



Epidemiological Alert Measles in the Americas Region

28 February 2025

In 2024, the Americas Region was again verified as measles-free, while maintaining elimination of rubella and congenital rubella syndrome (CRS). However, the recent identification of multiple measles outbreaks and cases, including some fatal ones, in countries and territories of the region, puts this achievement at risk. In view of this situation, the Pan American Health Organization / World Health Organization (PAHO/WHO) calls on Member States to strengthen vaccination, epidemiological surveillance, and rapid response activities. It also recommends implementing active community, institutional and laboratory searches for the early identification of cases, as well as carrying out complementary vaccination activities to close possible immunity gaps.

Global summary

According to monthly measles and rubella surveillance data published by the World Health Organization (WHO) in 2025, as of February 1, 2025, 7,633 suspected measles cases were reported in 54 Member States in the six WHO regions, of which 3,098 (40.6%) were confirmed¹. In 2024, 664,144 suspected measles cases were reported in 184 WHO Member States, of which 334,144 (50.3%) were confirmed (1).

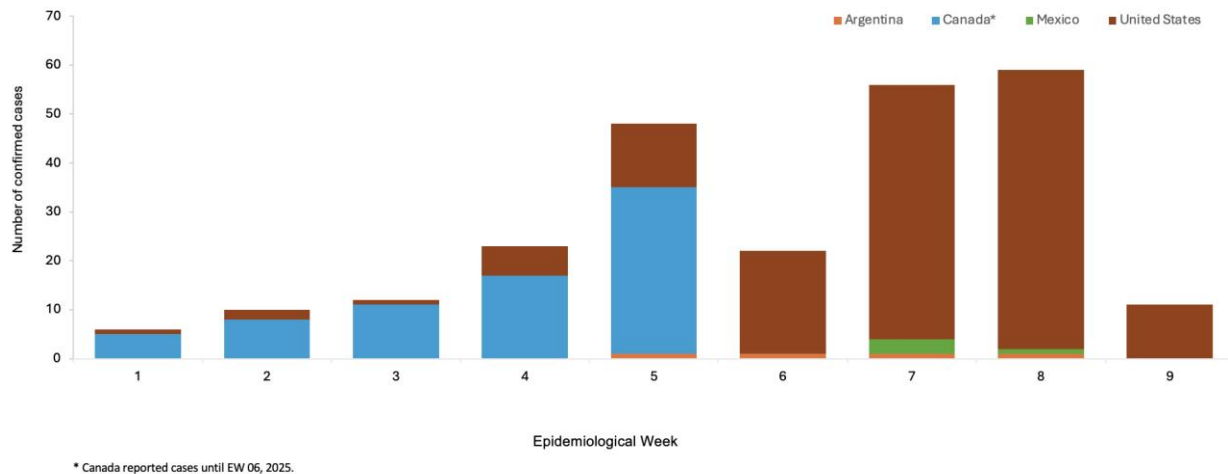
Summary of the situation in the Americas Region

In 2025, between epidemiological week (EW) 1 and EW 9, in the Americas Region, 268 measles cases have been confirmed, including one death, in Argentina (n= 4), Canada (n= 96), the United States of America (n= 164, including one death), and Mexico (n= 4) (**Figure 1**) (2-5). This total represents a 4.5-fold increase compared to the 60 measles cases reported in the same period in 2024. Of the total number of cases in 2025, 69% (n=186) were in persons aged 5 years or older (2-6).

¹ Includes cases confirmed by laboratory, clinical or epidemiological criteria.

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Figure 1. Confirmed measles cases by epidemiological week and country in the Americas Region 2025 (until EW 6).



Source: Adapted with data provided by the respective countries (2-5).

In 2024, between EW 1 and EW 52, in the Americas Region, 17,887 suspected measles cases were notified, among which 464 were confirmed in Argentina (n= 14), Bermuda (n= 2), the Plurinational State of Bolivia (n= 3), Brazil (n= 4), Canada (n= 146), the United States (n= 284), the Turks and Caicos Islands (n= 2), Mexico (n= 7), and Peru (n= 2). According to the information available on confirmed cases, the age groups with the highest proportion of cases corresponds to the 10-19 years age group (27%), the 1-4 years age group (25%) and the 20-29 years age group (23%). Regarding vaccination history, 63% of the cases were not vaccinated and in 18% this information was unknown or absent (6).

Measles epidemiologic situation in 2025 by country in the Americas Region

The following is an update of the epidemiological situation of measles in countries that have reported confirmed cases in the Americas in 2025 (2-5).

