

Public Health Risk Assessment Related to Measles: Implications for the Americas Region, v3 (following mass gathering events)

5 August 2026

Risk assessment prepared using data available as of 20 July 2026

Overall Risk
Regional
Very High

Confidence in the Available Information
Regional
High

General Risk Statement

This Rapid Risk Assessment (RRA) replaces the one published on 18 February 2026, and aims to assess the current public health risk in the Americas Region associated with the increase in measles outbreaks and cases reported during 2026 in several countries within and outside the Region, the high mobility of people related to various types of mass gathering events (sports, music, religious, cultural, and others) and tourism activity that increased during the current holiday season (June–August) (1, 2).

Indeed, the incidence of measles has increased significantly worldwide in 2026. As of July 2026, 186,168 confirmed cases of measles had been reported to the World Health organization (WHO), representing a 12% increase compared with the number of confirmed cases reported for the same period in 2025 (n= 165,783 cases); this increase is particularly linked to the rise in cases in countries within the WHO Regions of Africa, the Americas, and Southeast Asia (3). Countries such as Angola, Bangladesh, Cameroon, Guatemala, Kazakhstan, the Central African Republic, the Lao People's Democratic Republic, Mongolia, Madagascar, and Yemen have recorded the highest incidence rates worldwide over the past six months (January through June 2026) (3). As of June 2026, the WHO Southeast Asia Region has reported 70,499 confirmed cases of measles, more than triple the total reported in 2025 (n= 19,943 cases) (3).

In 2025, the Americas Region experienced an unprecedented increase in measles cases, with 15,152 confirmed cases—including 29 deaths—reported among 15 countries (4, 5). Furthermore, endemic measles circulation re-established itself in the Region after more than 12 months of continuous viral circulation in Canada (6). In 2026, between epidemiological weeks (EW) 1 and EW 28, a total of 45,262 cases of measles, including 46 deaths, were confirmed in 17 countries and one territory in the Region, representing a 5.92-fold increase in the number of cases compared with the same period the previous year. In 2026, cases were reported in Argentina (n= 1 case), Belize (n= 11 cases), the Plurinational State of Bolivia (n= 82 cases, including one death), Bonaire (n= 1 case), Brazil (n= 8 cases), Canada (n=1,102 cases), Chile (n= 1 case), Colombia (n= 13 cases), Costa Rica (n= 5 cases), El Salvador (n= 42), Guatemala (n= 28,543 cases, including 28 deaths), Honduras (n= 10 cases), Mexico (n= 12,120 cases, including 17 deaths), Panama (n= 9 cases), Peru (n= 1,052 cases), the United States of America (n= 2,260 cases), and Uruguay (n= 2 cases) (7).

This sharp increase in confirmed measles cases in several countries in the Region, against a backdrop of rising incidence in other WHO regions, increases the likelihood of longer wait times for access to the measles vaccine (3-5, 7), as well as the risk of the disease spreading. In addition, the high mobility of people associated with the holding of various types of mass gathering events has led to an increase in international travel both within and outside the Region, thereby facilitating the importation and spread of the measles virus (4, 5, 7) among countries and regions. Taken together, these factors warrant a review of the public health risk assessment related to measles in the Americas Region.

This situation could be exacerbated by concurrent and anticipated emergencies in the Region—in particular, the June 2026 earthquakes in Venezuela, the social crisis in Haiti, and the potential health impacts associated with

the developing El Niño phenomenon (2026–2027). These emergencies could place additional strain on health services, disrupt the continuity of routine immunization programs, and hinder surveillance and response activities, thereby increasing the vulnerability of affected populations.

