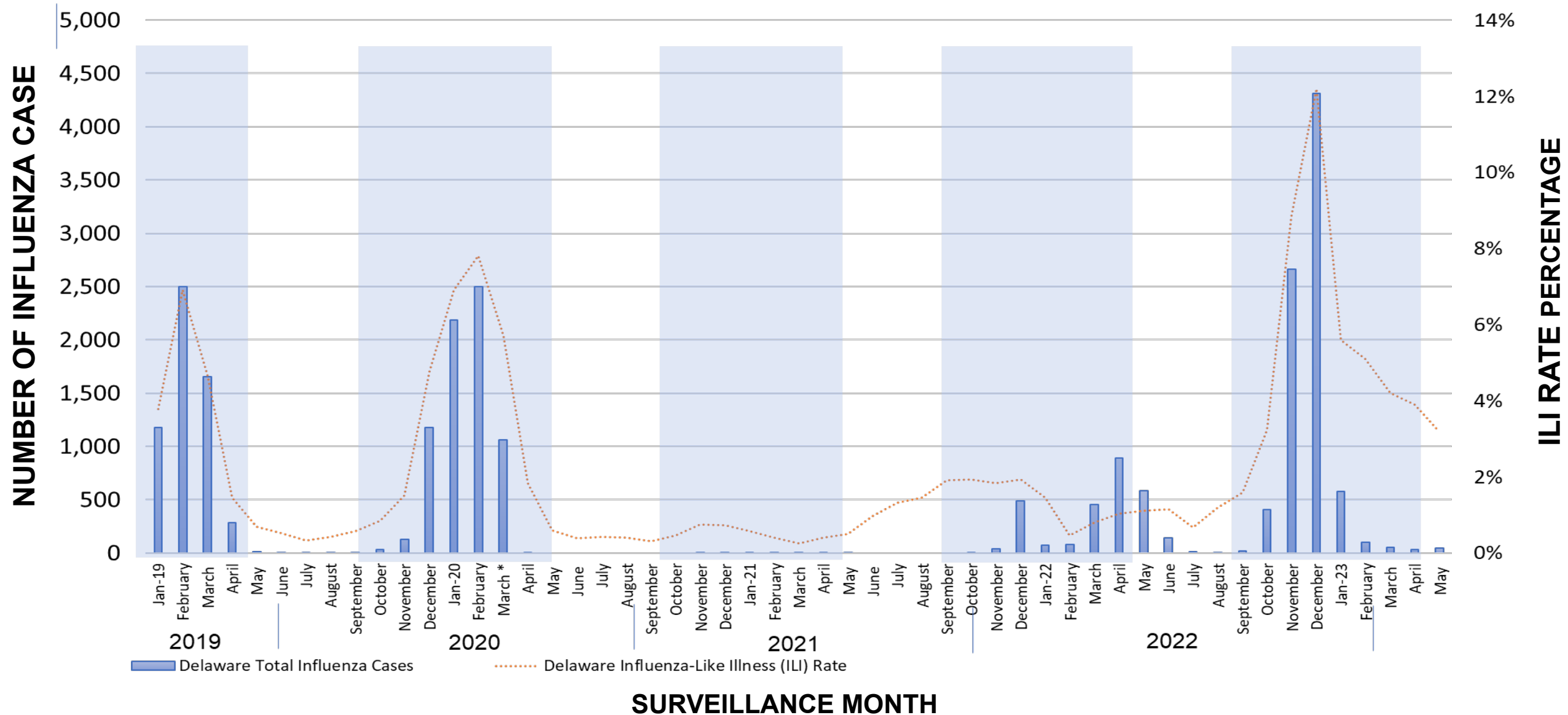


Note: Mortality and Morbidity Weekly Report (MMWR) numbers CDC reporting weeks

Respiratory Season October – May (MMWR ~ Week 40 – Week 20 of following year)

Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

Delaware Total Influenza Cases¹ Per Month, 2019-2022



Note: National COVID-19 emergency declared March 13th

Surveillance month – flu season start the month of October and ends in May

Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023



DE ILINet- symptom tracking

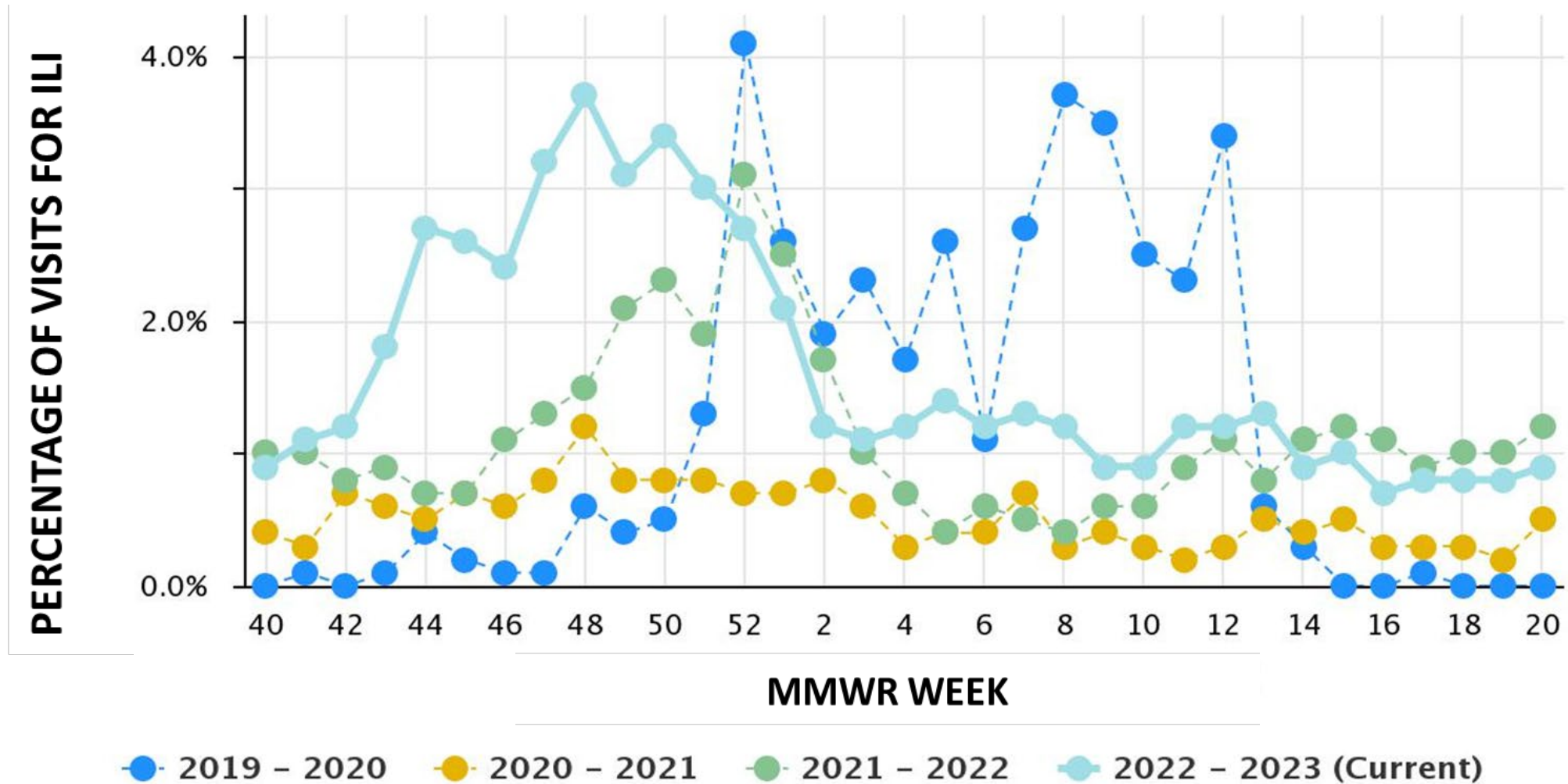
Influenza-like Illness (ILI) Sentinel Reporting Sites

- 35 Sites:
 - 9 Federally Qualified Health Centers
 - 5 Clinics
 - 8 Hospital networks
 - 2 University Wellness Clinics
 - 8 Correctional Center Clinics
 - 1 Urgent Care.

Note: ILINet is the reporting portal for Influenza-like Illness (ILI).

ILI has been defined for surveillance purposes as an illness with fever or feverishness plus either cough or sore throat.

Percentage of Sentinel Provider Reported Influenza-like Illness (ILI) by Respiratory Season and MMWR week, Delaware, 2019-2023