In **Argentina**, between EW 1 and EW 8 of 2025, a total of four cases of measles have been confirmed, all residents of the Autonomous City of Buenos Aires. The first case was reported on 31 January 2025, in a six-year-old female minor who arrived in the country on 22 January from Russia with layovers in Vietnam, the United Arab Emirates, and Brazil. The child progressed favorably and was treated on an outpatient basis. The second case was notified on 3 February in 2025 and corresponds to the 20-month-old sister of the index case. This second case had onset of fever on 29 January and onset of rash on 3 February. Neither of the two minors had a history of measles vaccination. Tests confirmed the presence of the virus in both by detection of the viral genome by RTqPCR. On 14 February, a third case of measles was confirmed in a 40-year-old adult with no history of travel, residing near the two previously confirmed cases. On 10 February, the case started with cough, adding fever and exanthema on 12 February. The case reported complete vaccination. The serum IgM against measles was negative and IgG positive, and measles virus viral genome was detected by RTqPCR in urine. On 21 February, a fourth case of measles was confirmed in an 18-year-old adolescent female with no history of travel, living close to the previous cases. This case had onset of fever on 19 February, and on 21 February, the case presented conjunctivitis. In view of this

symptomatology, together with the epidemiological history of probable contact with confirmed cases, samples were taken on the same day, confirming the diagnosis. The case had a complete history of vaccination referred to in the clinical history of the jurisdiction (2).

In **Canada**, between EW 1 and EW 7 of 2025, 66 laboratory-confirmed measles cases were reported, plus 30 cases confirmed by epidemiologic link. Of the confirmed cases, 91 were import-related, four were imported, and one was of unknown origin. Seventy-two percent of cases were reported in the province of Ontario (n= 69), followed by 21% in the province of Quebec (n= 20), 5% in the province of Manitoba (n= 5), and 2% in the province of British Columbia (n= 2). Forty-six percent of the cases were between 5 and 17 years of age, followed by 27% of cases over 18 years of age. Regarding vaccination history in confirmed cases, 78% were not vaccinated, 5% had no known history of vaccination, 6% had received one dose of measles, mumps, and rubella (MMR) vaccine, and 10% had received two doses of MMR. Nine percent of cases were hospitalized (n= 9) for isolation or treatment due to complications. D8 genotypes were identified in 50 of the confirmed cases. Two outbreaks were identified, both initiated in 2024. Seventy-five percent (n= 72) of the cases are related to a multijurisdictional outbreak involving four provinces (3).

In **Mexico**, between EW 1 and EW 8 of 2025, four cases of measles have been laboratory confirmed; one imported and three with source of infection under study, located in Oaxaca (n= 2) and Chihuahua (n= 2). Regarding the cases in the State of Oaxaca, the case is a five-year-and eight-months-old female minor from the United States and resident of Oaxaca, with no history of vaccination and history travel between October 2024 and January 2025 to Thailand, Lao People's Democratic Republic, Viet Nam, Japan, and the United States, arriving in Mexico on 29 January. The case had onset of exanthema on 10 February, establishing the period of transmissibility in the state. The second case corresponds to a 16-years and 6-months old male with a complete vaccination schedule. He presented onset of rash on 14 February, with no history of travel. Confirmed by the Institute of Epidemiological Diagnosis and Reference (InDRE per its acronym in Spanish), with the following results: RTqPCR measles positive, IgM measles negative, RTqPCR rubella negative, IgM rubella negative. In the State of Chihuahua, the first confirmed case occurred on 20 February; it was a 9-year- and 11-months-old male, with no history of vaccination, with onset of rash on 11 February and had a period of transmissibility within his community. Subsequently, the second case was identified within the follow-up of school contacts in the state; a 9-year-old male, with no history of vaccination against measles or rubella, with onset of rash on 13 February. He is a school contact of the primary case mentioned above. The samples were sent to the InDRE, where the genotyping process was initiated (4).

In the **United States of America**, between EW 1 and EW 8 of 2025, 164 measles cases have been reported, with one death, in nine states: Alaska (n=2), California (n=3), Georgia (n= 3), Kentucky (n= 1), New Jersey (n= 3), New Mexico (n= 9), New York (n= 2), Rhode Island (n= 1), and Texas (n= 140 and one death). Of the total cases, 93% (n= 153) are associated with outbreaks (defined as three or more cases), with three outbreaks identified this year. Thirty-four percent (n= 55) of the cases involved children under 5 years of age, 48% (n= 79) involved persons aged 5-19 years, 18% (n= 29) involved adults over 20 years, and 1% (n= 1) involved persons of unknown age. Regarding vaccination, 95% of cases were unvaccinated or had an unknown vaccination history and 4% had a single dose of MMR. Twenty percent (n= 32) of cases required hospitalization, mainly in children under 5 years of age with 29% (n= 16).

