



APRIL 23,

# Measles Cases and Outbreaks

## WHAT TO KNOW

Updated on May 10, 2024. CDC updates this page weekly on Fridays.



## Measles cases in 2024

As of May 9, 2024, a total of 132 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 (91 of 132) 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

**132**

#### Age

Under 5 years: **58 (44%)**

5-19 years: **30 (23%)**

20+ years: **44 (33%)**

#### 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 132 cases) for isolation or for management of measles complications.

#### Percent of Age Group Hospitalized

Under 5 years: **64%** (37 of 58)

5-19 years: **37%** (11 of 30)

20+ years: **50%** (22 of 44)

## What to Know

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### How serious is measles?

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.

### 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.

### How do I protect myself?

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:

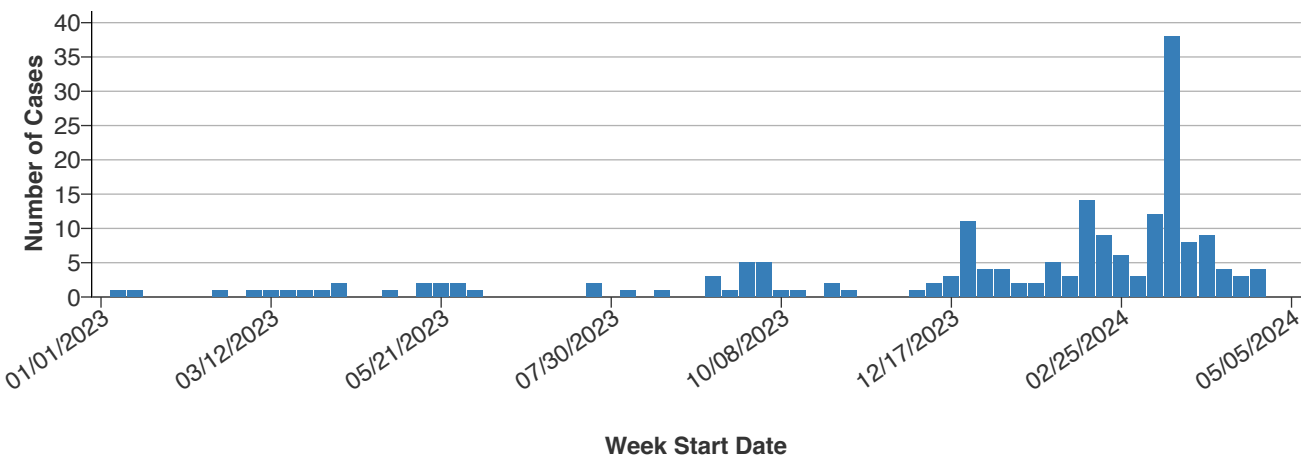
- U.S. MMR coverage among kindergarteners is now below the 95% coverage target—much lower in some communities—and is decreasing.
- [Global measles activity](#) is increasing, meaning more chances of an unvaccinated person infected with measles abroad returning to the U.S.

How does CDC assess measles outbreak risk?

[Read more](#) about how CDC is assessing measles outbreak risk in the U.S.

## Weekly Measles Cases by Rash Onset Date

2023-2024\* (as of May 9, 2024)



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

Data Table	
Week Start Date	Cases
01/01/2023	0
01/08/2023	1
01/15/2023	1
01/22/2023	0
01/29/2023	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	0
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