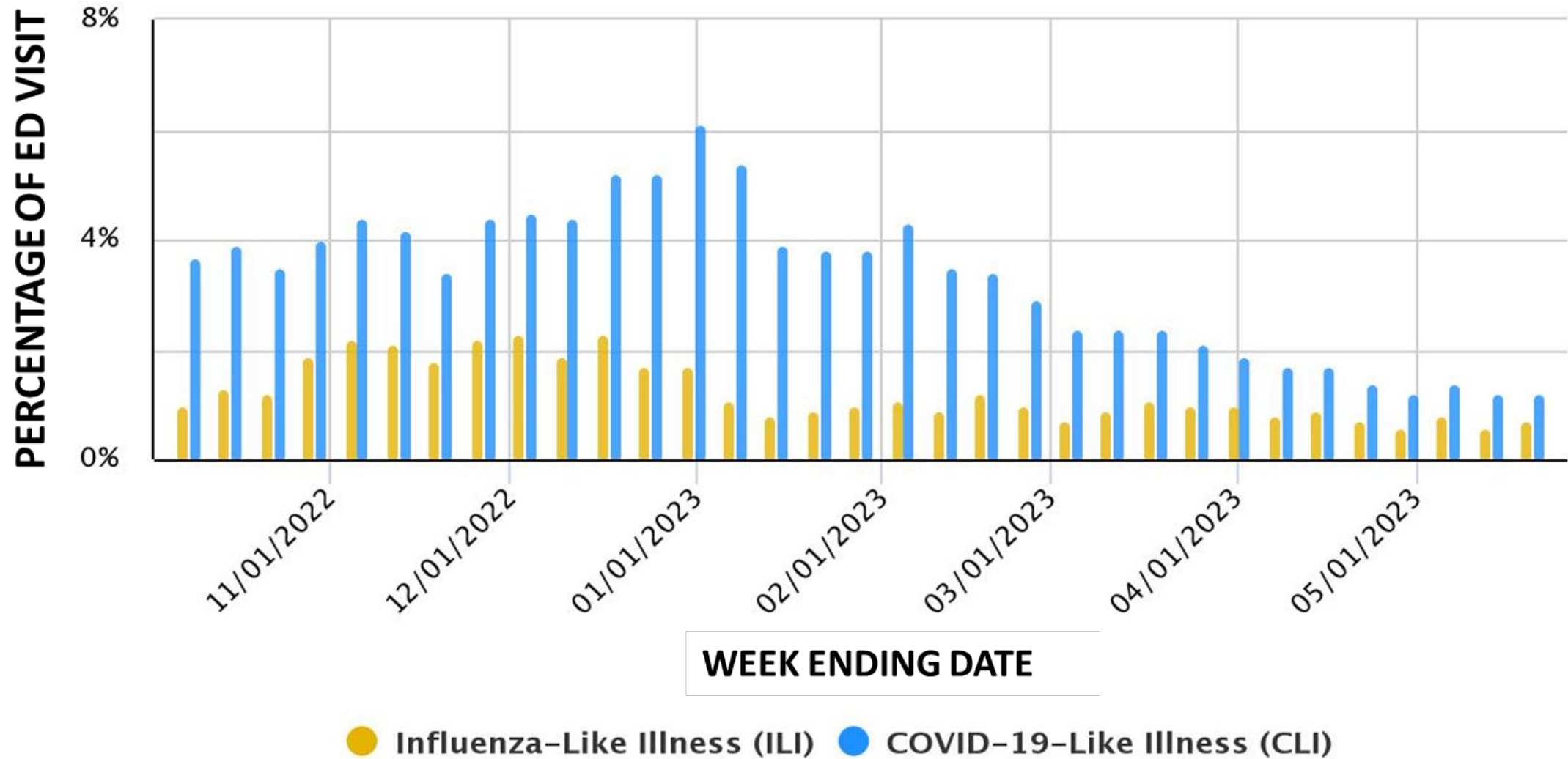


Notes: Influenza Like Illness (ILI) has been defined for surveillance purposes as an illness with fever or feverishness plus either cough or sore throat.

Sentinel Providers are healthcare providers who report how many visits they have weekly for ILI to CDC.

Source: Delaware Department of Health and Social Services, Division of Public Health, My Healthy Community, Influenza: Hospitalizations, Hospitalization Trends, November 14, 2022

Percentage of Emergency Department (ED) Visits for Influenza-like Illness (ILI) and COVID-19 Like Illness (CLI) by Week, Delaware, 2022 - 2023







Note: ILI has been defined for surveillance purposes as an illness with fever or feverishness plus either cough or sore throat.

CLI is defined as fever and cough or shortness of breath or difficulty breathing with or without the presence of a coronavirus diagnosis code

Source: Delaware Department of Health and Social Services, Division of Public Health, My Healthy Community, Influenza: Hospitalizations, Hospitalization Trends, November 14, 2022

Long Term Care Unit Pilot Reporting Program for rapid influenza tests, RSV tests, and respiratory panels

 **DELAWARE HEALTH AND SOCIAL SERVICES**
Division of Public Health

Resize font:   

Viral Respiratory Diseases Weekly Report

Please complete the survey below.

Thank you!

If you do not have a numeric site ID or any questions please contact Reportdisease@delaware.gov

Reporting Site ID <small>* must provide value</small>	<input type="text"/> <small>Same ID as ILINet</small>
Reporting Site Zip Code <small>* must provide value</small>	<input type="text"/>
Reporting Site County <small>* must provide value</small>	<input type="text"/>
Reporting Week <small>* must provide value</small>	<input type="text"/>
Are you reporting Rapid Influenza Diagnostic Test (RIDT) data this week?	<input type="radio"/> Yes <input type="radio"/> No <small>reset</small>
Are you reporting Rapid RSV data this week?	<input type="radio"/> Yes <input type="radio"/> No <small>reset</small>
Are you reporting Respiratory Viral Panel (RVP) data this week?	<input type="radio"/> Yes <input type="radio"/> No <small>reset</small>

