

FORUM:	World Health Assembly (WHA)
ISSUE:	Measures to Strengthen Immunization Programs and Combat the Resurgence of Measles in the United States
STUDENT OFFICER:	Heeyu Cho
POSITION:	Deputy Chair of World Health Assembly (WHA)

Introduction

Measles is an infectious disease that is contagious and can remain airborne for up to two hours in a confined space. It is transmitted through respiratory particles. Symptoms include a high fever, cough, inflamed eyes, and a rash. In severe cases, it can result in pneumonia, brain inflammation, or even death, particularly among unvaccinated children and immunocompromised individuals (Centers for Disease Control and Prevention, “Measles”).



Figure 1 Baby with measles

There is a vital need to enhance immunization programs in response to the recent outbreak of measles in the United States. The Centers for Disease Control and prevention (CDC) reports that measles cases have reached their greatest level in 33 years, despite the fact that the disease was officially eradicated in the United States in 2000. The majority of this increase is occurring in regions with low vaccination rates and where vaccination status is unknown.

While the drastic rise in cases is occurring within the United States, the potential for international spread remains a global concern. As seen during COVID-19, infectious diseases spread easily through global travel, especially now that borders are open again. While measles may not be as disruptive as COVID-19, it still poses a serious risk to unvaccinated populations worldwide. With no specific treatment available, vaccination is the only reliable defense. The resurgence in a highly developed country highlights the global need to strengthen immunization systems, making this a relevant issue for international cooperation.

Background

Measles is one of the most contagious viral diseases, spreading through the air and capable of infecting up to 90% of unvaccinated individuals exposed to it. In 1757, Scottish physician Francis Home identified the disease as being caused by an infectious agent in the blood. The turning point came in 1963, when the first measles vaccine was licensed, based on a virus strain isolated during a Boston school outbreak. In 1968, a safer version known as the Edmonston-Enders strain replaced the original and remains in use today as part of the MMR (Measles, Mumps, and Rubella) and MMRV (Measles, Mumps, Rubella, and Varicella) vaccines (Centers for Disease Control and Prevention, “History of Measles”).

The U.S. launched an elimination of Measles campaign in 1978 and eventually adopted a two-dose MMR vaccine schedule after outbreaks in the late 1980s exposed the limitations of a single dose. These efforts were successful: measles was declared eliminated in the U.S. in 2000, meaning it was no longer spreading continuously (Texas Health and Human Services).

Measles cases in the United States, 1919 to 2025

Reported number of measles cases. Data for 2025 is incomplete and includes reported cases up to 05 August 2025.

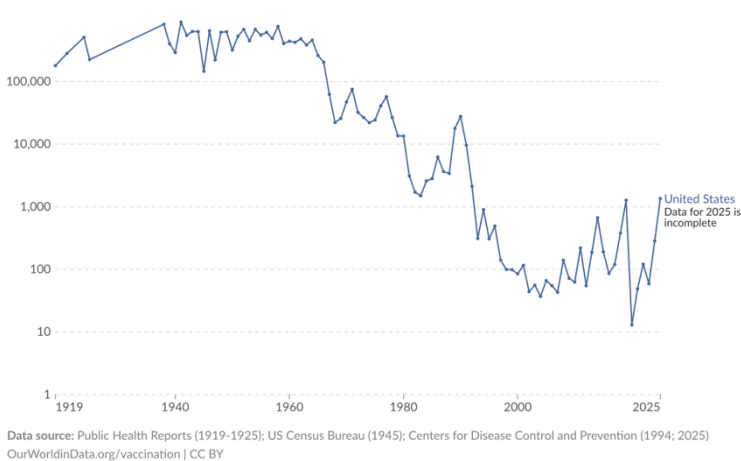


Figure 2 Measles cases in the United States, 1919 to 2025

Despite the rising numbers, the U.S. was still recognized as having “sustained elimination” by Pan American Health Organization (PAHO) in its most recent verification report from November 2024. Globally, the WHO set measles elimination targets for all regions by 2020 through its Global Vaccine Action Plan, though many regions—including high-income countries—have failed to meet those goals (Centers for Disease Control and Prevention, “Measles Cases and Outbreaks”).