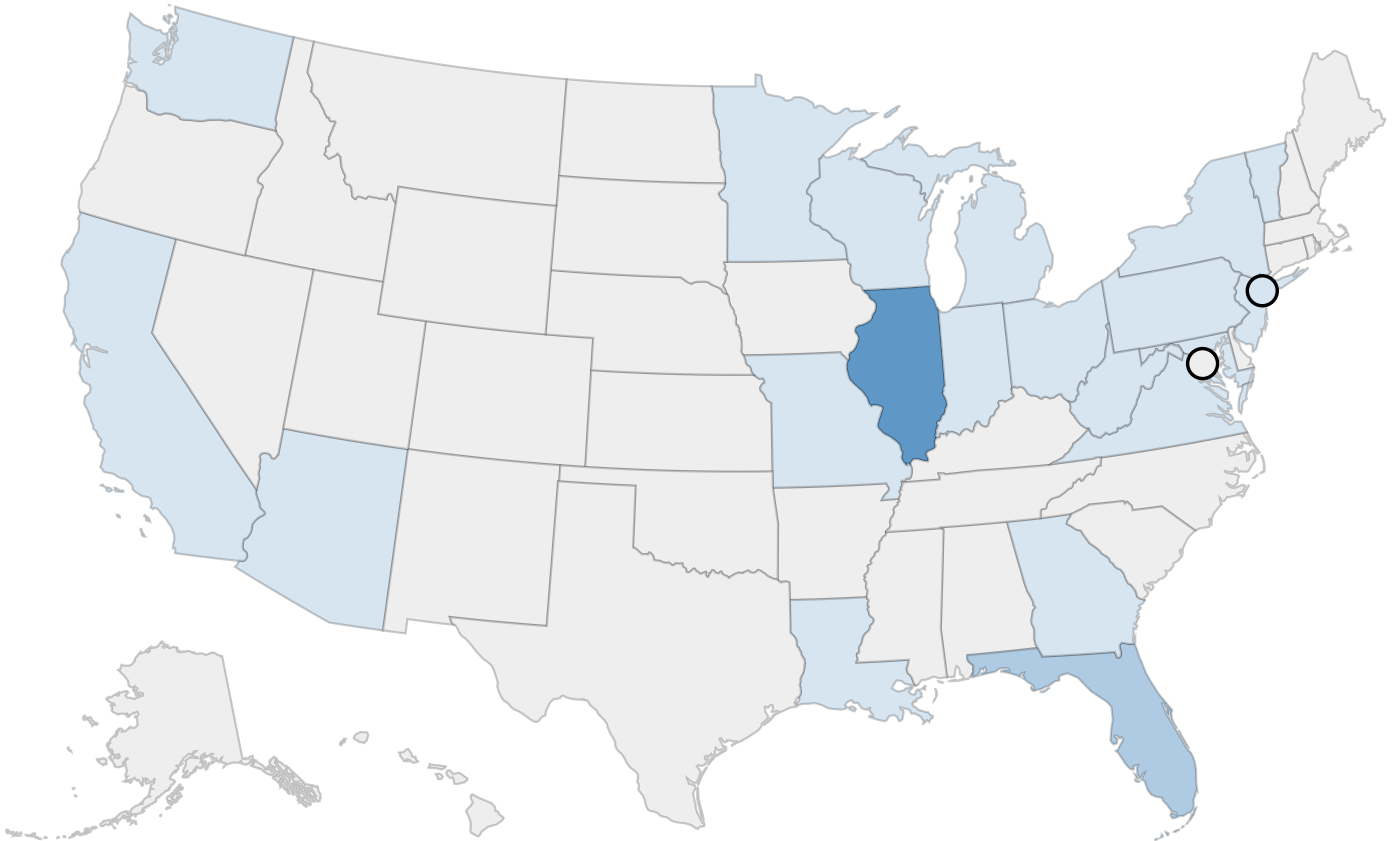
12/24/2023	11
12/31/2023	4
01/07/2024	4
01/14/2024	2
01/21/2024	2
01/28/2024	5
02/04/2024	3
02/11/2024	14
02/18/2024	9
02/25/2024	6
03/03/2024	3
03/10/2024	12
03/17/2024	38
03/24/2024	8
03/31/2024	9
04/07/2024	4
04/14/2024	3
04/21/2024	4
04/28/2024	0
05/05/2024	0

\*2023-2024 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 9, 2024



### Legend



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

### Data Table

Location	Cases in 2024
<input type="radio"/> Alabama	0
<input type="radio"/> Alaska	0
<input checked="" type="radio"/> Arizona	1-9
<input type="radio"/> Arkansas	0
<input checked="" type="radio"/> California	1-9
<input type="radio"/> Colorado	0
<input type="radio"/> Connecticut	0
<input type="radio"/> Delaware	0
<input type="radio"/> District Of Columbia	0
<input checked="" type="radio"/> Florida	10-19
<input checked="" type="radio"/> Georgia	1-9
<input type="radio"/> Hawaii	0
<input type="radio"/> Idaho	0
<input checked="" type="radio"/> Illinois	50-99
<input checked="" type="radio"/> Indiana	1-9