COVID-19

COVID-19 2022-2023 Season Statistics

**Seasonal Reporting
10/2/2022-5/20/2023**

24,806 Total Cases

12,982 New Castle

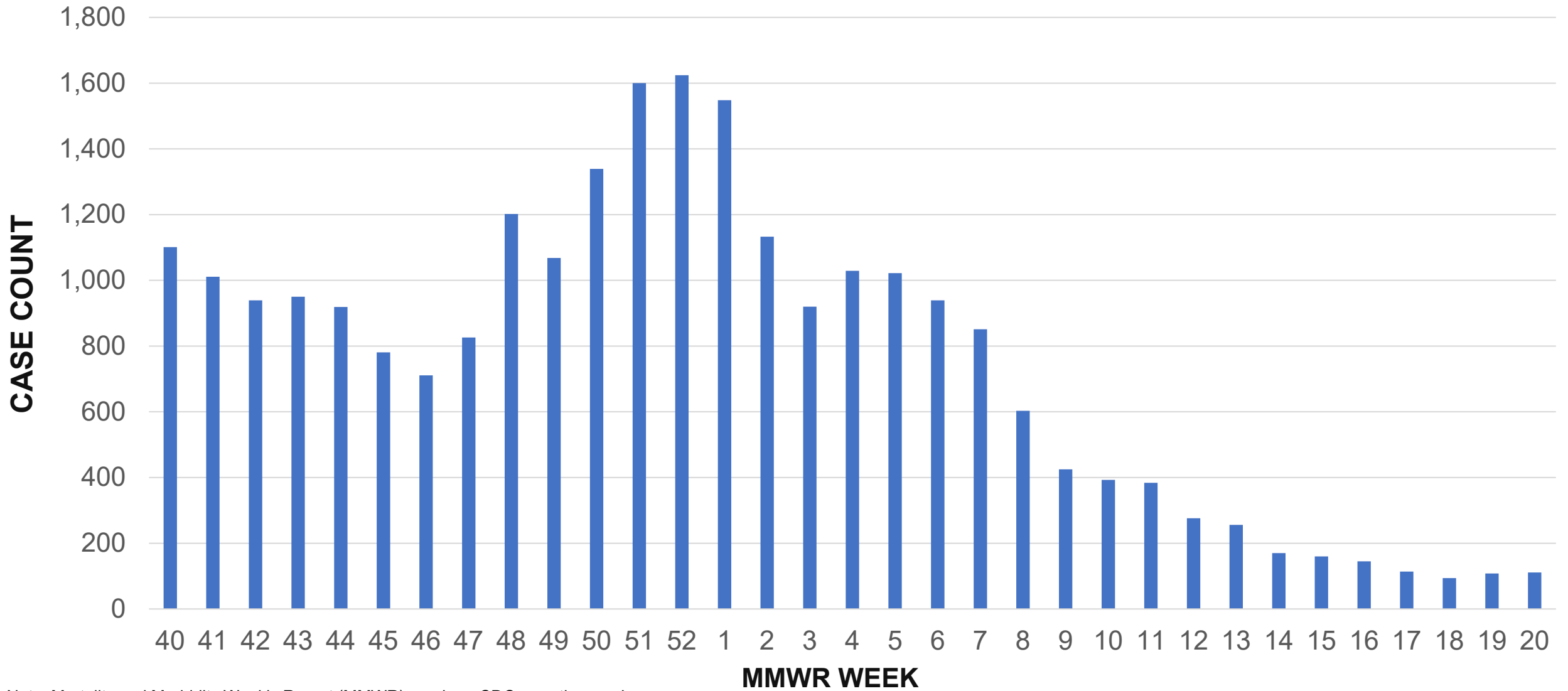
4,863 Kent

6,900 Sussex

61 Unknown

Source: Delaware Department of Health and Social Services,
Division of Public Health, November 14, 2023