This resurgence cannot be separated from the broader impacts of the COVID-19 pandemic, which disrupted public health infrastructure worldwide. In the U.S., routine immunizations were delayed due to lack of resources, clinic closures, staffing shortages, and fear of virus exposure in healthcare settings. This resulted in millions of missed vaccine appointments. Surveillance systems also weakened, making it harder to detect and respond to new measles cases (NSW Health). A rising wave of vaccine hesitancy,

After elimination, annual U.S. measles cases stayed low for years, though some outbreaks occurred due to imported cases. However, the number of measles cases has started to rise again in recent years. According to OurWorldinData, U.S. measles cases dropped to just 13 cases in 2020, which is start of COVID-19, then slowly increased: 29 cases in 2021, 121 cases in 2022, 59 cases in 2023, followed by a steep rise to 285 cases in 2024 and 1,333 cases (OurWorldinData).



TIANMUN

fueled by misinformation and shifts in national health policy. During this time, childhood vaccination coverage fell nationally, dropping to 92.7% among kindergartners, below the CDC’s recommended 95% threshold for herd immunity (Kay).

The federal response has also faced criticism. Health Secretary Robert F. Kennedy Jr.’s controversial decisions—such as firing CDC vaccine advisers and making statements that challenge established science—have undermined public confidence in vaccination campaigns (Vaccine Integrity Project Staff and Advisers). This loss of trust is particularly evident in communities already skeptical of the health system, leading many to delay or skip immunizations. Broader political actions have added to this climate of mistrust. For example, the Trump administration’s cancellation of nearly \$500 million in mRNA vaccine development contracts was celebrated by anti-vaccine groups but alarmed public health experts who saw it as a step back in pandemic preparedness. Critics argue that these actions distract from real systemic issues like poverty, education, and access to care. As Professor Elizabeth Jacobs from the University of Arizona warned, “When the foundation of your policy is not evidence-based, it will collapse.” (Halpert)

This historical timeline shows that measles resurgence is not a sudden event, but the result of long-term weakness in global and national immunization systems. Without strengthening these programs, other disease outbreaks may follow.

Problems Raised

Low Childhood Vaccination Coverage and Vulnerable Populations



Figure 3 Child getting vaccinated

Falling childhood vaccination rates have been one of the most pressing issues revealed by the current measles outbreak in the United States. The CDC recommends that communities maintain at least 95% vaccination coverage to prevent outbreaks through herd immunity. However, recent data shows that the national average among kindergartners has dropped to 92.7% (Michaud).

While this number may appear



TIANMUN

relatively high, it disguises the reality that some communities have vaccination rates far lower, leaving lots of children unprotected.

In these under-vaccinated areas, measles spreads rapidly, particularly affecting those who are too young to be vaccinated or medically unable to receive the MMR vaccine. In fact, 29% of all 2025 measles cases in the U.S. have been reported in children under the age of 5 (Texas Health and Human Services), a group that is most vulnerable to severe complications. The resurgence has led to numerous preventable hospitalizations and has even resulted in three child deaths in 2025, despite the relatively low case fatality rate of measles (Ybarra).

The implications extend beyond individual health. Outbreaks force schools and childcare centers to issue emergency exclusions and place avoidable strain on hospitals and pediatric care. The drop in routine childhood vaccination coverage was heavily influenced by the COVID-19 pandemic, which interrupted regular health services and shifted focus away from standard immunization. These disruptions have not fully recovered, particularly in communities with limited access to primary care providers. Without renewed efforts to restore and expand coverage, the risks of future outbreaks will only grow.

Vaccine Hesitancy, Misinformation, and Weak Federal Response

The measles resurgence in the U.S. has also laid bare the damaging impact of widespread vaccine hesitancy and misinformation, much of which has been amplified by online platforms and polarizing political figures. Misleading claims about vaccine safety, particularly those linking MMR to autism, which have been repeatedly debunked, continue to circulate widely.

This issue has been further compounded by federal leadership missteps. US Department of Health and Human Services (HHS) Secretary Robert F. Kennedy Jr. has faced backlash for spreading contradictory messages about vaccine policy, firing CDC vaccine advisors, and delaying a clear endorsement of MMR vaccines during the 2025 outbreak (Halpert). National medical organizations have even taken legal action, accusing him of eroding public confidence in vaccines at a time when clarity and trust are most critical (Yousif).