MMR vaccination coverage in children has decreased in recent years from 95.2% in 2019-2020 to 92.7% in 2023-2024 (5)

Guidance to Member States

The Pan American Health Organization / World Health Organization (PAHO / WHO) recommends that Member States continue their efforts to sustain the elimination of measles, rubella, and congenital rubella syndrome in our Region. To this end, it is crucial to strengthen surveillance and rapid response to these diseases, as well as to achieve vaccination coverage $\geq 95\%$ with two doses of measles, mumps, and rubella (MMR) vaccine.

The risk of outbreaks has increased, given the increase in measles cases worldwide, coupled with factors such as low coverage of the first and second doses of measles, mumps, and rubella vaccine (MMR1 and MMR2) in most countries and territories in the Region; gaps in the performance of integrated measles/rubella surveillance indicators (7); the significant increase in the movement of people within the Americas Region and from other regions of the world; and the increase in dengue cases in the Region, which could mask potential measles or rubella cases, due to the similarity of the clinical manifestations of these diseases.

Taking into consideration the risk factors and the current regional context, recommendations related to vaccination, surveillance, and rapid response are provided below (7, 8):

Vaccination

- a. **Implement vaccination intensification activities** based on the results of the measles and rubella risk analysis, with the objective of closing coverage gaps, prioritizing the municipalities with the highest risk.
- b. **Conduct microplanning of routine vaccination** services to achieve vaccination coverage of at least 95% with two doses of vaccine. PAHO has developed guidelines that can be very useful for this task.
- c. **Offer vaccinations to travelers** through medical brigades or fixed vaccination posts, ensuring access at strategic points.
- d. **Increase efforts to achieve vaccination coverage in reluctant populations**, including awareness-raising activities targeting local authorities, community and religious leaders, as well as other key social actors and government sectors, such as the education sector. In addition, carry out complementary vaccination activities in host communities or areas surrounding reluctant populations to close immunity gaps and strengthen community protection.

Surveillance

- a. **Strengthen epidemiological surveillance** in high-risk areas, border areas and areas with epidemiological silence, through the implementation of active searches in both health services and the community. This should include continuous monitoring and analysis of epidemiological surveillance indicators, in collaboration with the national

measles and rubella elimination sustainability commission, to implement corrective measures if necessary.

- b. **Adopt and adapt recent PAHO guidance** on active case finding when implementing this surveillance strategy, following the recommendations of the Regional Commission for Measles, Rubella, and Congenital Rubella Syndrome issued at its 2024 meeting. Available from: <https://www.paho.org/en/documents/guidance-active-case-finding-acute-flaccid-paralysis-measles-and-rubella>(9).
- c. **Implement active case-finding in laboratories** by reviewing serum samples obtained for dengue or arboviral disease surveillance to identify measles and rubella cases that may have gone unnoticed. It is recommended to follow the guidance on measles and rubella testing provided by the laboratory network of the Americas Region (10).
- d. **Obtain serum, nasopharyngeal swab and urine samples** (7) in all suspected measles or rubella cases for laboratory confirmation through serological and molecular real-time RT-PCR testing and genomic sequencing to document the genotype associated with the infection. If the local laboratory does not have the capacity to perform measles and rubella diagnosis, it is recommended that specimens be referred to the appropriate reference laboratory for testing, ensuring that results are obtained in a timely manner as defined in the surveillance system. Member States are encouraged to ensure proper storage, preservation and transport of samples following international recommendations for the transport of infectious substances.
- e. **Classify suspected cases** with positive IgM result considering clinical, epidemiological and laboratory criteria, with the participation of surveillance, laboratory and immunization delegates, in addition to the national commission for sustainability of measles and rubella elimination.

Quick response

- a. **Review and -if necessary- adjust operational preparedness and rapid response plans**, strengthening the capacity of health systems mainly in the risk areas mentioned in the **Vaccination** section.
- b. **Initiate a timely response to imported cases of measles or rubella**, including activation of trained rapid response teams and implementation of national rapid response protocols (11, 12).
- c. **Establish appropriate in-hospital case management** to avoid nosocomial transmission, particularly during an outbreak. This involves maintaining an adequate referral flow of patients in isolation wards (at any level of care), avoiding contact with other patients in common rooms such as waiting rooms and hospital wards.
- d. Train health personnel, with emphasis on rapid response teams, in outbreak response. PAHO has online self-learning courses for this purpose (Available in Spanish at: 1) Rapid Response to Measles and Rubella Outbreaks in the Americas. <https://campus.paho.org/es/curso/preparacion-de-la-respuesta-rapida-brotos-de->

[sarampion-y-rubeola-2023](#) (13); 2) Measles Outbreak in the Post-Elimination Era: Case Study. <https://campus.paho.org/es/curso/brote-de-sarampion-en-la-era-post-eliminacion-estudio-de-caso-2022> (14).

Mass events and international travelers

The following is a set of guidelines that health authorities can implement in the context of mass events and international travelers.

