

Disease Outbreak News

Measles - United States of America

27 March 2025

Situation at a glance

On 11 March 2025, the World Health Organization (WHO) received a report from the International Health Regulation (2005) (IHR) National Focal Point (NFP) of the United States of America (United States) on the ongoing measles outbreak in the country, notified under IHR because it is an unusual event with potential significant public health impact, with the number of cases and deaths in 2025 exceeding the numbers in previous years. Additionally, cases linked to the outbreak in the State of Texas, United States, have been reported in Mexico. Measles is a highly contagious, airborne viral disease that can lead to severe complications and death. From 1 January to 20 March 2025, 17 States have reported a total of 378 cases of measles, including two deaths - the first deaths related to measles in the United States in a decade. The majority of cases are in children who are unvaccinated or have unknown vaccination status, and the overall hospitalization rate is 17%. In 2025, within the larger public health event, there are three distinct measles outbreaks reported, accounting for 90% (341/378) of reported cases. The Centers for Disease Control and Prevention of the United States (US CDC) and other government agencies are working to control the outbreaks. In 2000, measles was declared eliminated in the United States, since then imported cases of measles have been detected in the country, as the disease remains endemic in many parts of the world. WHO is working closely with countries in the WHO Region of the Americas to prevent the spread and reintroduction of measles.

Description of the situation

On 11 March 2025, the NFP of the United States notified to WHO an ongoing outbreak of measles in the United States.

From 1 January to 20 March 2025, 378 cases have been reported from 17 States including: Alaska, California, Florida, Georgia, Kansas, Kentucky, Maryland, Michigan, New Jersey, New Mexico, New York State, Ohio, Pennsylvania, Rhode Island, Texas, Vermont, and Washington. Two deaths have also been reported, one confirmed in Texas and one under investigation in New Mexico. The majority of cases are in children who are unvaccinated or have unknown vaccination status. The hospitalization rate is 17%.

Ninety percent of the 378 cases (341 cases) have been associated with three distinct outbreaks (defined as three or more related cases) reported in 2025, while the remainder are sporadic cases that are part of the larger outbreak.

From late January until 14 March 2025, the Texas Department of State Health Services reported 259 cases in the South Plains and Panhandle regions of Texas. Of these, 34 patients have been hospitalized, and 257 (99%) were unvaccinated or with unknown vaccination status. In February 2025, an unvaccinated school-aged child who lived in the Texas outbreak area died of measles. This was the first death in the United States related to measles in a decade.

As of 14 March, the New Mexico Department of Health reported 35 cases of measles. Of the 35 cases, 28 were unvaccinated, two were vaccinated, and five had unknown vaccination status.

From 1 January 2025 to 20 March 2025, the US CDC reported 128 measles DNA sequences. Texas submitted 92 identical DNA sequences in genotype D8; while 10 DNA sequences from New Mexico and one DNA sequence from Kansas were identical to those from Texas. Texas also reported three genotype D8 sequences (a total of 19 D8 sequences have been reported from the affected States) with single nucleotide substitutions. Additionally, a total of five distinct genotype B3 sequences were reported from the States of Alaska, California, Florida, Kentucky, New York, Rhode Island, Texas, and Washington.

The source of this outbreak is unknown. Currently, there is no evidence of decreased vaccine effectiveness or changes in the virus that would result in increased severity.

In 2000, measles was declared eliminated^[1] in the United States and, since then, imported cases of measles have been detected in the country since the disease remains endemic in many parts of the world. The United States last verified the ongoing elimination of measles in 2024. In 2023, the vaccination coverage rate for two doses of measles, mumps, and rubella (MMR) vaccine among children in kindergarten in the United States was 92.7%.

Epidemiology

Measles is a highly contagious acute viral disease which affects individuals of all ages and remains one of the leading causes of death among young children globally. The mode of transmission is airborne or via droplets from the nose, mouth, or throat of infected persons.

Initial symptoms, which usually appear 10-14 days after infection, include high fever, usually accompanied by a runny nose, bloodshot eyes, cough and tiny white spots inside the mouth. The rash usually appears 10-14 days after exposure and spreads from the head to the trunk to the lower extremities. A person is infectious from four days before up to four days after the appearance of the rash. There is no specific antiviral treatment for measles and most people recover within 2-3 weeks.

Measles is usually a mild or moderately severe disease. However, measles can lead to complications such as pneumonia, diarrhoea, secondary ear infection, inflammation of

the brain (encephalitis), blindness, and death. Postinfectious encephalitis can occur in about one in every 1000 reported cases. About two or three deaths may occur for every 1000 reported cases.

Immunization against measles prevents measles and its complications.

Public health response

Federal, State, local health authorities and community partners in the United States are implementing the following public health measures to control the outbreak: US CDC escalated to a level 3 Incident Management Structure on 3 March 2025 to provide remote technical assistance on diagnostics, post-exposure prophylaxis, healthcare infection and prevention, case investigation and confirmation, and communication support. The Texas Department of State Health Services is leading the investigation in Texas. US CDC deployed subject matter experts to assist the response. WHO has issued epidemiological alerts and updates due to the increase in measles cases in several countries in the WHO Region of the Americas that started in 2024. WHO continues to monitor the situation and work closely with countries in the Region of the Americas to support their vaccination, surveillance and rapid outbreak response efforts to prevent the spread and reintroduction of measles and to protect the health of the entire population.