While the CDC continues to recommend MMR vaccination, these mixed signals at the federal level have left state and local health departments to navigate public confusion on their own. The U.S. has seen 92%



Figure 4 Photo of MMR vaccine



TIANMUN

of measles cases occur in unvaccinated individuals or those with unknown vaccine status (Godoy), emphasizing how critical consistent public messaging is in encouraging vaccine uptake.

Lack of national coordination also undermines efforts to improve data sharing and real-time outbreak monitoring. Professor Lauren Gardner of Johns Hopkins stressed the importance of timely and accurate surveillance across border lines to respond quickly to emerging hotspots (Rosen). Without strong federal guidance and unified messaging, even well-established immunization programs become fragmented and less effective in preventing outbreaks.

Gaps in Immunization Program Infrastructure



Figure 5 Vaccine delivery during pandemic

The current outbreak has also revealed deeper structural issues within the U.S. immunization system. Many of these challenges echo problems highlighted during past health emergencies, including the COVID-19 pandemic. For instance, during the early stages of COVID-19, hospitals in major cities like New York and Los Angeles faced overwhelming

demand, with ICU capacity stretched to near 100%, and similar stress occurred in Lombardy, Italy (Public Health On Call). The WHO reported that over 90% of countries faced disruptions to essential health services during the height of the pandemic, and similar trends were seen in immunization delivery.

In the context of measles, these systemic weaknesses have made it difficult to ensure that MMR vaccines are delivered efficiently, equitably, and in time to prevent outbreaks. Rural and underserved communities often face structural barriers such as lack of local clinics, limited transportation, or a shortage of healthcare workers trained to administer and educate about vaccines. During COVID-19, routine vaccinations were delayed or missed entirely due to clinic closures, redirection of health resources, and staffing shortages. These service gaps were never fully recovered, particularly in areas already facing systemic healthcare inequities (Rosebush).

The absence of a dynamic national strategy for scaling immunization programs during public health emergencies has further worsened the situation. There is no unified framework for states to ramp up vaccine outreach, education, or mobile distribution during spikes in disease transmission. This reflects the broader need for dynamic health infrastructure capable of responding not only to pandemics but to any rapid resurgence of vaccine-preventable diseases. Building this capacity includes developing flexible



vaccine delivery models, strengthening communication systems for emergency alerts, and ensuring long-term investment in public health staffing, supply chains, and local partnerships.

The fragmented nature of immunization program governance in the U.S.—where vaccine mandates and implementation vary by state—also creates loopholes that hinder cohesive responses. Without stronger federal leadership and emergency planning tailored specifically to immunization, the country risks repeating the same cycle in future outbreaks.

International Actions

Measles and Rubella Elimination Regional Monitoring and Re-Verification Commission (MRE-RVC)

The Measles and Rubella Elimination Regional Monitoring and Re-verification Commission

(MRE-RVC), established by PAHO, plays a role in ensuring countries in the Americas maintain measles elimination. The commission evaluates national surveillance systems, immunization coverage, and outbreak responses to verify that measles is no longer endemic. For countries like the U.S., which achieved elimination in 2000, MRE-RVC conducts periodic reviews—most recently re-verifying U.S. status in November 2024. However, the 2025 outbreak has raised concerns about sustained elimination, highlighting the importance of not only meeting but maintaining MRE-RVC standards



Figure 6 Logo of Pan American Health Organization (PAHO)

through robust surveillance and high vaccination coverage (“Fourth Annual Meeting of the Measles and Rubella Elimination Regional Monitoring and Re-Verification Commission. 4–6 November 2024 (Virtual)”).

Global Measles and Rubella Laboratory Network (GMRLN)

The Global Measles and Rubella Laboratory Network (GMRLN) is a global diagnostic infrastructure coordinated by WHO and the CDC. It supports the detection, confirmation, and genotyping of measles and rubella viruses, allowing countries to rapidly identify outbreaks and trace their origins. With over 700 participating labs, including in the U.S., the network is vital for real-time surveillance. However, the 2025 outbreak has shown that surveillance alone is not enough—effective use of GMRLN data must be paired with swift public health interventions to prevent outbreaks from escalating (Rota et al.).



