

### Measles (Rubeola)

Measles (Rubeola) Home



# Measles Cases and Outbreaks

Updated on May 3, 2024. CDC updates this page weekly on Fridays.

### Measles cases in 2024

As of May 2, 2024, a total of 131 measles cases were reported by 21 jurisdictions: Arizona, California, Florida, Georgia, Illinois, Indiana, Louisiana, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York City, New York State, Ohio, Pennsylvania, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

There have been 8 outbreaks (defined as 3 or more related cases) reported in 2024, and 69% of cases (90 of 131) are outbreak-associated. For comparison, 4 outbreaks were reported during 2023 and 48% of cases (28 of 58) were outbreak-associated. For more information on the ongoing outbreak in Chicago, Illinois see the Chicago Department of Public Health Measles Update .

### U.S. Cases in 2024

Total cases

131

<u>Age</u>

Under 5 years: **57 (44%)** 5-19 years: **30 (23%)** 20+ years: **44 (34%)** 

**Vaccination Status** 

Unvaccinated or Unknown: 81%

One MMR dose: **14%** Two MMR doses: **5%** 

### U.S. Hospitalizations in 2024

### 53%

of cases hospitalized (70 of 131 cases) for isolation or for management of measles complications.

Percent of Age Group Hospitalized

Under 5 years: **65%** (37 of 57) 5-19 years: **37%** (11 of 30) 20+ years: **50%** (22 of 44)

### What to Know

Measles is an airborne, extremely infectious, and potentially severe rash illness. Before the measles vaccine was introduced, an estimated 48,000 people were hospitalized and 400—500 people died in the U.S. each year. Learn more.

Measles is not a seasonal virus. However, measles is often spread over times of high travel (ex: spring break) or in situations where unvaccinated persons are in close quarters (ex: summer camp).

### Can I get measles while traveling?

Did you know that measles can be found around the world? Measles can live in the air for 2 hours after an infectious person leaves the space. Before any international travel, evaluate if your family needs early vaccine doses.

After you return, watch your health for 3 weeks and call your healthcare provider if you or your child gets sick with a rash and fever.

Prevent measles and talk to your healthcare provider about the measles, mumps, and rubella (MMR) vaccine, especially if planning to travel.

More information on the vaccine for measles.

### Why is there more measles activity?

Measles was declared eliminated in the U.S. in 2000, thanks to a very high percentage of people receiving the safe and effective measles-mumps-rubella (MMR) vaccine. In recent years, however:

- U.S. MMR coverage among kindergarteners is now below the 95% coverage target—much lower in some communities—and is decreasing.
- Global measles activity is increasing, meaning more chances of an unvaccinated person infected with measles abroad returning to the U.S.

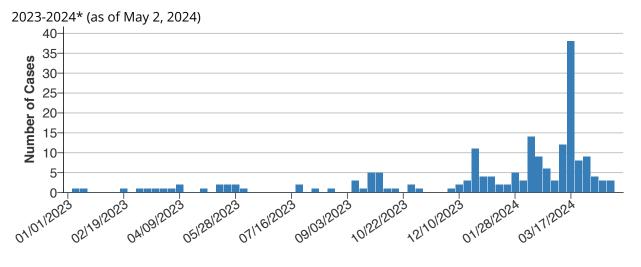
How does CDC assess measles outbreak risk?

Read more about how CDC is assessing measles outbreak risk in the U.S.

Why are some fully vaccinated people getting measles?

Two doses of MMR vaccine are 97% effective at preventing measles, 1 dose is 93% effective. It is uncommon for someone fully vaccinated to develop measles. However, breakthrough infections (when someone becomes infected after they have been vaccinated) can occur, especially in communities experiencing an outbreak where high levels of measles virus are circulating. The number of breakthrough infections (approximately 5% of total) is consistent with what we have seen in previous years.