COVID-19 Case Counts by MMWR Week, Delaware, 2022-2023 Respiratory Season

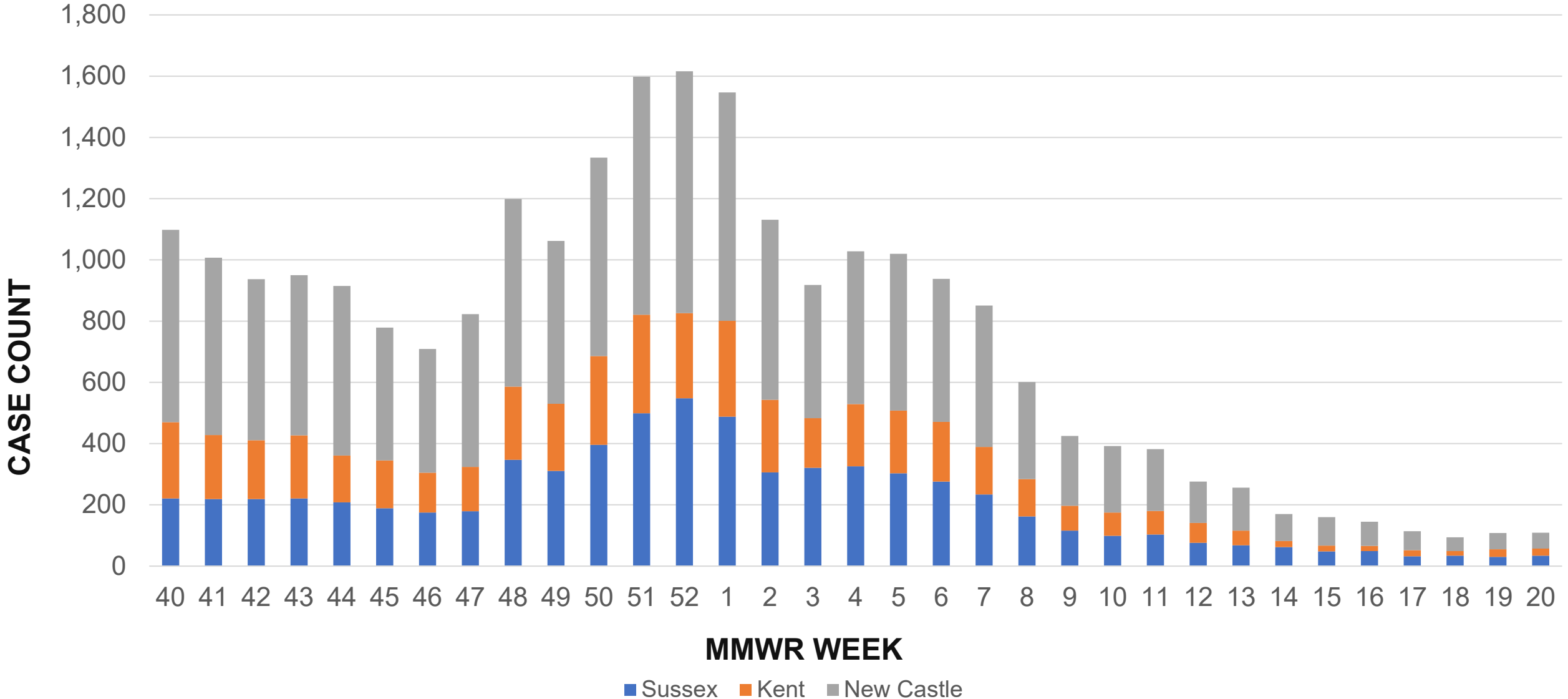


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COVID-19 Case Counts by County and MMWR Week, Delaware, 2022-2023 Respiratory Season

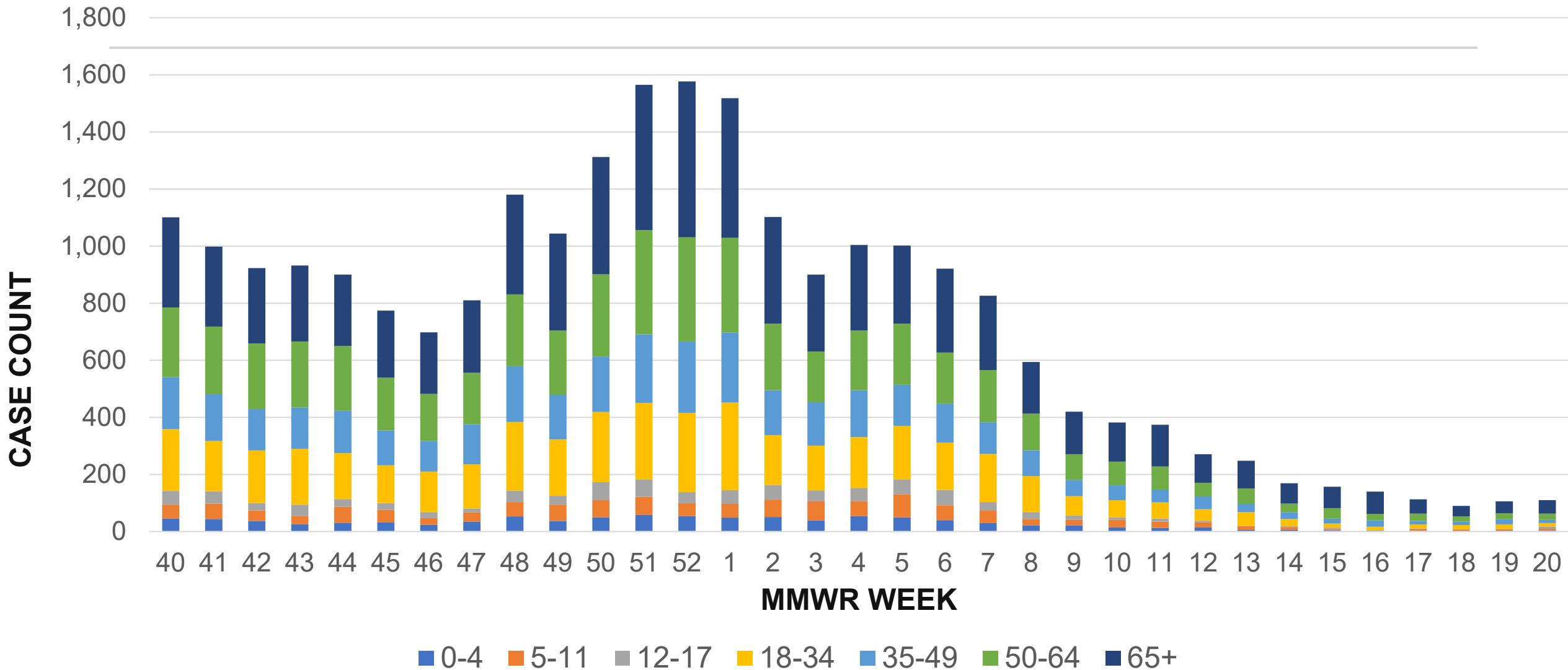


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COVID-19 Case Counts by Age Group and MMWR Week, Delaware, 2022-2023 Respiratory Season