TIANMUN

Expanded Programme on Immunization (EPI)

The Expanded Programme on Immunization (EPI) was launched by the World Health Organization (WHO) in 1974 to ensure that all children globally have access to life-saving vaccines, including the measles vaccine. It has since become the foundation of national immunization programs in many countries, offering critical support for vaccine delivery infrastructure, cold chain management, health worker training, and technical assistance. Through EPI, millions of children have gained protection against vaccine-preventable diseases, contributing to the global decline in measles mortality. In addition to EPI, WHO has launched several other programs to strengthen global immunization systems, including the Immunization Agenda 2030, the Strategic Advisory Group of Experts on Immunization (SAGE), and the Vaccine-Preventable Diseases (VPD) Surveillance Systems, which is jointly supported by WHO and the CDC. These efforts form a coordinated global response to controlling current outbreaks and preventing future resurgence of vaccine-preventable diseases like measles (Keja et al.).

Key Players

Pan American Health Organization (PAHO)

The Pan American Health Organization (PAHO) serves as the World Health Organization's (WHO) Regional Office for the Americas and plays a crucial role in coordinating immunization and disease control efforts across North, Central, and South America. PAHO has been instrumental in leading regional initiatives to eliminate measles. In 1994, PAHO member states committed to a regional goal of interrupting endemic measles transmission, a milestone the U.S. officially achieved in 2000 (Centers for Disease Control and Prevention, "Measles").

To maintain elimination status, PAHO established mechanisms for ongoing verification and monitoring, including the Re-verification Commission (MRE-RVC). The U.S. has consistently met these benchmarks, including its most recent re-verification in November 2024 (Pan American Health Organization).

PAHO continues to support the U.S. and other member states in strengthening disease surveillance, outbreak response coordination, and laboratory networks. It also collaborates with national

MEASLES IS VERY CONTAGIOUS

**ONE PERSON WITH
MEASLES CAN
SPREAD IT TO 9
OUT OF 10
UNVACCINATED
PEOPLE
AROUND THEM.**

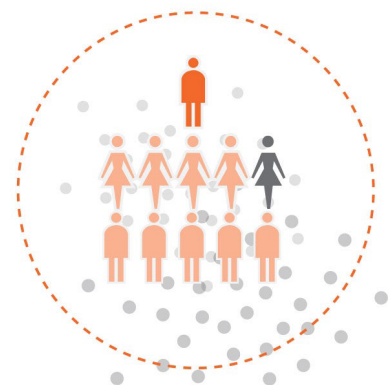


Figure 7 PAHO measles alert communication method



TIANMUN

governments to improve routine immunization programs, provide guidance for emergency vaccination campaigns, and ensure timely reporting of measles cases. While PAHO does not directly manage U.S. immunization systems, its regional coordination framework provides essential oversight, technical support, and continuity to prevent cross-border spread of measles.

Centers for Disease Control and Prevention (CDC)

The U.S. Centers for Disease Control and Prevention (CDC) is a national agency with extensive global reach, particularly through its participation in global immunization efforts and outbreak response initiatives. Internationally, the CDC is a founding partner of the Measles & Rubella Initiative (M&RI) and contributes to global efforts through the Global Measles and Rubella Laboratory Network (GMRLN). These programs help countries strengthen surveillance systems, improve laboratory diagnostics, and

mount rapid responses to outbreaks.

Domestically, the CDC leads the federal response to the 2025 measles resurgence. It provides guidance to state health departments, oversees case tracking and vaccine data, and works with partners like state immunization programs to improve outreach in under-vaccinated communities. The CDC has maintained its official stance endorsing the MMR vaccine as the most effective protection against



Figure 8 Part of CDC's Measles infographic

measles (Centers for Disease Control and Prevention, “Measles Cases and Outbreaks”), even amid shifting political messaging. CDC officials have also ensured that vaccine supplies are delivered to areas experiencing outbreaks and have coordinated technical support and communications strategies to address vaccine hesitancy.