## Weekly Measles Cases by Rash Onset Date



**Week Start Date** 

Data Table		
Week Start Date	Cases	
01/01/2023	0	
01/08/2023	1	
01/15/2023	1	
01/22/2023	0	

02/05/2023 0	
02/12/2023 0	
02/19/2023 1	
02/26/2023 0	
03/05/2023 1	
03/12/2023 1	
03/19/2023 1	
03/26/2023 1	
04/02/2023 1	
04/09/2023 2	
04/16/2023 0	
04/23/2023 0	
04/30/2023 1	
05/07/2023 0	
05/14/2023 2	
05/21/2023 2	
05/28/2023 2	
06/04/2023 1	
06/11/2023 0	
06/18/2023 0	
06/25/2023 0	
07/02/2023 0	
07/09/2023 0	
07/16/2023 0	
07/23/2023 2	
07/30/2023 0	
08/06/2023 1	
08/13/2023 0	
08/20/2023 1	
08/27/2023 0	
09/03/2023	
09/10/2023 3	
09/17/2023 1	
09/24/2023 5	
10/01/2023 5	
10/08/2023 1	

10/15/2023	1
10/22/2023	0
10/29/2023	2
11/05/2023	1
11/12/2023	0
11/19/2023	0
11/26/2023	0
12/03/2023	1
12/10/2023	2
12/17/2023	3
12/24/2023	11
12/31/2023	4
01/07/2024	4
01/14/2024	2
01/21/2024	2
01/28/2024	5
02/04/2024	3
02/11/2024	14
02/18/2024	9
02/25/2024	6
03/03/2024	3
03/10/2024	12
03/17/2024	38
03/24/2024	8
03/31/2024	9
04/07/2024	4
04/14/2024	3
04/21/2024	3
04/28/2024	0

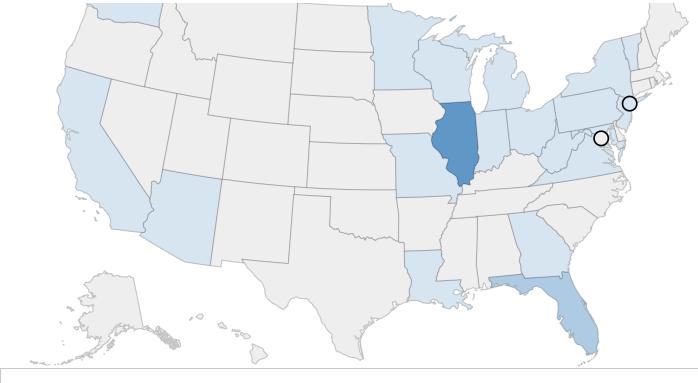
<sup>\*2023-2024</sup> case counts are preliminary and subject to change.

Note: rash onset date is currently unknown for two reported cases in 2024, which are not included in this figure.

# Measles Cases in 2024

as of May 2, 2024





Legend		
O 0	O 1-9	
0 10-19	20-49	
50-99	100+	

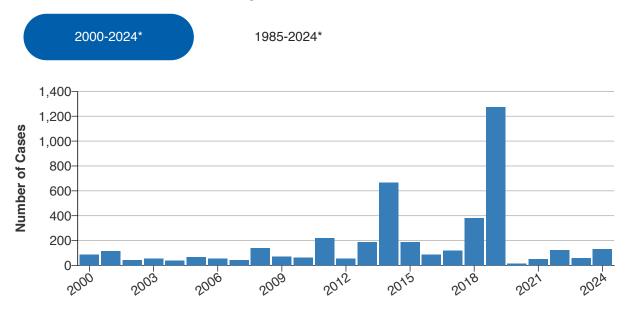
Data Table	_
Location	Cases in 2024
Alabama	0
Alaska	0
Arizona	1-9
Arkansas	0
California	1-9
Colorado	0
Connecticut	0
○ Delaware	0
District Of Columbia	0
Florida	10-19
Georgia	1-9
☐ Hawaii	0
○ Idaho	0
Illinois	50-99
☐ Indiana	1-9

Olowa	0
Kansas	0
Kentucky	0
Louisiana	1-9
Maine	0
Maryland	1-9
Massachusetts	0
Michigan	1-9
Minnesota	1-9
Mississippi	0
Missouri	1-9
○ Montana	0
○ Nebraska	0
○ Nevada	0
New Hampshire	0
New Jersey	1-9
New Mexico	0
New York	1-9
New York City	1-9
North Carolina	0
North Dakota	0
Ohio	1-9
Oklahoma	0
Oregon	0
<ul><li>Pennsylvania</li></ul>	1-9
○ Rhode Island	0
O South Carolina	0
O South Dakota	0
Tennessee	0
○ Texas	0
○ Utah	0
Vermont	1-9
─ Virginia	1-9
Washington	1-9
West Virginia	1-9
Wisconsin	1-9
Wyoming	0

# **Yearly Measles Cases**

as of May 2, 2024

Make a selection from the filters to change the visualization information.