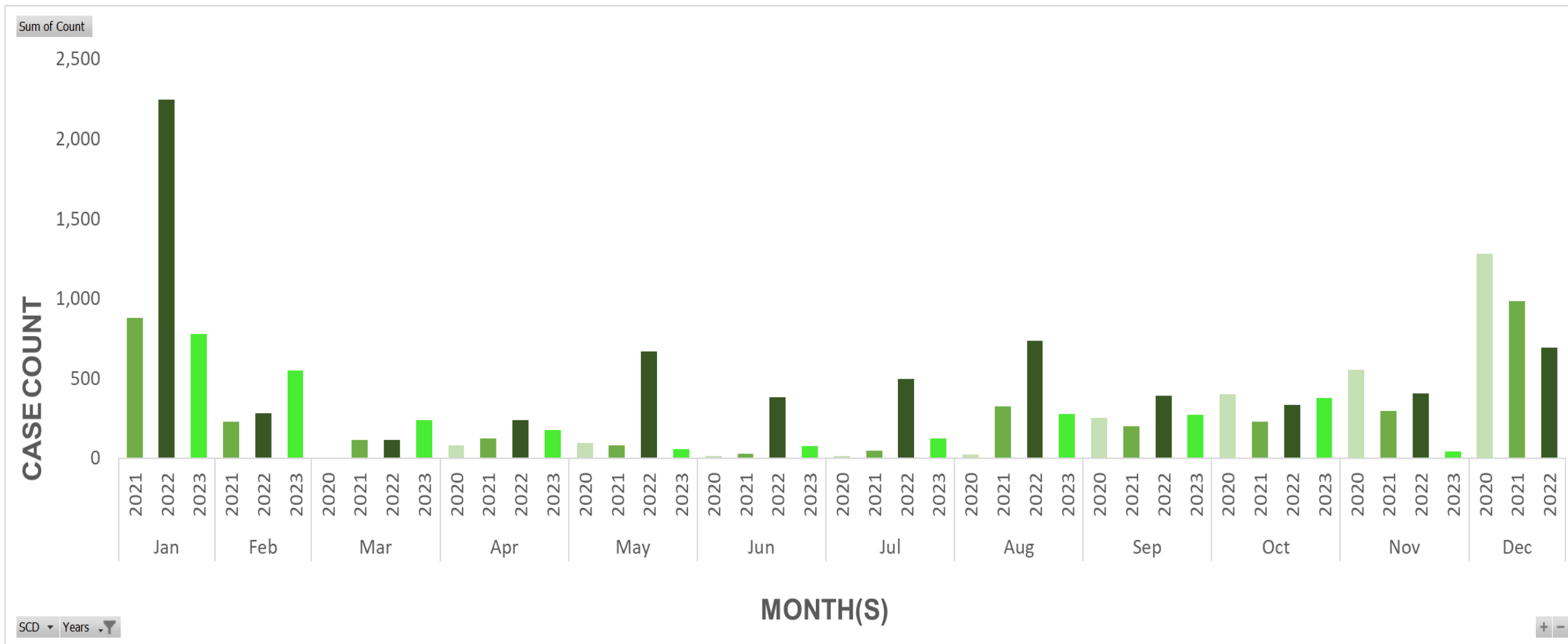


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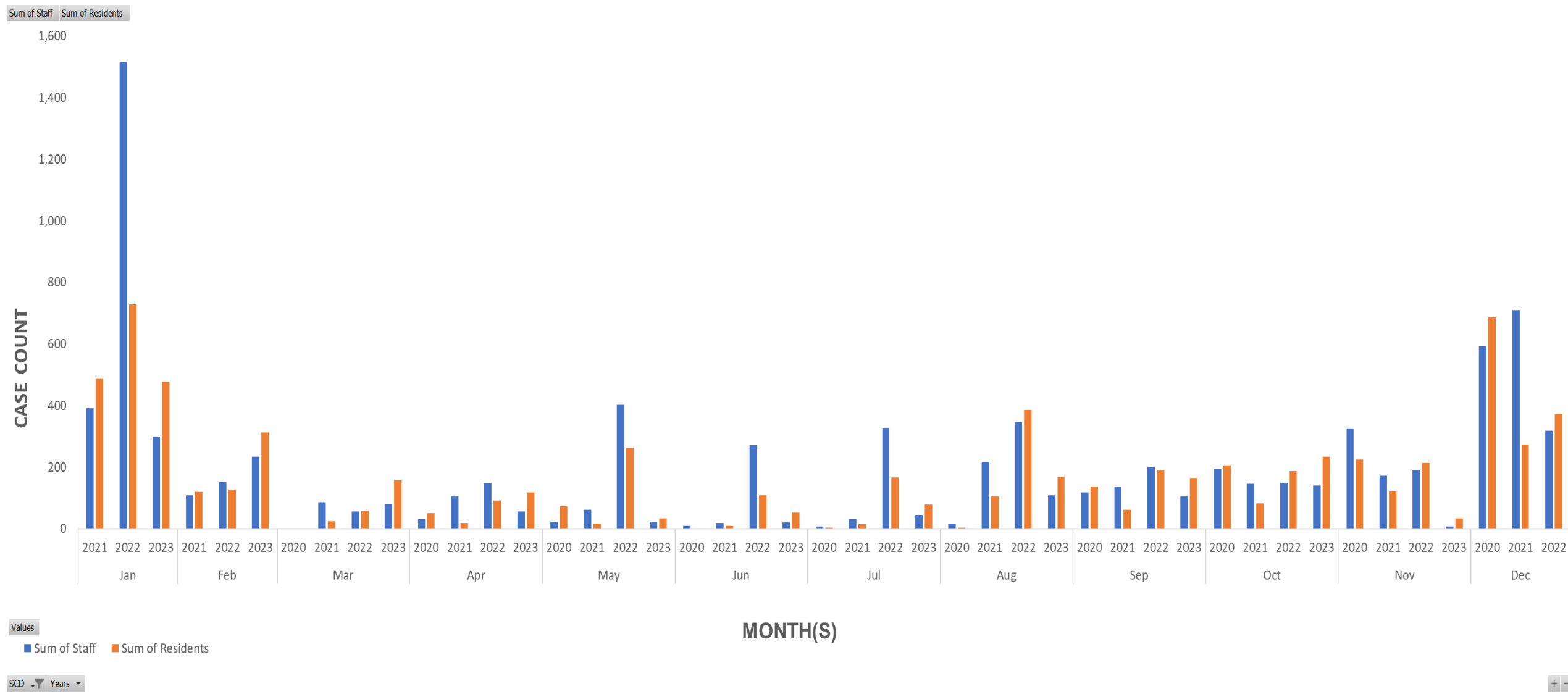
COVID-19 Long Term Care Unit Cases by Month and Year, Delaware, 2020-2023



