



NCIRD Surveillance

National Emergency Department Visits for COVID-19, Influenza, and Respiratory Syncytial Virus

Charts and data provided by CDC, updates Wednesday by 8am. For the past year, using a rolling 52-week period.

This site provides a combined view of emergency department visit data for multiple respiratory conditions as tracked by the National Syndromic Surveillance Program (NSSP). NSSP is a collaboration among CDC, federal partners, state and local health departments, and academic and private sector partners to collect, analyze, and share electronic data received from multiple health care settings. Data are monitored for a subset of emergency departments across the United States. Additional data and features are forthcoming.

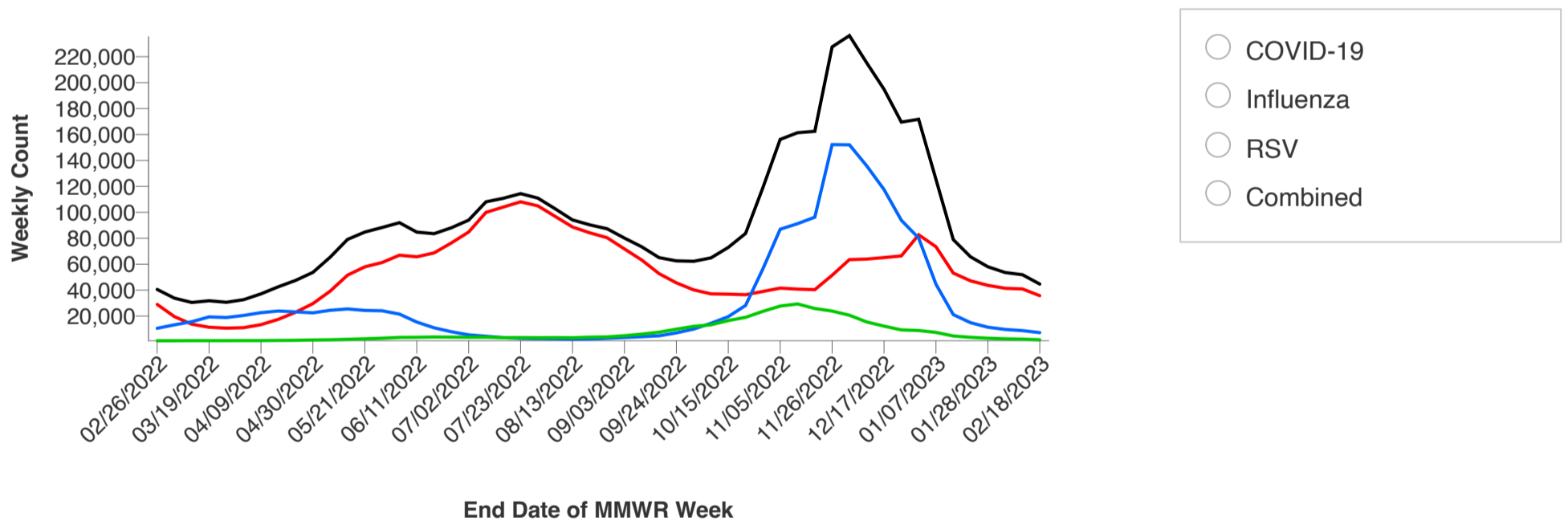
Weekly Emergency Department Visits by Age Group

Filters

Age Group

All Ages ▼

[Apply Filters](#) [Reset All](#)



[Download Data \(CSV\)](#)

Data Table	02/26/2022	03/05/2022	03/12/2022	03/19/2022
<input type="radio"/> COVID-19	28,995	19,564	13,752	11,392
<input type="radio"/> Influenza	10,564	13,247	15,663	19,356
<input type="radio"/> RSV	976	997	1,075	1,053
<input type="radio"/> Combined	40,535	33,808	30,490	31,801

Note, to view a specific respiratory illness, select it within the legend.

*The “Combined” category is created by adding emergency department patient visits with diagnosed COVID-19 to those visits with diagnosed influenza and those visits with diagnosed Respiratory Syncytial Virus (RSV) for the given week.

For more detailed information on these data please see the [Companion Guide: NSSP Emergency Department Data on Respiratory Illness](#).