Despite recent federal leadership controversies, the CDC remains a stabilizing force in the public health response, using evidence-based strategies to protect vulnerable populations and support long-term immunization infrastructure within the U.S. and around the world.

Possible Solutions

Restoring Public Trust in Vaccination Programs

One of the most urgent challenges in strengthening immunization programs is addressing public distrust in vaccines. In recent years,



Figure 9 Vaccination reaching rural communities



widespread misinformation—especially on social media—has caused growing skepticism about vaccine safety, contributing to falling coverage rates. To rebuild trust, governments must invest in grassroots-level engagement, empowering local healthcare workers, school nurses, and community leaders to be credible voices in their communities. These individuals are often the most trusted sources of information and can play a key role in dispelling myths and encouraging hesitant parents. Faith-based organizations, parent associations, and cultural leaders should also be included in these outreach efforts to ensure messages resonate with diverse populations. Importantly, public agencies must coordinate their communication strategies to avoid contradictory or confusing information, especially during outbreaks. Restoring trust will not happen overnight, but consistent, transparent, and culturally sensitive outreach can gradually restore confidence in science-backed immunization efforts—helping to raise vaccine uptake and protect vulnerable groups from diseases like measles.



Reinforcing Health Infrastructure to Expand Immunization Access

To effectively address the resurgence of measles and prepare for future health emergencies, governments must prioritize rebuilding and strengthening healthcare infrastructure with a specific focus on supporting immunization delivery. The COVID-19 pandemic exposed severe gaps in healthcare capacity, including widespread shortages of medical workers, vaccine educators, and logistical resources. Many rural and underserved communities still lack consistent access to vaccination services due to limited personnel, outdated facilities, or long travel distances to health clinics. Investing in the training and deployment of more healthcare professionals—particularly in community health and immunization outreach—will ensure that vaccine education and delivery can reach all populations. Governments should also increase funding for public health infrastructure by supporting the construction of flexible, mobile clinics and expanding school-based health services. Without restoring the workforce and supply chain first, even the best immunization strategies cannot succeed. Strengthening healthcare infrastructure is therefore not just about emergency preparedness—it is a foundational step toward rebuilding an effective, equitable immunization program capable of responding to diseases like measles in real time.

Glossary

MMR Vaccine

The MMR vaccine is a vaccine against measles, mumps, and rubella. The first dose is generally given to children around 9 months to 15 months of age, with a second dose at 15 months to 6 years of age, with at least four weeks between the doses.

Herd Immunity

Resistance to the spread of an infectious disease within a population that is based on pre-existing immunity of a high proportion of individuals as a result of previous infection or vaccination.

Vaccine Hesitancy

Reluctance or refusal to have oneself or one's children vaccinated against an infectious disease or diseases.

United States Secretary of Health and Human Services

The United States secretary of health and human services is the head of the United States Department of Health and Human Services and serves as the principal advisor to the president of the United States on all health matters. The secretary is a member of the United States Cabinet.

Health equity

Health equity is the attainment of the highest level of health for all people.

Immunization coverage

Proportion of the population or age group receiving a vaccine or a series of vaccines (the numerator), divided by the total target population or the total target age group (the denominator).

Surveillance system in Public Health

Public health surveillance is the ongoing systematic collection, analysis, and interpretation of data, closely integrated with the timely dissemination of these data to those responsible for preventing and controlling disease and injury.



Sources

Centers for Disease Control and Prevention. “History of Measles.” *Centers for Disease Control and Prevention*, 9 May 2024, www.cdc.gov/measles/about/history.html. Accessed 24 July 2025.

---. “Measles.” *Centers for Disease Control and Prevention*, 29 May 2024, www.cdc.gov/measles/about/index.html. Accessed 24 July 2025.

---. “Measles Cases and Outbreaks.” *Measles (Rubeola)*, CDC, 25 Apr. 2025, www.cdc.gov/measles/data-research/index.html. Accessed 25 July 2025.

Cleveland Clinic. “Measles: What Is It, Symptoms, Treatment & Prevention.” *Cleveland Clinic*, Cleveland Clinic, 28 Feb. 2025, my.clevelandclinic.org/health/diseases/8584-measles. Accessed 23 July 2025.

