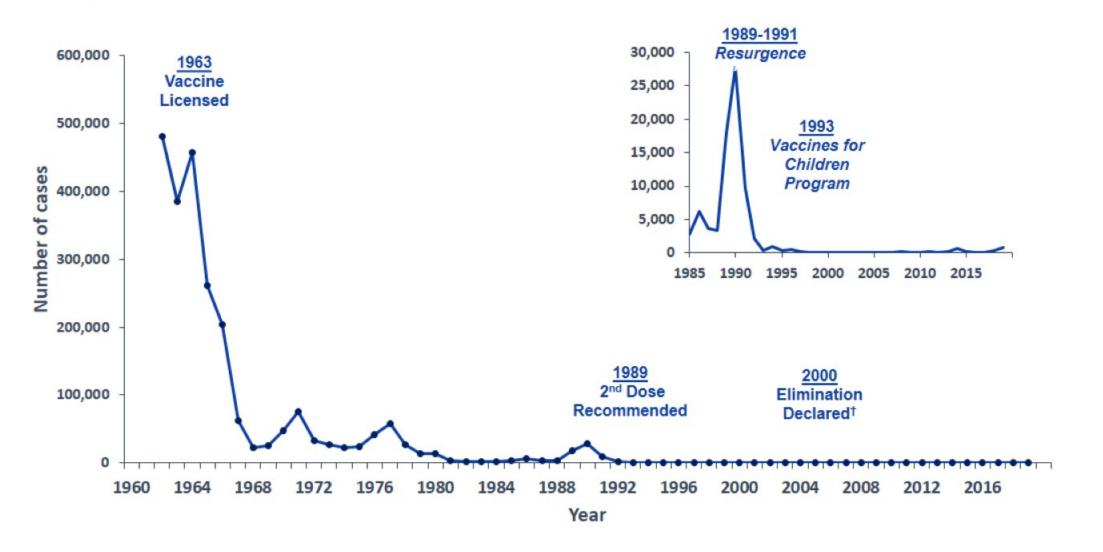
National Center for Immunization & Respiratory Diseases



Measles-United States, 2019

Thomas Clark, MD, MPH Deputy Director, Division of Viral Diseases National Center for Immunization and Respiratory Diseases

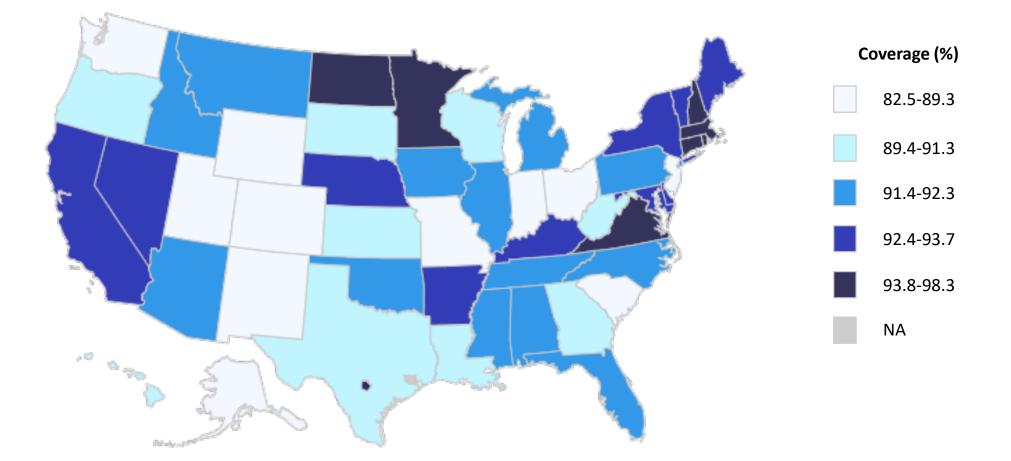
Reported Measles Cases, United States, 1962–2019*



*2018 and 2019 data are preliminary and subject to change

[†]Elimination is defined as the absence of endemic measles transmission in a region for ≥ 12 months in the presence of a well-performing surveillance system

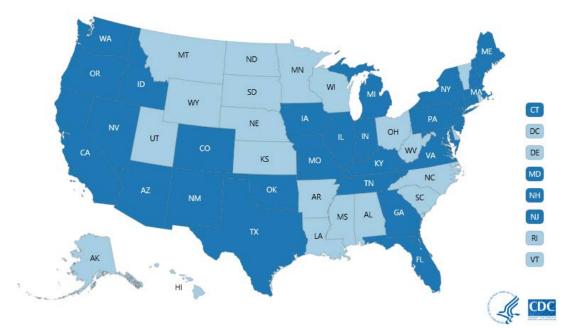
2017 Vaccine Coverage for ≥1 Dose MMR (ages 19-35 months)