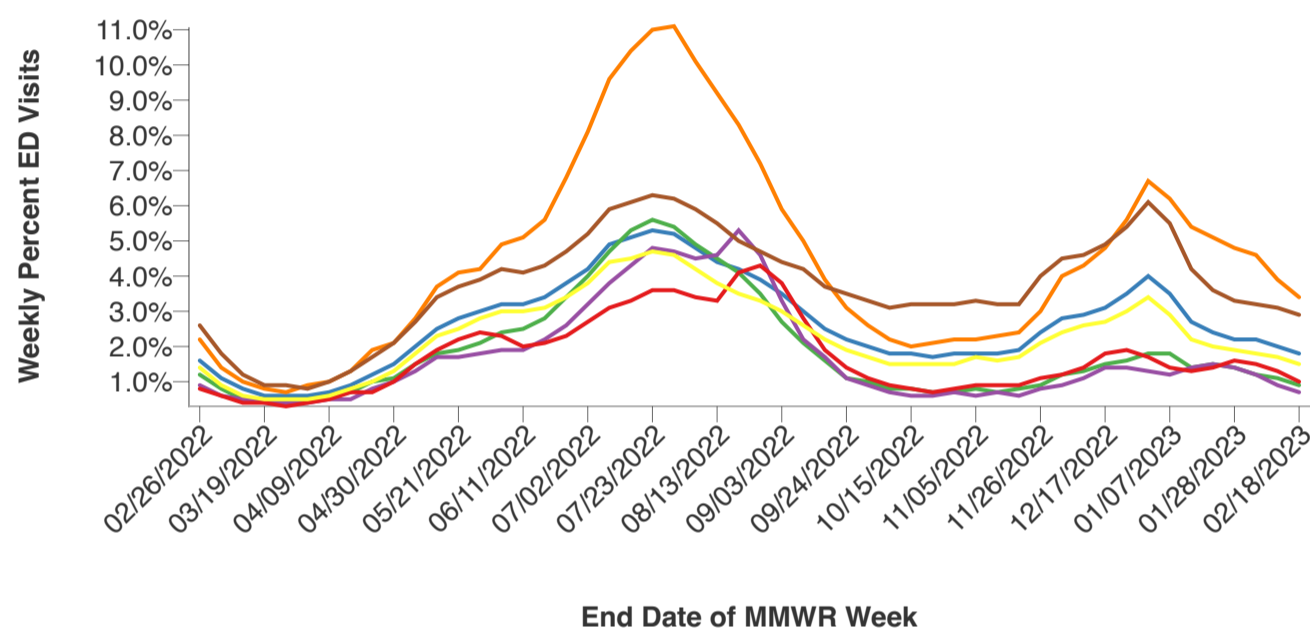
Weekly Emergency Department Visits by Age Group and Respiratory Illness, as a Percent of All Emergency Department Visits

Filters

Respiratory Illness

COVID-19

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Age Groups

- All Ages
- 00-01 Years
- 02-04 Years
- 05-11 Years
- 12-17 Years
- 18-64 Years
- 65+ Years

[Download Data \(CSV\)](#)

Data Table	02/26/2022	03/05/2022	03/12/2022	03/19/2022
<input type="radio"/> All Ages	1.6%	1.1%	0.8%	0.6%
<input type="radio"/> 00-01 Years	2.2%	1.4%	1.0%	0.8%
<input type="radio"/> 02-04 Years	1.2%	0.8%	0.5%	0.5%
<input type="radio"/> 05-11 Years	0.9%	0.6%	0.5%	0.4%
<input type="radio"/> 12-17 Years	0.8%	0.6%	0.4%	0.4%
<input type="radio"/> 18-64 Years	1.4%	0.9%	0.6%	0.5%
<input type="radio"/> 65+ Years	2.6%	1.8%	1.2%	0.9%

Note, to view a specific age group, select it within the legend.

* The “Combined” category is created by adding emergency department patient visits with diagnosed COVID-19 to those visits with diagnosed influenza and those visits with diagnosed Respiratory Syncytial Virus (RSV) for the given week.

For more detailed information on these data please see the [Companion Guide: NSSP Emergency Department Data on Respiratory Illness](#).

Additional resources

The National Respiratory and Enteric Virus Surveillance System (NREVSS)

RSV-NET

Respiratory Syncytial Virus Infection (RSV)

FluSurv-NET

Influenza (Flu)

National Syndromic Surveillance Program (NSSP)

Respiratory Virus Hospitalization Surveillance Network (RESP-NET)

Syndromic Surveillance in Action: NSSP Success Stories

COVID-NET

NSSP: Improving the Public Health Response

Companion Guide: NSSP Emergency Department Data on Respiratory Illness

Introduction

The National Syndromic Surveillance Program (NSSP) is a collaboration among CDC, local and state health departments, with private sector partners. Together, these partners collect, share, and analyze automated electronic healthcare data in near-real time.