Godoy, Maria. “U.S. Measles Cases Hit Highest Level in 33 Years, CDC Reports.” *NPR*, 9 July 2025, www.npr.org/sections/shots-health-news/2025/07/09/nx-s1-5461155/measles-outbreak-cdc-vaccination-health. Accessed 21 July 2025.

Halpert, Madeline. “RFK Jr Cancels \$500m in mRNA Vaccine Development in the US.” *BBC*, 6 Aug. 2025, www.bbc.com/news/articles/c74dzdddvmjo. Accessed 27 July 2025.

Kay, Katty. “American Medicine Has a Trust Problem.” *Bbc.com*, BBC, 22 May 2025, www.bbc.com/worklife/article/20250521-vaccine-distrust-public-health-leana-wen-katty-kay-interview. Accessed 28 July 2025.

“Measles Cases in the United States.” *Our World in Data*, 2025, ourworldindata.org/grapher/number-of-measles-cases. Accessed 22 July 2025.

Michaud, Josh. “Measles Elimination Status: What It Is and How the U.S. Could Lose It | KFF.” *KFF*, 28 July 2025, www.kff.org/policy-watch/measles-elimination-status-what-it-is-and-how-the-u-s-could-lose-it/. Accessed 23 July 2025.

NSW Health. “Measles Fact Sheet - Fact Sheets.” *Nsw.gov.au*, 11 Apr. 2019, www.health.nsw.gov.au/Infectious/factsheets/Pages/measles_factsheet.aspx. Accessed 23 July 2025.



Public Health On Call. “How the U.S. Ensures Vaccine Safety | Johns Hopkins Bloomberg School of Public Health.” *Johns Hopkins Bloomberg School of Public Health*, 21 Feb. 2025, publichealth.jhu.edu/2025/how-the-us-ensures-vaccine-safety. Accessed 25 July 2025.

Rosebush, Julia. “Measles Is Still a Very Dangerous Disease.” *Www.uchicagomedicine.org*, 1 Feb. 2023, www.uchicagomedicine.org/forefront/pediatrics-articles/measles-is-still-a-very-dangerous-disease. Accessed 21 July 2025.

Rosen, Aliza. “What to Know about Measles and Vaccines | Johns Hopkins Bloomberg School of Public Health.” *Johns Hopkins Bloomberg School of Public Health*, 26 Feb. 2025, publichealth.jhu.edu/2025/what-to-know-about-measles-and-vaccines. Accessed 24 July 2025.

Texas Health and Human Services. “Measles Outbreak – March 4, 2025 | Texas DSHS.” *Texas.gov*, 12 Aug. 2025, www.dshs.texas.gov/news-alerts/measles-outbreak-2025. Accessed 22 July 2025.

“U.S. Measles Cases Hit Highest Level since Declared Eliminated in 2000 | International Vaccine Access Center.” *International Vaccine Access Center*, 7 July 2025, publichealth.jhu.edu/ivac/2025/us-measles-cases-hit-highest-level-since-declared-eliminated-in-2000. Accessed 25 July 2025.

Vaccine Integrity Project Staff and Advisers. “Center for Infectious Disease Research and Policy.” *CIDRAP*, 11 June 2025, www.cidrap.umn.edu/covid-19/viewpoint-rflks-reckless-firing-cdc-vaccine-advisers-not-supported-evidence. Accessed 23 July 2025.

World Health Organization. “History of Measles Vaccination.” *Www.who.int*, World Health Organization, 2024, www.who.int/news-room/spotlight/history-of-vaccination/history-of-measles-vaccination. Accessed 24 July 2025.

---. “Measles.” *World Health Organization*, 14 Nov. 2024, www.who.int/news-room/fact-sheets/detail/measles. Accessed 27 July 2025.

Ybarra, Mike. “Recognizing the Importance of Vaccination for American Health and Security.” *Phrma.org*, 4 Aug. 2025, phrma.org/blog/recognizing-the-importance-of-vaccination-for-american-health-and-security. Accessed 29 July 2025.



Yousif, Nadine. “Measles Cases in the US Reach 33-Year High.” *BBC*, 7 July 2025,
www.bbc.com/news/articles/c98jng7j1llo. Accessed 26 July 2025.