<input type="radio"/> Iowa	0
<input type="radio"/> Kansas	0
<input type="radio"/> Kentucky	0
<input checked="" type="radio"/> Louisiana	1-9
<input type="radio"/> Maine	0
<input checked="" type="radio"/> Maryland	1-9
<input type="radio"/> Massachusetts	0
<input checked="" type="radio"/> Michigan	1-9
<input checked="" type="radio"/> Minnesota	1-9
<input type="radio"/> Mississippi	0
<input checked="" type="radio"/> Missouri	1-9
<input type="radio"/> Montana	0
<input type="radio"/> Nebraska	0
<input type="radio"/> Nevada	0
<input type="radio"/> New Hampshire	0
<input checked="" type="radio"/> New Jersey	1-9
<input type="radio"/> New Mexico	0
<input checked="" type="radio"/> New York	1-9
<input checked="" type="radio"/> New York City	1-9
<input type="radio"/> North Carolina	0
<input type="radio"/> North Dakota	0
<input checked="" type="radio"/> Ohio	1-9
<input type="radio"/> Oklahoma	0
<input type="radio"/> Oregon	0
<input checked="" type="radio"/> Pennsylvania	1-9
<input type="radio"/> Rhode Island	0
<input type="radio"/> South Carolina	0
<input type="radio"/> South Dakota	0
<input type="radio"/> Tennessee	0
<input type="radio"/> Texas	0
<input type="radio"/> Utah	0
<input checked="" type="radio"/> Vermont	1-9
<input checked="" type="radio"/> Virginia	1-9
<input checked="" type="radio"/> Washington	1-9
<input checked="" type="radio"/> West Virginia	1-9
<input checked="" type="radio"/> Wisconsin	1-9
<input type="radio"/> Wyoming	0

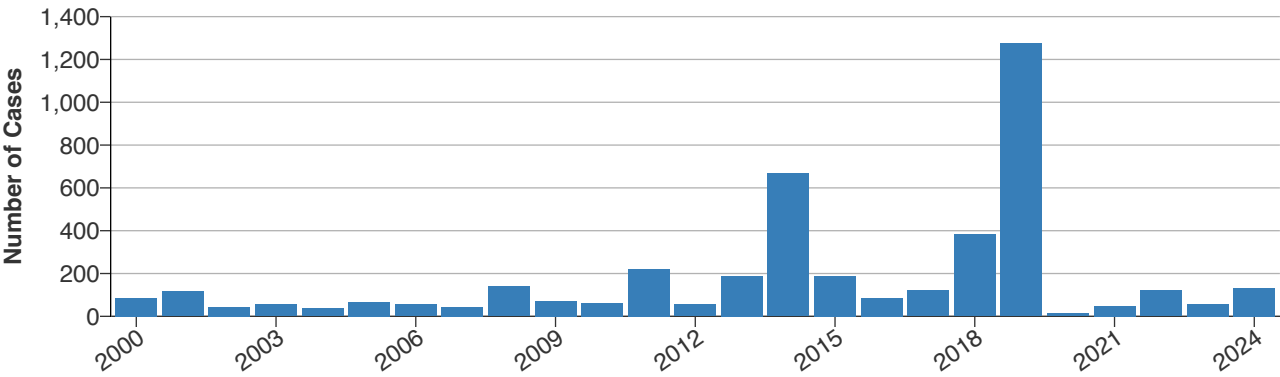
# Yearly Measles Cases

as of May 9, 2024

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

2000-2024\*

1985-2024\*



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

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	120
2018	382
2019	1,274
2020	13
2021	49
2022	121
2023	58
2024	132