WHO risk assessment

Measles is a highly contagious viral disease that affects individuals of all ages and remains one of the leading causes of death among young children globally. The transmission mode is airborne or via droplets from the nose, mouth, or throat of infected persons. Initial symptoms, which usually appear 10-14 days after infection, include high fever, usually accompanied by a runny nose, bloodshot eyes, cough and tiny white spots inside the mouth. A rash develops several days later, usually starting on the face and upper neck and gradually spreading downwards. A patient is infectious four days before the start of the rash to four days after the appearance of the rash. There is no specific antiviral treatment approved for measles; most people recover within 2-3 weeks. Measles can also cause serious complications, including blindness, encephalitis, severe diarrhoea, ear infection, and pneumonia, which are more common in children under 5 years and adults more than 20 years of age. Measles can be prevented by immunization.

In 2016, the Region of the Americas was the first WHO Region to be declared free of the endemic transmission of measles by the International Expert Committee for Documenting and Verifying Measles, Rubella and the Congenital Rubella Syndrome in the Americas. Nevertheless, maintaining the Region free of measles is an ongoing challenge due to the permanent risk of importation and reintroduction of the virus.

The public health risk in the Region of the Americas for measles is considered high due to the persistence of the circulation of the virus from imported cases, which have resulted in a limited number of outbreaks, with several generations of cases and the appearance of cases associated with pre-existing outbreaks in new geographical areas. Additionally, an

increase in the susceptible population due to persistently low vaccination coverage related to factors such as the COVID-19 pandemic, increased vaccine hesitancy in some communities and sectors of the population, and limited access to health services, particularly for vulnerable populations.

WHO advice

WHO recommends maintaining sustained homogeneous coverage of at least 95% with the first and second doses of the measles-containing vaccine (MCV) and strengthening integrated epidemiological surveillance of measles and rubella to achieve timely detection of all suspected cases in public and private healthcare facilities.

WHO recommends strengthening epidemiological surveillance and preparedness and response capacities in high-traffic border areas to rapidly detect and respond to suspected measles cases. Providing a rapid response to imported measles cases to avoid the re-establishment of endemic transmission through the activation of rapid response teams trained for this purpose and by implementing rapid response protocols when there are imported cases. Once a rapid response team has been activated, continued coordination between the national, sub-national and local levels must be ensured, with continuous and effective communication channels across all levels. During outbreaks, it is recommended to establish adequate hospital case management and infection prevention and control capacity to avoid health care-associated infection transmission, with appropriate referral of patients to airborne infection isolation rooms (for any level of care) and avoiding contact with other patients in waiting rooms and/or other hospital rooms.

WHO recommends providing broad access to measles, mumps and rubella (MMR) vaccination to maintain high vaccination rates of the general population and to ensure individuals at high risk of exposure are up-to-date on this vaccination, such as health and care personnel and international travellers. Individuals living in outbreak areas within the United States should follow local public health guidance. Globally, between 2000 and 2023, vaccination successfully prevented an estimated 60 million deaths^[2] and decreased an estimated measles death from 800 062 in 2000 to 107 500 in 2023, which is an 87% decrease.^[3]

In all settings, consideration should be given to providing susceptible contacts with post-exposure prophylaxis, including a dose of MCV or normal human immunoglobulin (NHIG) (if available) for those at risk and in whom the vaccine is contraindicated. In well-resourced settings, MCV should be provided to susceptible contacts within 3 days. For contacts for whom vaccination is contraindicated or is not possible within 3 days post-exposure, consideration can be given to providing NHIG up to 6 days post-exposure. Infants, pregnant women, and the immunocompromised should be prioritized.

WHO recommends maintaining a stock of the measles-rubella (MR) and/or MMR vaccine, and syringes/supplies for responding to imported cases. Facilitating access to vaccination services according to the national scheme to incoming and outgoing international travellers, including individuals due to perform activities, domestically or

abroad, in areas with ongoing measles outbreaks, displaced populations, indigenous populations, or other vulnerable populations.

WHO advises international travellers to check and update their vaccination status against measles prior to departure, including when planning to travel to the United States. Unvaccinated individuals from areas in the United States experiencing measles outbreaks, with knowledge of exposure to measles cases and/or presenting signs and symptoms compatible with measles virus infection, should consult local health authorities before undertaking an international voyage. At present, no additional measures that significantly interfere with international traffic are warranted.

Further information

- World Health Organization. Measles Fact sheets. <https://www.who.int/news-room/fact-sheets/detail/measles>
- CDC, Health Alert Network: [https://www.cdc.gov/han/2025/han00522.html\(link is external\)](https://www.cdc.gov/han/2025/han00522.html(link is external))
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- World Health Organization, Measles Outbreak Guide, Available from: <https://www.who.int/publications/i/item/9789240052079>

[1] Measles elimination is defined as “[t]he absence of endemic measles transmission in a defined geographical area (e.g. region or country) for ≥ 12 months in the presence of a well-performing surveillance system.” <https://www.who.int/publications/i/item/measles-and-rubella-strategic-framework-2021-2030>

[2] Progress Toward Measles Elimination — Worldwide, 2000–2023. https://www.cdc.gov/mmwr/volumes/73/wr/mm7345a4.htm?s_cid=mm7345a4_w

[3] World Health Organization. Measles Fact sheets. https://www.who.int/news-room/fact-sheets/detail/measles?gad_source=1

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