Although the public health risk associated with measles in the Americas Region continues to be classified as **Very High**, the factors underlying this classification differ from those considered in the assessment conducted on 18 February 2026. Key factors include:

- **The persistence of active outbreaks in countries across the Region**, including the detection of cases not linked to known chains of transmission, the recent emergence of cases in new geographic areas, and the impact on indigenous populations and communities or groups that are reluctant to get vaccinated (5-7).
- **The increase in mortality observed in 2026 compared with 2025**, disproportionately affecting indigenous populations with high levels of malnutrition and limited access to health services (7).
- **The persistence of suboptimal vaccination coverage** ($\leq 95\%$) in most countries and territories in the Region. According to vaccination coverage for measles, rubella, and mumps (MMR1 and MMR2), reported by 43 countries and territories in the Americas in 2025, only 26% of them achieved coverage above 95% for MMR1, a figure that holds true for MMR2. Regional coverage was 88% for MMR1 and 85% for MMR2 (8).
- **The increase and geographic concentration of the susceptible population¹** are a consequence of persistently low vaccination coverage. Various factors contribute to this situation, including immunization gaps accumulated during the COVID-19 pandemic, increased vaccine hesitancy in some communities and population groups, operational difficulties in implementing vaccination in a timely manner as a control measure, and barriers to accessing health services that particularly affect vulnerable populations, including indigenous peoples, migrants, and internally displaced persons (9).
- **The high mobility of people between countries within and outside the region**, associated with large-scale events of international scope (cultural, sporting, religious, and others), including the 2026 FIFA World Cup™, and the holidays that typically occur at this time of year.

The public health risk associated with measles in the Americas Region, especially in countries with suboptimal vaccination coverage, continues to be classified as “Very High” with a “High” confidence level based on available information.

The rapid risk assessment will be revised in the event of a change in the epidemiological, clinical, or virological situation or context.

Criteria		Assessment		Risk	Rationale
		Probability	Consequences		
Potential Risk to Human Health	Regional	Almost certain	Moderate	High	- Measles is the most contagious disease worldwide. Although it can affect people of any age, infants and adults are at higher risk of developing severe forms of the disease, complications, and fatal outcomes (9-11). - Measles can cause prolonged immunosuppression, which increases the risk of severe secondary infections, especially in immunocompromised individuals, even in the months following recovery (9-11). Before the widespread introduction of vaccination, it was estimated that this immunosuppressive effect contributed to nearly half of all childhood deaths from other infectious diseases and that it can last for months to years after the acute phase of the disease (12). - In populations with high levels of malnutrition, a lack of adequate health care, and low risk perception, measles can have a case fatality rate as high as 10% (7).

¹ Any person who is not immune (unvaccinated and has not previously had the disease, or vaccinated but has not developed immunity)