Note: Long Term Care Units (LTC) include Skilled nursing facilities, Assisted living facilities, Behavioral units, and Rest Residentials

Source: Delaware Department of Health and Social Services, Division of Public Health, Office of Infectious Disease Epidemiology, November 14, 2023

COVID-19 Long Term Care Unit Cases by Month and Year, Delaware, 2022-2023 Respiratory Season



Preventative Measures

- Wash hands appropriately for more than 20 seconds.
- Clean and disinfect frequently touched surfaces at home, work, or school, especially when someone is ill.
- Cover your mouth and nose if you cough or sneeze with a tissue or a shirt – never with one's hands.
- Avoid touching your eyes, nose, and mouth.
- Avoid sharing personal items, food, or drink.
- Avoid contact with people who have suspected or confirmed respiratory illness.

Preventative Measures Continued

- Improve ventilation.
- Get tested for respiratory illnesses when suspected and stay home if you have suspected or confirmed respiratory illness.
- Follow CDC recommendations if or when exposed to respiratory illnesses.
- Seek treatment if you are at high risk for severe illness.
- Stay up to date with vaccinations.

Source: Center for Disease Control and Prevention, COVID-19, Prevention, *How to protect yourself and others*, November 15, 2023

Centers for Disease Control and Prevention. (n.d.-a). *How to protect yourself and others*. Centers for Disease Control and Prevention. <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>

Vaccinations

RSV VACCINES

- **RSVPreF3 (Arexvy, GSK)**
 - Arexvy contains an adjuvant.
 - In Phase III clinical trials, Arexvy was 82.6% effective at preventing lower respiratory tract infections from RSV in adults age 60 and older.
- **RSVpreF (Abrysvo, Pfizer)**
 - ABRYSVO (Respiratory Syncytial Virus Vaccine) is a sterile solution for intramuscular injection.
 - Supplied as a vial of Lyophilized Antigen Component that is reconstituted at the time of use with a Sterile Water Diluent Component. The antigen component contains recombinant RSV preF A and RSV preF B.

Source: Center for Disease Control and Prevention, RSV, RSV Vaccines, November 15, 2023

Centers for Disease Control and Prevention. (2023b, August 30). *RSV vaccination: What older adults 60 years of age and over should know*. Centers for Disease Control and Prevention. <https://www.cdc.gov/vaccines/vpd/rsv/public/older-adults.html>



Influenza

- Everyone 6 months and older in the United States should get an influenza (flu) vaccine every season with rare exception. CDC's Advisory Committee on Immunization Practices has made this "universal" recommendation since the 2010-2011 flu season.
- Adults aged 65+ should receive any one of the higher dose or adjuvanted flu vaccines:
 - Quadrivalent high-dose inactivated flu vaccine (HD-IIV4)
 - Quadrivalent recombinant flu vaccine (RIV4)
 - Quadrivalent adjuvanted inactivated flu vaccine (aIIV4).

Source: Center for Disease Control and Prevention, Seasonal Influenza Vaccines, November 15, 2023

Centers for Disease Control and Prevention. (2023, August 25). *Seasonal flu vaccines*. Centers for Disease Control and Prevention.

<https://www.cdc.gov/flu/prevent/flushot.htm#:~:text=There%20are%20different%20flu%20vaccine,Fluad%20Quadrivalent%20adjuvanted%20flu%20vaccine.>

COVID-19

CDC recommends the 2023–2024 updated COVID-19 vaccines: Pfizer-BioNTech, Moderna, or Novavax, to protect against serious illness from COVID-19.