- **In relation to travelers**

Before the trip

PAHO/WHO recommends to Member States that any traveler 6 months of age² and older who cannot show proof of vaccination or immunity be advised to **receive a dose of measles and rubella vaccine**, preferably MMR, **at least two weeks before traveling to areas where measles transmission has been documented**. PAHO/WHO recommendations regarding advice for travelers are available in the Epidemiological Update on measles published by PAHO/WHO on 27 October 2017 (15).

It is recommended that health authorities inform the traveler before departure about the signs and symptoms of measles, which include:

- o Fever,
- o Exanthema,
- o Cough, coryza (runny nose) or conjunctivitis (red eyes),
- o Joint pain,
- o Lymphadenopathy (swollen lymph nodes).

During the trip

Recommend to travelers that if during their trip they present symptoms that make them suspect that they have contracted measles or rubella, they should do the following:

- o Seek immediate attention from a health care professional.
- o Avoid close contact with others for seven days from the onset of the rash.
- o Remain in the place where you are staying (e.g., hotel or home, etc.), except to go to the doctor, or as recommended by the health care professional.
- o Avoid traveling and visiting public places.

On his return

- o If travelers suspect that they have contracted measles or rubella upon return, they should contact their health service.
- o If the traveler presents any of the above symptoms, it is recommended to inform the physician about the trip.

² The dose of Measles, Rubella and Parotitis or Measles and Rubella vaccine administered to children 6 to 11 months of age does not replace the first dose of the recommended schedule at 12 months of age.

- **Regarding physicians and other health professionals**

PAHO/WHO recommends:

- o Promote the practice of requesting immunization/vaccination testing for measles and rubella in the health care sector (medical, administrative and security personnel).
- o Sensitize private sector health care workers on the need for immediate notification of any measles or rubella case, to ensure a timely response by national public health authorities according to the standards of the national surveillance and response system.
- o Continue to remind healthcare personnel of the need to inquire about patients' travel history.

- **Identification and contact tracing of confirmed measles cases**

- o Carry out activities for the identification and follow-up of contacts identified and present in the **national territory**, in accordance with the country's guidelines and directives.
- o Consider the **international implications** that may arise in the **follow-up of contacts**, and consider the following scenarios and operational aspects in the development of these activities:
 - a. When a case is identified by the national authorities of another Member State and the national authorities are requested to locate the contact(s) whose most likely place of residence is their country. National authorities are urged to use all available coordination mechanisms to locate these persons. The information available for this action may be limited and efforts should be rational and based on existing resources. Health services should be alerted to the possibility of such contacts so that they can be vigilant in detecting suspected cases.
 - b. When a case is identified locally and depending on when detection occurs in the natural history of the disease, it may require:
 - *Current case*: National authorities should obtain information on the possible location of contacts abroad and inform the relevant national authorities of the country where the contact is presumed to be located accordingly.
 - *Retrospectively identified case*: according to the travel history of the case, the national authorities should inform the corresponding national authorities as this situation could be the first sign of virus circulation, or an outbreak, in the other country/countries concerned.
 - c. Conduct active institutional and community searches to rapidly detect cases among those contacts that have not been identified in the outbreak investigation, following the route of travel of the case(s).

Operational remarks

- If there is no involvement of international means of transport (e.g. planes, cruise ships, trains) in the possible exposure scenarios for a case/s, national authorities should communicate with their counterpart/s in the other countries through the relevant

International Health Regulations (IHR) National Focal Point or through other existing bilateral and multilateral programmatic mechanisms, with a copy to the WHO Regional IHR Contact Point. If deemed necessary, national authorities may request the support of the WHO Regional IHR Contact Point for the Americas to facilitate communications related to international contact tracing.

- If international means of transport (e.g. aircraft, cruise ships, trains) are involved as a possible scenario in exposure to a case/s, the national port health authorities or the one acting in their stead should activate existing mechanisms to obtain relevant information from companies (e.g. airlines) to locate travelers or establish such mechanisms in case they are absent. For further communication between national authorities see above.

Channels for the dissemination of guidelines

PAHO/WHO recommends that national authorities consider disseminating the guidelines in this document through:

- Public awareness campaigns to promote and improve the health of travelers before and after their trip so that they acquire responsible behaviors in relation to vaccination against measles and know the signs and symptoms of measles. For this activity, it is also recommended to consider health care services or clinics for travelers, airports, ports, train and bus stations, airlines operating in the country, among others.
- Travel agencies, tourism-related entities and diplomatic corps should also be aware of and disseminate the necessary recommendations that a traveler should consider prior to travel.

Communication to physicians and other health workers of the contents of existing national surveillance guidelines, as well as timely dissemination of any new protocols that the country develops in relation to travelers.

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