Criteria		Assessment		Risk	Rationale
		Probability	Consequences		
					- In 2026, between EW 1 and EW 27, 44 measles-related deaths were identified in the Americas Region; this number exceeds the same figure recorded in 2025 (n= 29 deaths) (5). The deaths were reported in Guatemala (n= 26), Mexico (n= 17), and Bolivia (n= 1). Of the deaths reported in Guatemala, 42% occurred among infants younger than 1 year of age (n= 11) who had not completed their vaccination schedule. The mortality rate is 24 times higher among children under 1 year of age, and the case fatality rate is five times higher, compared with the overall rate (4). - Vaccine hesitancy in some population groups complicates efforts, hindering the effectiveness of the specific response to outbreaks (7). During 2025 and 2026, outbreaks and cases were observed in communities with low vaccination coverage and vaccine hesitancy (4). - There is no specific antiviral treatment for measles (7). - Indigenous populations and children under 5 years of age have shown greater vulnerability to this disease in the Americas Region (13). - Limited access to health services among vulnerable populations (indigenous peoples, migrants, and displaced persons) can delay diagnosis, increase mortality, and limit the outbreak response.
Risk of dissemination	Regional	Highly Likely	High	Very High	- Measles is a highly contagious viral disease that is transmitted through the air and via droplets. It can easily infect those who are not immune. When outbreaks occur in areas with high population density and inadequate vaccination coverage, the disease is very likely to spread rapidly (7). Secondary attack rates among susceptible household contacts have been reported to range from 75% to 90%. Given the high efficiency of measles transmission, outbreaks have been reported in populations where only 3% to 7% of people were susceptible (14). - Increased international travel to various countries in the Americas Region, with increased human mobility associated with mass gathering events. - Persistence of active outbreaks and the spread of the outbreak to new areas of the Americas Region (4). - Difficulty in maintaining adequate vaccination coverage among the general population, and particularly among those reluctant to be vaccinated, migrants, indigenous peoples, and other at-risk populations within the Americas Region. This has led to an increase in the susceptible population and the emergence of pockets of this population as a result of <i>low</i> vaccination coverage in recent years. - Although improvements have been made in measles-rubella surveillance indicators, there are still countries that do not meet the minimum reporting rate of two suspected cases per 100,000 population—consistently across the entire country—in addition to other indicators. This could delay detection, reporting, confirmation, and rapid response efforts (15–17). - The COVID-19 pandemic caused setbacks in surveillance and immunization efforts. The suspension of immunization services and the decline in vaccination coverage worldwide left millions of children vulnerable to preventable diseases such as measles. Global coverage levels for the second dose of the measles vaccine are even lower. Global gaps in vaccination coverage have created a pathway for the measles epidemic to spread worldwide (15–17). It is estimated that approximately 1.5 million children did not receive any dose of the measles vaccine in the Americas Region during 2024. - The global resurgence of cases, particularly in regions and countries with historically low levels of viral circulation, increases the likelihood of imported cases resulting from unvaccinated travelers arriving from areas with ongoing high transmission.

Criteria		Assessment		Risk	Rationale
		Probability	Consequences		
					High mobility of people between countries within and outside the region, associated with large-scale international events (cultural, sporting, religious, and others), may lead to outbreaks similar to those reported in Mexico and Bolivia.
Risk of insufficient prevention and control capacity with available resources	Regional	Highly Likely	High	Very High	- High demand for vaccines to address outbreaks, which could lead to longer wait times for access to the measles vaccine, potentially limiting vaccination campaigns to specific populations or age groups, depending on the situation of Member States. - Vaccine hesitancy is a significant problem in general, and particularly in some affected communities in countries of the Americas Region. Misinformation could fuel vaccine refusal, which could delay the implementation of vaccination activities in response to outbreaks. - The occurrence of simultaneous outbreaks of arboviral diseases characterized by fever and rash in some countries of the Americas Region may hinder the timely detection of cases, especially in areas where health personnel are not trained to perform an adequate differential diagnosis. - Frequent turnover of health care personnel creates gaps in the knowledge and skills needed to respond rapidly to measles and rubella outbreaks. - Health services are overburdened due to the impact of concurrent public health emergencies. Furthermore, the response, especially to large measles outbreaks, requires additional financial and human resources, which demand a significant effort from Member States.

References

1. Pan American Health Organization. Public health risk assessment related to measles: implications for the Americas Region V2 - 18 February 2026. Washington, D.C.: PAHO; 2026. Available from: <https://www.paho.org/en/documents/public-health-risk-assessment-related-measles-implications-americas-region-v2-18-february>.
2. Pan American Health Organization. Public Health Recommendations for travelers attending the 2026 FIFA World Cup. Washington, D.C.: PAHO; 2026. Available from: <https://www.paho.org/en/documents/public-health-recommendations-travelers-attending-2026-fifa-world-cup>.
3. World Health Organization. Immunization data - Provisional measles and rubella data. Geneva: PAHO; 2026 [cited 20 July 2026]. Available from: <https://immunizationdata.who.int/global?topic=Provisional-measles-and-rubella-data&location=>.
4. Pan American Health Organization / World Health Organization. Epidemiological Alert: Measles in the Americas Region, 29 May 2026. Washington, D.C.: PAHO/WHO; 2026. Available from: <https://www.paho.org/en/documents/epidemiological-alert-measles-americas-region-29-may-2026>.
5. Pan American Health Organization. Measles outbreak dashboard in the Americas. Washington, D.C.: PAHO; 2026 [cited 20 July 2026]. Available from: <https://app.powerbi.com/view?r=eyJrljoiMDQ2OTRIMGYtNmMwNi00MjcLThjNzMtYjJhNDdmOGU3MTZmliwidCI6ImU2MTBINzJlLTJlYzAtNGUwZi04YTE0LTlFINGlXMDE1MTImNyIsImMiOiR9>.
6. Pan American Health Organization. PAHO calls for regional action as the Americas lose measles elimination status. Washington, D.C.: PAHO; 2026. Available from: <https://www.paho.org/en/news/10-11-2025-paho-calls-regional-action-americas-lose-measles-elimination-status>.
7. Pan American Health Organization. Measles. Washington, D.C.: PAHO/WHO; 2026 [cited 20 July 2026]. Available from: <https://www.paho.org/en/topics/measles>.