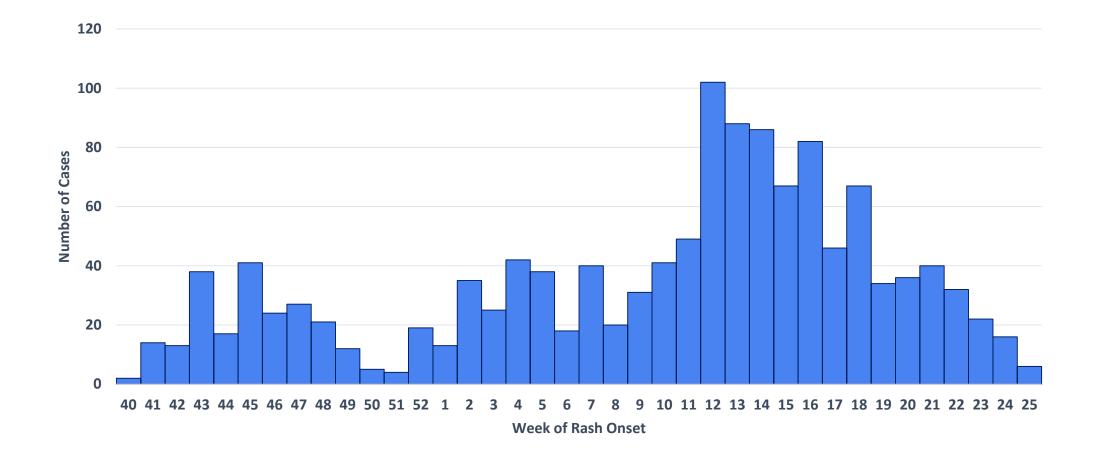
Source: National Immunization Survey-Child (NIS-Child), 1995 through 2017 available online through CDC ChildVaxView at https://www.cdc.gov/vaccines/imz-managers/coverage/childvaxview/data-reports/index.html

Measles Cases in 2019

- 1077* Individual cases of measles confirmed in 28 states
- This is the greatest number of cases reported in the United States since 1992 and since measles was declared eliminated in 2000
- Measles outbreaks ongoing:
 - New York State, Rockland County
 - New York City
 - California, Butte County
 - Pennsylvania, Allegheny County
 - Washington, King County



Measles Cases by Week of Rash Onset– United States, September 30, 2018 – June 25, 2019 (N=1319)



Measles Outbreaks and International Importations— January 1 – June 20, 2019 (N=1077)

- High two-dose coverage has been critical to limiting transmission
- 13 outbreaks reported In US
 - 94% of reported cases are outbreak-related
 - 6 of 13 in under-immunized, close-knit communities
 - 77% of cases are related to outbreaks in New York State and New York City

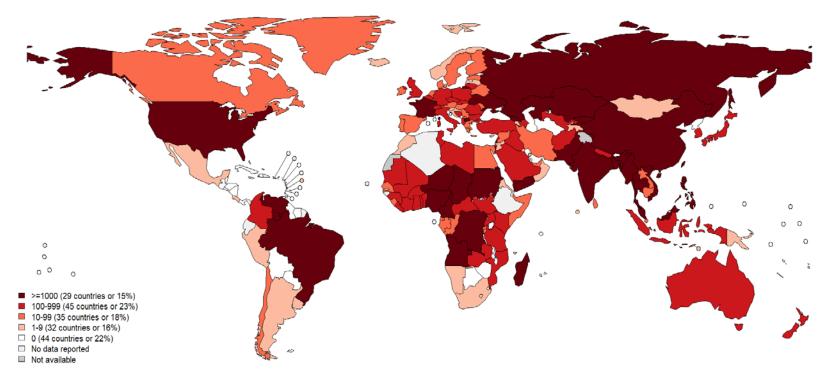
International importations

- 64 (6%) cases were internationally imported
 - 44 (69%) US residents
 - 20 (31%) foreign visitors
- Three most common source countries are the Philippines (15 imports), Ukraine (10 imports), and Israel (9 imports)

Global Measles Cases— November 2018 – April 2019



Top 10*	
Country	Cases
Madagascar	82585
Ukraine	60972
Philippines	25661
India**	21914
Nigeria	19780
Kazakhstan	7336
Brazil	6144
Venezuela (Bolivarian Republic of)	5668
Yemen	5643
Myanmar	4663





Map production: World Health Organization, WHO, 2019. All rights reserved Data source: IVB Database

Disclaimer:

The boundaries and names shown and the designations used on this map do notimply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border intes for which there may not yeb full agreement.