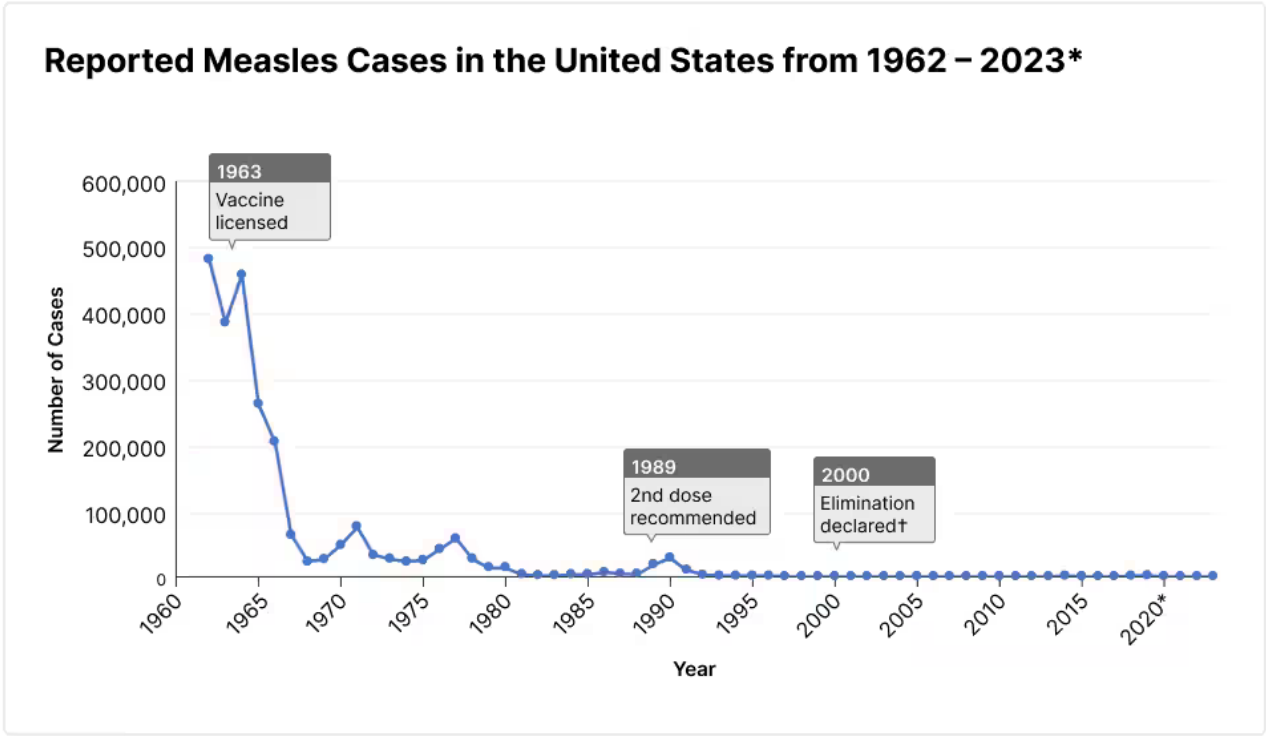


\*2023-2024 case counts are preliminary and subject to change.

## 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.

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\*2023 data are preliminary and subject to change. †Elimination is defined as the absence of endemic measles transmission in a region for  $\geq 1$ ...

[Show More](#)

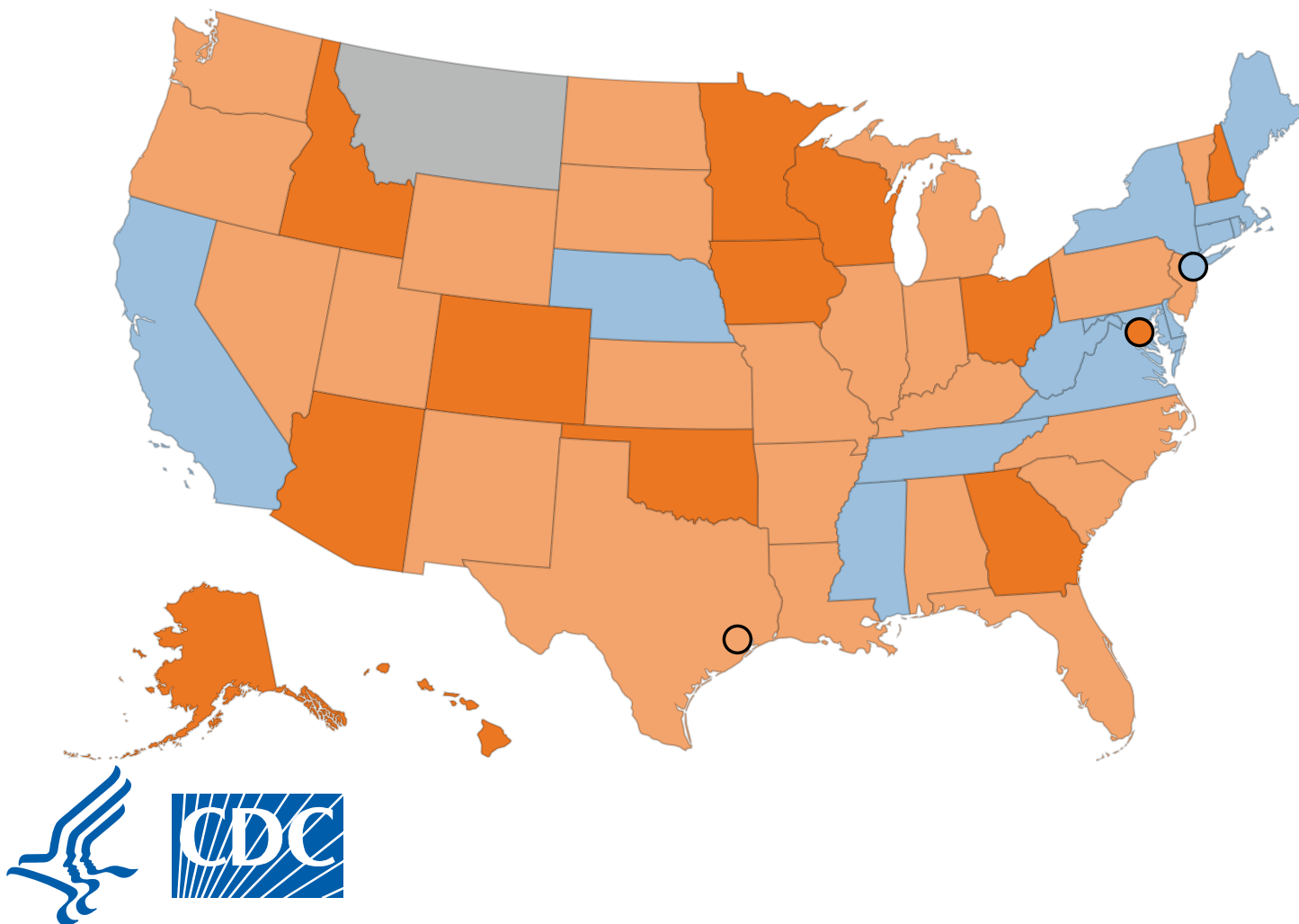
## MMR Vaccine Coverage for Kindergartners by School Year (2009-2023)