8. Pan American Health Organization / World Health Organization. Routine immunization dashboard, Lifecycle immunization coverage in the Americas. Washington, D.C.: PAHO/WHO; 2025 [cited 20 July 2026]. Available from: <https://paho-cim.shinyapps.io/immunization-dashboard/#>.
9. Pan American Health Organization / World Health Organization. CD61/INF/6 - Plan of action for the sustainability of measles, rubella, and congenital rubella syndrome elimination in the Americas 2018-2023: Final Report – 6 August 2024. Washington, D.C.: PAHO/WHO; 2024. Available from: <https://iris.paho.org/items/eadb9fcf-51d4-42e1-b278-85294fc53ebc>.
10. World Health Organization. Measles. Geneva: WHO; 2026 [cited 20 July 2026]. Available from: <https://www.who.int/news-room/fact-sheets/detail/measles>.
11. Heymann DL: Editor. Manual for the Control of Communicable Diseases. 21st ed. Washington, D.C.: American Public Health Association; 2022.
12. Mina MJ, Metcalf CJ, de Swart RL, Osterhaus AD, Grenfell BT. Long-term measles-induced immunomodulation increases overall childhood infectious disease mortality. Science. 8 May 2015;348(6235):694-9. Available from: <https://pubmed.ncbi.nlm.nih.gov/25954009>
13. Pastor D, Bravo-Alcántara P, Durón R, Tirso CP, Ortiz C, Rey G. Factores de riesgo y medidas de control en brotes de sarampión en países de la Región de las Américas, 2017-2023. Rev Panam Salud Publica 2024;48:e105. Available from: <https://doi.org/10.26633/RPSP.2024.105>.
14. World Health Organization. Measles Elimination: Field Guide. Washington, D.C.: PAHO/WHO; 2007. Available from: <https://www.paho.org/en/documents/measles-elimination-field-guide>.
15. Pan American Health Organization / World Health Organization. Bulletin 2022 Epidemiological Weeks 1–52 Measles, Rubella, and Congenital Rubella Syndrome—Vol. 28, EW 1–52, 2022. Washington, D.C.: PAHO/WHO; 2024. Available from: <https://www.paho.org/en/documents/bulletin-2022-epidemiological-weeks-1-52-measles-rubella-congenital-rubella>.
16. Pan American Health Organization / World Health Organization. Bulletin 2023, Epidemiological Weeks 1–52: Measles, Rubella, and Congenital Rubella Syndrome—Vol. 29, EW 1–52, 2023. Washington, D.C.: PAHO/WHO; 2024. Available from: <https://www.paho.org/en/documents/bulletin-2023-epidemiological-weeks-1-52-measles-rubella-congenital-rubella>.
17. Pan American Health Organization / World Health Organization. Weekly Measles-Rubella Bulletin (53) — 3 January 2026. Washington, D.C.: PAHO/WHO; 2026. Available from: <https://www.paho.org/en/documents/measles-rubella-weekly-bulletin-53-3-january-2026>.