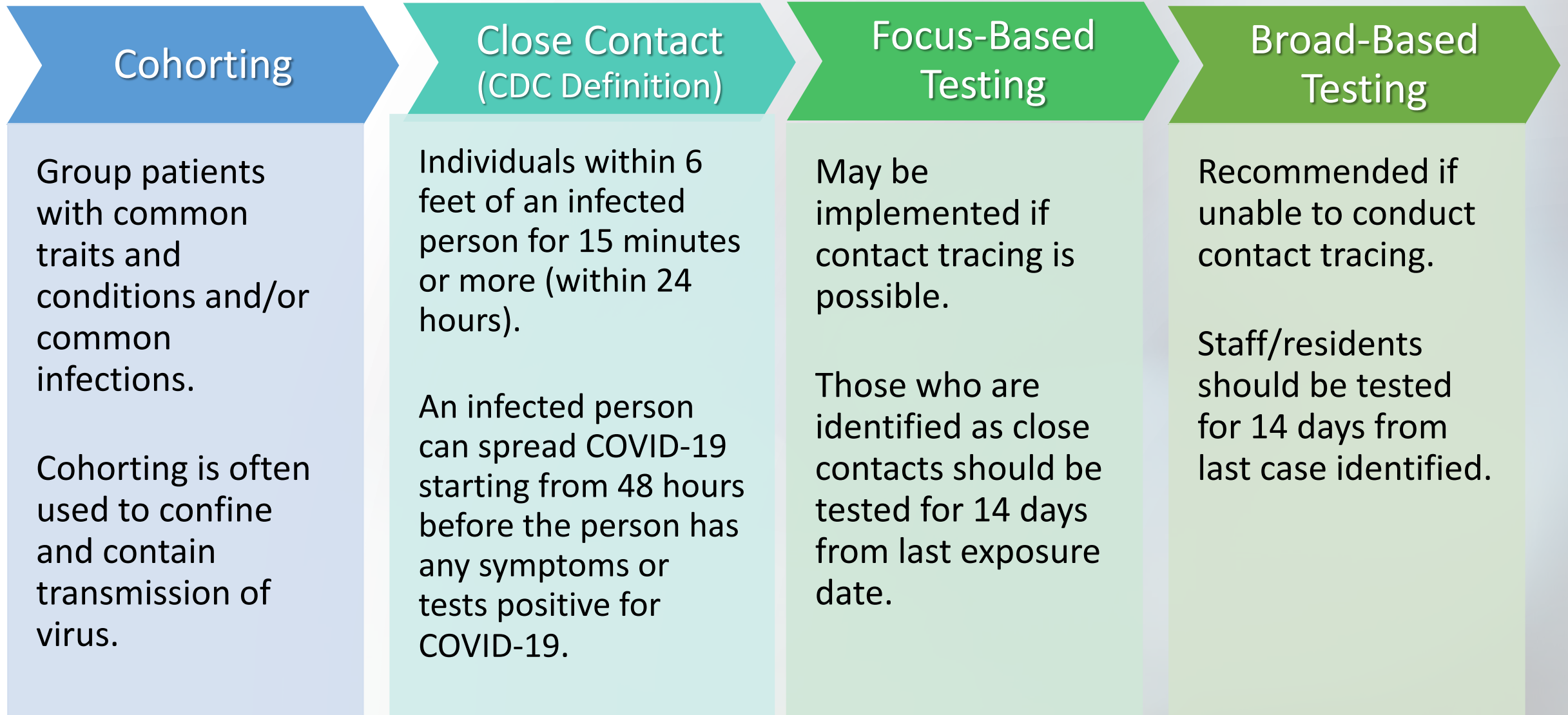
Everyone aged 5 years and older \pm should get **1 dose of an updated COVID-19 vaccine** to protect against serious illness from COVID-19.

Children aged 6 months–4 years need multiple doses of COVID-19 vaccines to be up to date, including at least 1 dose of updated COVID-19 vaccine.

People who are moderately or severely immunocompromised may get additional doses of updated COVID-19 vaccine.

Further Prevention Approaches

Mitigation Strategies for Long Term Care





Treatment Options

COVID-19

- Nirmatrelvir with Ritonavir (Paxlovid)
- Remdesivir (Veklury)
- Molnupiravir (Lagevrio)

Source: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/outpatient-treatment-overview.html>

Influenza

- Rapivab (peramivir)
 - One dose is usually prescribed intravenously
- Relenza (Zanamivir)
 - Prescribed for five-day use
- Tamiflu (Oseltamivir Phosphate)
 - Prescribed for five-day use
- Xofluza (Baloxavir Marboxil)
 - One dose orally is usually prescribed

Reporting Influenza, COVID-19, and RSV

reportdisease@delaware.gov

HL7 electronic health/medical record interface

Rapids for influenza and RSV are non-reportable.

Additional Resources

More Information

Influenza

- <https://www.cdc.gov/flu/about/index.html>
- <https://www.cdc.gov/flu/about/keyfacts.htm>
- <https://www.cdc.gov/flu/about/disease/spread.htm>
- <https://www.cdc.gov/flu/about/viruses/index.htm>

RSV

- <https://www.cdc.gov/rsv/index.html>
- <https://www.cdc.gov/rsv/about/prevention.html>
- <https://www.cdc.gov/rsv/high-risk/index.html>
- <https://www.cdc.gov/rsv/clinical/index.html>

COVID-19

- <https://www.cdc.gov/coronavirus/2019-nCoV/index.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/prevention.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/k-12-childcare-guidance.html>
- [Infection Control: Severe acute respiratory syndrome coronavirus 2 \(SARS-CoV-2\) | CDC](#)
- <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/stay-up-to-date.html>
- <https://myhealthycommunity.dhss.delaware.gov/locations/state>



Questions or Comments?



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