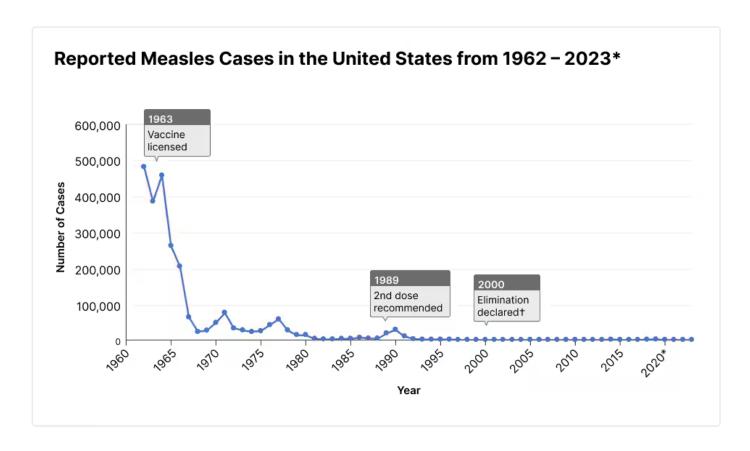
Data Table	_
Year	Cases
2000	86
2001	116
2002	44
2003	56
2004	37
2005	66
2006	55
2007	43
2008	140
2009	71
2010	63
2011	220
2012	55
2013	189
2014	667
2015	188
2016	86
2017	100

2017	120
2018	382
2019	1,274
2020	13
2021	49
2022	121
2023	58
2024	131

<sup>\*2023-2024</sup> case counts are preliminary and subject to change.

# **History of Measles Cases**

Measles was officially eliminated from the United States in 2000†, meaning there is no measles spreading within the country and new cases are only found when someone contracts measles abroad and returns to the country. Achieving measles elimination status in the U.S. was a historic public health achievement. The below figure illustrates how common measles was before vaccines and how vaccine policy enabled elimination.



<sup>\*2023</sup> data are preliminary and subject to change.

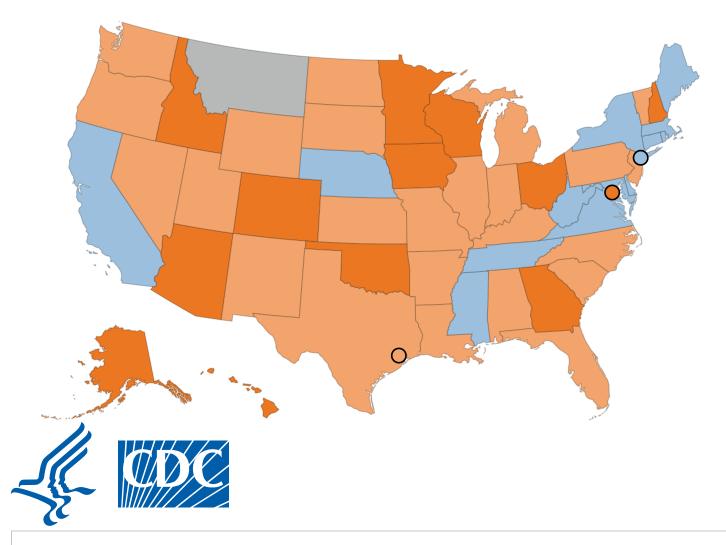
†Elimination is defined as the absence of endemic measles transmission in a region for  $\geq$  12 months in the presence of a well-performing surveillance system.

# MMR Vaccine Coverage for Kindergarteners by School Year (2009-2023)

The Measles, Mumps, Rubella (MMR) vaccine is very safe and effective. When more than 95% of people in a community are vaccinated (coverage >95%), most people are protected through community immunity (herd immunity). However, vaccination coverage among U.S. kindergartners has decreased from 95.2% during the 2019–2020 school year to 93.1% in the 2022–2023 school year, leaving approximately 250,000 kindergartners at risk each year over the last three years. To dive into vaccine coverage data for MMR, visit VaxView | CDC.

At local levels, vaccine coverage rates may vary considerably, and pockets of unvaccinated people can exist in states with high vaccination coverage. When measles gets into communities of unvaccinated people in the U.S., outbreaks can occur. Make a selection from the filters to change the visualization information.