875 1750

3500 Kilomete

Notes: Based on data received 2019-06 - Surveillance data from 2018-11 to 2019-04 - * Countries with highest number of cases for the period. **WHO classifies all suspected measles cases reported from India as measles clinically compatible if a specimen was not collected as per the algorithm for classification of suspected measles in the WHO VPD Surveillance Standards. Thus numbers might be different between what WHO reports and what India reports.

CDC Measles Response

- Operating in Incident Management Structure (April 8)
 - >100 staff working on response
 - Update case counts and outbreak information weekly
 - Promote vaccination of travelers and prevention of importations
- Providing technical assistance to states reporting measles cases
 - Prevention and control
 - Case confirmation and genotyping
- Providing rapid, on-ground assistance when requested
 - >25 staff deployed
- Providing science-based information and targeted communications resources
- Establishing collaborations with key stakeholders in affected communities
 - Rabbis/Rabbinical organizations, healthcare providers, health centers, and summer camps

Increase in Measles Cases — United States, January 1–April 26, 2019

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On April 29, 2019, this report was posted as an MMWR Early Release on the MMWR website (https://www.cdc.gov/mmwr).

As of April 26, 2019, CDC had reported 704 cases of measles in the United States since the beginning of 2019, representing the largest number of cases reported in the country in a single year since 1994, when 963 cases occurred, and since measles was declared eliminated* in 2000 (1,2). Measles is a highly contagious, acute viral illness characterized by fever and a maculopapular rash; complications include pneumonia, encephalitis, and death. Among the 704 cases, 503 (71%) were in unvaccinated persons and 689 (98%) occurred in U.S. residents. Overall, 66 (9%) patients were hospitalized. Thirteen outbreaks have been reported in 2019, accounting for 663 cases, 94% of all reported cases. Six of the 13 outbreaks were associated with underimmunized close-knit communities and accounted for 88% of all cases. High 2-dose measles vaccination coverage in the United States has been critical to limiting transmission (3). However, increased global measles activity poses a risk to U.S. elimination, particularly when unvaccinated travelers acquire

(Table). Among all measles patients, 503 (71%) were unvaccinated, 76 (11%) were vaccinated (received \geq 1 measles, mumps, and rubella (MMR) vaccine), and the vaccination status of 125 (18%) was unknown. Overall, 66 (9%) patients were hospitalized, and 24 (3%) had pneumonia. No deaths or cases of encephalitis were reported to CDC.

Of the 704 total cases, 663 (94%) were associated with outbreaks; 13 outbreaks have been reported in 2019. Outbreakrelated cases have been reported in 12 states[†] and New York City; multistate transmission was documented in four outbreaks. Six outbreaks were associated with underimmunized close-knit communities and accounted for 88% of all cases. New York state and New York City accounted for 474 (67%) of all cases reported in 2019 and have had ongoing transmission since October 2018.

Among the 704 cases, 689 (98%) occurred in U.S. residents. Forty-four cases were directly imported from other countries, including 34 (77%) that occurred in U.S. residents; 23 imports resulted in no known secondary cases. Among the 44 interna-

Summary

- The United States remains in elimination status, although there are prolonged outbreaks in close-knit communities
- Vaccination coverage remains high, but communities with low vaccination coverage are at risk for outbreaks
- Increased global measles activity poses a risk of continuing importations

Get Vaccinated: Prevent and Stop Measles Outbreaks

When measles happens anywhere in the world...

it can travel here and spread

Since measles is still common in many countries, unvaccinated travelers will continue to bring the disease into the U.S., and it can spread to other people.

Make sure you and your family members are up-to-date on your measles-mumps-rubella (MMR) vaccine, including before traveling internationally. Ask your doctor if everyone has received all recommended doses of MMR for best protection against measles.

NCIRDig-405 | Last updated: June 2, 2014

www.cdc.gov/features/measles/



U.S. Department of Health and Human Services Centers for Disease Control and Prevention

CDC Strategy to End Measles Outbreaks

Driver #1 Access to Vaccines

Driver #2 Pockets of Low Vaccination

Driver # 3 Bad Information

Strategy: Dismantle Barriers to Access

- Minimize vaccine costs to patients
- Connect parents with health care providers
- Find new opportunities to vaccinate and minimize missed chances
- Strategy: Identify, Reach, and Assist Communities at Risk
 - Leverage data to identify pockets of low vaccination before an outbreak occur
 - Work with health partners and providers to reach groups at risk
 - Create tailored, effective, and empathetic materials and approaches to improve MMR vaccination among at-risk communities
- Strategy: Immunize against bad information with accurate, persuasive communications
- Contain and counter false safety and efficacy claims
- Partner with health agencies, providers, and other stakeholders to educate the public and policy makers
- Empower health care providers to make a positive case for vaccines