The national data include emergency departments in all 50 states, the District of Columbia, and Guam. Coverage map: <https://www.cdc.gov/nssp/participation-coverage-map.html>

Inclusion

Diagnostic codes and clinical terms were used to create definitions for diagnosed COVID-19, influenza, and RSV. To reduce the impact of changes in reporting patterns, data shown are from emergency departments that consistently sent high-quality data over time. Emergency departments are included if they have consistent reporting over the past year (coefficient of variation ≤ 40 in visit counts) and discharge diagnoses averaging $\geq 75\%$ complete per week over the past year, with consistent discharge diagnosis code formatting.

Considerations for Interpretation of Data

Variability in testing practices for different viruses and in different age groups may lead to under-ascertainment of respiratory infections in electronic healthcare data, including emergency department visits. Patients who are less likely to be tested are less likely to be included. These data are based on electronic codes transmitted automatically in near real-time, and hospital practices for assigning these codes can vary. These data are dynamic and update as codes are added and changed.

How Percent of Visits is Calculated

For data that are presented as a percentage, each respiratory illness is presented as a percent of all emergency department visits by age group. For example, the COVID-19 data show emergency department visits for children ages 5-11 with diagnosed COVID-19 as a fraction of all emergency department visits for children ages 5-11.

Definitions

The following discharge diagnoses (DD) and clinical terms are included: International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM), and Systematized Nomenclature of Medicine – Clinical Terms (SNOMED CT). Please note that conditions can be defined in different ways in electronic healthcare data, and some jurisdictions may use different definitions. Short codes listed capture all codes underneath (J09 captures J09.X1-J09.X9).

COVID-19

Definition name in the NSSP Electronic Surveillance System for the Early Notification of Community-Based Epidemics (ESSENCE) system: CDC COVID-Specific DD v1

Code Type	Codes	Code Description
<i>Inclusions</i>		
ICD-10-CM	J12.82	Pneumonia due to coronavirus disease 2019
	U07.1	COVID-19
SNOMED CT	840539006	Disease caused by severe acute respiratory syndrome coronavirus 2
	840544004	Suspected disease caused by severe acute respiratory coronavirus 2
	840533007	Severe acute respiratory syndrome coronavirus 2

Influenza

Definition name in the Nssp ESSENCE system: CDC Influenza DD v1

Code Type	Codes	Code Description
<i>Inclusions</i>		
ICD-10-CM	J09	Influenza due to certain identified influenza viruses
	J10	Influenza due to other identified influenza viruses
	J11	Influenza due to unidentified influenza virus
ICD-9-CM	487.0	Influenza with pneumonia
	487.1	Influenza with other respiratory manifestations
	487.8	Influenza with other manifestations
	488.01	Influenza due to identified avian influenza virus with pneumonia
	488.09	Influenza due to identified avian influenza virus with other manifestations
	488.11	Influenza due to identified 2009 H1N1 influenza virus with pneumonia
	488.19	Influenza due to identified 2009 H1N1 influenza virus with other manifestations
	488.81	Influenza due to identified novel influenza A virus with pneumonia
	488.89	Influenza due to identified novel influenza A virus with other manifestations
SNOMED CT	442696006	Influenza caused by influenza A virus subtype H1N1
	442438000	Influenza caused by Influenza A virus
	6142004	Influenza
	195878008	Pneumonia and influenza

RSV

Definition name in the Nssp ESSENCE system: CDC Respiratory Syncytial Virus DD v1

Code Type	Codes	Code Description
<i>Inclusions</i>		
ICD-10-CM	B97.4	Respiratory syncytial virus (RSV) as the cause of diseases classified elsewhere
	J12.1	Respiratory syncytial virus pneumonia
	J20.5	Acute bronchitis due to respiratory syncytial virus
	J21.0	Acute bronchiolitis due to respiratory syncytial virus
ICD-9-CM	466.11	Acute bronchiolitis due to respiratory syncytial virus
	480.1	Pneumonia due to respiratory syncytial virus
	079.6	Respiratory syncytial virus

Code Type	Codes	Code Description
<i>Inclusions</i>		
SNOMED CT	55735004	Respiratory syncytial virus infection
	408684006	Healthcare associated respiratory syncytial virus disease
	195881003	Pneumonia caused by respiratory syncytial virus
	10625551000119103	Bronchopneumonia caused by respiratory syncytial virus
	57089007	Respiratory syncytial virus bronchiolitis
	195739001	Acute bronchiolitis caused by respiratory syncytial virus
	79479005	Respiratory syncytial virus bronchitis
	195727009	Acute respiratory syncytial virus bronchitis
	72204002	Respiratory syncytial virus laryngotracheobronchitis
	31309002	Respiratory syncytial virus pharyngitis

Last Reviewed: January 17, 2023