2022-23 💠



### Legend - Coverage (%)

- Less than 90%
- 90-94.9%
- 95%+
- Not available

Data Table —					
Location	Categories	Coverage Estimate	Population Size	Percent Surveyed	Survey Type
Alabama	90-94.9%	93.9%	59,113	100	Census
Alaska	Less than 90%	83.6%	9,650	88.8	Vol. response (put
Arizona	Less than 90%	89.9%	80,814	97.7	Census
Arkansas	90-94.9%	91.9%	38,358	95.8	Census (pub.), vo
California	95%+	96.5%	541,132	100	Census
Colorado	Less than 90%	87%	65,576	97.2	Census
Connecticut	95%+	97.3%	35,580	100	Census
Delaware	95%+	95.1%	10,674	9.7	Stratified 2-stage

<ul><li>District Of Columbia</li></ul>	Less than 90%	87.5%	8,064	100	Census
Florida	90-94.9%	90.6%	230,309	97.7	Census
Georgia	Less than 90%	88.1%	123,771	100	Census
Hawaii	Less than 90%	86.4%	13,195	8.1	Stratified 2-stage
Houston	90-94.9%	91.3%	37,664	98.8	Census (pub.), vo
Idaho	Less than 90%	81.3%	23,721	99.3	Census
Illinois	90-94.9%	91.7%	135,332	100	Census
Indiana	90-94.9%	92%	81,307	87.5	Vol. response (pul
lowa	Less than 90%	89.9%	39,178	100	Census
Kansas	90-94.9%	91.6%	35,543	30.8	Stratified 2-stage
Kentucky	90-94.9%	90.1%	54,742	96.9	Census
Louisiana	90-94.9%	92.2%	54,314	100	Census
Maine	95%+	96.8%	12,403	93.9	Census
Maryland	95%+	96.7%	59,684	100	Census
Massachusetts	95%+	96.5%	66,041	100	Census
Michigan	90-94.9%	92.9%	113,678	100	Census
Minnesota	Less than 90%	87.6%	68,152	97.9	Census
Mississippi	95%+	98.4%	36,048	100	Census
Missouri	90-94.9%	91.3%	69,126	100	Census
Montana	Not available	Not available	NR	NA	Not conducted
<ul><li>Nebraska</li></ul>	95%+	95.1%	23,176	100	Census
Nevada	90-94.9%	92.8%	34,333	89.1	Vol. response (pul
New Hampshire	Less than 90%	89.4%	11,332	100	Census
New Jersey	90-94.9%	94.3%	104,468	100	Census
New Mexico	90-94.9%	94.9%	21,068	100	Census
New York	95%+	97.9%	205,906	96.6	Census (pub.), vo
New York City	95%+	97.3%	85,379	97.6	Census (pub.), vo
North Carolina	90-94.9%	93.8%	125,679	83.1	Vol. response
North Dakota	90-94.9%	92%	10,554	99.4	Census
Ohio	Less than 90%	89.3%	134,893	93.7	Census (pub.), vo
Oklahoma	Less than 90%	89.6%	52,548	89.5	Census (pub.), vo
Oregon	90-94.9%	91.9%	40,963	100	Census
Pennsylvania	90-94.9%	94%	137,259	97.2	Census (pub.), vo
Rhode Island	95%+	96.9%	10,532	96.5	Census
South Carolina	90-94.9%	93.2%	58,878	28.1	Stratified 1-stage
South Dakota	90-94.9%	92.5%	12,081	100	Census
Tennessee	95%+	95.4%	79,692	100	Census
Texas	90-94.9%	94.2%	381,680	98	Census

Utah	90-94.9%	90%	46,635	100	Census
Vermont	90-94.9%	93.1%	5,816	100	Census
Virginia	95%+	95.8%	93,271	1.6	Stratified 2-stage
Washington	90-94.9%	91.4%	86,284	97.9	Census
<ul><li>West Virginia</li></ul>	95%+	95.6%	19,175	86.1	Vol. response (pul
Wisconsin	Less than 90%	86.5%	63,593	93.9	Census (pub.), vo
Wyoming	90-94.9%	90.8%	7,060	100	Census
	1	1	1		

Note: Alabama, Florida, Georgia, Iowa, Mississippi, New Hampshire, and New Jersey did not assess coverage for individual vaccines. Estimates shown are the percentage of kindergartners who received all doses of all vaccines required for school entry.

### **Previous Years**

**2023** 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013

#### Measles cases in 2023

During January 1-December 31, 2023, a total of 58 measles cases were reported by 20 jurisdictions\*: California, Colorado, District of Columbia, Florida, Hawaii, Idaho, Illinois, Kentucky, Maryland, Missouri, New Jersey, New York City, Ohio, Oregon, Pennsylvania, Texas, Utah, Virginia, Washington, and Wisconsin.