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

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

Data Table

Location	Categories	Coverage Estimate	Population Size	Percent Surveyed	Survey Type
<span style="color: #8B4513;">●</span> Alabama	90-94.9%	93.9%	59,113	100	Census
<span style="color: #8B4513;">●</span> Alaska	Less than 90%	83.6%	9,650	88.8	Vol. response (pub.), not conducted (pvt.)
<span style="color: #8B4513;">●</span> Arizona	Less than 90%	89.9%	80,814	97.7	Census
<span style="color: #8B4513;">●</span> Arkansas	90-94.9%	91.9%	38,358	95.8	Census (pub.), vol. response (pvt.)
<span style="color: #4682B4;">●</span> California	95%+	96.5%	541,132	100	Census
<span style="color: #8B4513;">●</span> Colorado	Less than 90%	87%	65,576	97.2	Census
<span style="color: #4682B4;">●</span> Connecticut	95%+	97.3%	35,580	100	Census
<span style="color: #4682B4;">●</span> Delaware	95%+	95.1%	10,674	9.7	Stratified 2-stage cluster sample
<span style="color: #8B4513;">●</span> District Of Columbia	Less than 90%	87.5%	8,064	100	Census
<span style="color: #8B4513;">●</span> 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 cluster sample
● Houston	90-94.9%	91.3%	37,664	98.8	Census (pub.), vol. response (pvt.)
● 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 (pub.), census (pvt.)
● Iowa	Less than 90%	89.9%	39,178	100	Census
● Kansas	90-94.9%	91.6%	35,543	30.8	Stratified 2-stage cluster sample
● 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
● Nebraska	95%+	95.1%	23,176	100	Census
● Nevada	90-94.9%	92.8%	34,333	89.1	Vol. response (pub.), census (pvt.)
● 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.), vol. response (pvt.)
● New York City	95%+	97.3%	85,379	97.6	Census (pub.), vol. response (pvt.)
● 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.), vol. response (pvt.)
● Oklahoma	Less than 90%	89.6%	52,548	89.5	Census (pub.), vol. response (pvt.)
● Oregon	90-94.9%	91.9%	40,963	100	Census
● Pennsylvania	90-94.9%	94%	137,259	97.2	Census (pub.), vol. response (pvt.)
● Rhode Island	95%+	96.9%	10,532	96.5	Census
● South Carolina	90-94.9%	93.2%	58,878	28.1	Stratified 1-stage cluster sample
● 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 cluster sample
● Washington	90-94.9%	91.4%	86,284	97.9	Census
● West Virginia	95%+	95.6%	19,175	86.1	Vol. response (pub.), census (pvt.)
● Wisconsin	Less than 90%	86.5%	63,593	93.9	Census (pub.), vol. response (pvt.)
● Wyoming	90-94.9%	90.8%	7,060	100	Census

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

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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.

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

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

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

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.

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.

2019

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

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

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

## 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.

## 2017

For more information please see the following reports:

- [Measles Outbreak — Minnesota April–May 2017](#) *MMWR*. July 14, 2017

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

## 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

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

## 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

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

## 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

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

## 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

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

# Learn more

## Questions About Measles

Get answers to questions about protecting against measles, measles vaccine and how measles spreads.

## History of Measles

Learn the history of measles, from the pre-vaccine era to measles elimination.

READ NEXT  
Measles Resources



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Very helpful