#### Measles cases in 2022

From January 1 to December 31, 2022, a total of 121 measles cases were reported by 6 jurisdictions. \*

For more information please see the following reports:

Notes from the Field: Measles Outbreak — Central Ohio, 2022–2023
 MMWR. August 4, 2023

<sup>\*</sup>Jurisdictions refer to any of the 50 states, New York City, and the District of Columbia.

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#### Measles cases in 2021

From January 1 to December 31, 2021, a total of 49 measles cases were reported by 5 jurisdictions. \*

For more information please see the following reports:

 Public Health Actions to Control Measles Among Afghan Evacuees During Operation Allies Welcome — United States, September-November 2021
 MMWR. April 29, 2022

\*Jurisdictions refer to any of the 50 states, New York City, and the District of Columbia.

#### Measles cases in 2020

From January 1 to December 31, 2020, 13 individual cases of measles were confirmed in 8 jurisdictions.\*

\*Jurisdictions refer to any of the 50 states, New York City, and the District of Columbia.

#### Measles cases in 2019

From January 1 to December 31, 2019, 1,274 individual cases of measles were confirmed in 31 jurisdictions.

This is the greatest number of cases reported in the U.S. since 1992. The majority of cases were among people who were not vaccinated against measles. Measles is more likely to spread and cause outbreaks in U.S. communities where groups of people are unvaccinated.

For more information please see the following reports:

- Increase in Measles Cases United States, January 1-April 26, 2019 MMWR. May 3, 2019
- National Update on Measles Cases and Outbreaks United States, January 1-October 1, 2019. MMWR. October 11, 2019
- National Update on Measles Cases and Outbreaks United States, January 1–October 1, 2019
  MMWR. October 11, 2019
- Notes from the Field: Community Outbreak of Measles Clark County, Washington, 2018–2019
  MMWR. May 17, 2019
- Notes from the Field: Measles Outbreaks from Imported Cases in Orthodox Jewish Communities New York and New Jersey, 2018–2019
   MMWR. May 17, 2019

<sup>\*</sup>Jurisdictions refer to any of the 50 states, New York City, and the District of Columbia.

#### Measles cases in 2018

From January 1 to December 31, 2018, 382 individual cases of measles were confirmed in 28 jurisdictions.\*

\*Jurisdictions refer to any of the 50 states, New York City, and the District of Columbia.

### Measles cases in 2017

For more information please see the following reports:

 Measles Outbreak — Minnesota April-May 2017 *MMWR*. July 14, 2017

#### Measles cases in 2016

For more information please see the following reports:

- Notes from the Field: Measles Outbreak at a United States Immigration and Customs Enforcement Facility —
   Arizona, May–June 2016
   MMWR. May 26, 2017
- Measles Outbreak of Unknown Source Shelby County, Tennessee, April-May 2016
  MMWR. September 30, 2016

#### Measles cases in 2015

For more information please see the following reports:

- Measles United States, January 4–April 2, 2015
  MMWR. April 17, 2015
- Measles Outbreak California, December 2014–February 2015
  MMWR. Feb 20, 2015

#### Measles cases in 2014

For more information please see the following reports:

- Measles Outbreak in an Unvaccinated Family and a Possibly Associated International Traveler Orange County, Florida, December 2012–January 2013
   MMWR. Sep 12, 2014
- Notes from the Field: Measles in a Micronesian Community King County, Washington, 2014 MMWR. Sep 12, 2014
- Measles United States, January 1–May 23, 2014
  MMWR May 29, 2014
- Notes from the Field: Measles California, January 1–April 18, 2014
  MMWR. Apr 25, 2014

#### Measles cases in 2013

For more information please see the following reports:

- Measles United States, January 1-August 24, 2013
  MMWR. Sep 13, 2013
- Notes from the field: Measles outbreak among members of a religious community Brooklyn, New York, March–June 2013
   MMWR. Vol 62, No 36;752-3 09/13/2013
- Notes from the field: Measles outbreak associated with a traveler returning from India North Carolina, April—May 2013
  MMWR. Vol 62, No 36;753

### Learn More

Top 4 Things Parents Need to Know about Measles **Questions about Measles** 

History of Measles

Last Reviewed: May 3, 2024

Source: National Center for Immunization and Respiratory Diseases, Division of Viral Diseases