MEASLES & RUBELLA PARTNERSHIP

2024 ANNUAL SUMMARY

EXECUTIVE SUMMARY

The global fight against measles and rubella is marked by both progress and deep inequities. While more countries have reached elimination milestones, global vaccination rates remain stagnant. The latest coverage data from 2023* showed that first dose of measles vaccination coverage remained at 83%, the same as in 2022. As a result, over 22 million children missed a vital first dose of the measles vaccine.

To close immunity gaps and increase coverage, we must work closely with countries and global partners to mobilize political commitment, secure sustainable funding, and strengthen immunization programs to accelerate measles and rubella elimination. This is especially critical as shifting global health priorities threaten key resources and essential health services, making collaboration and partnership even more urgent.

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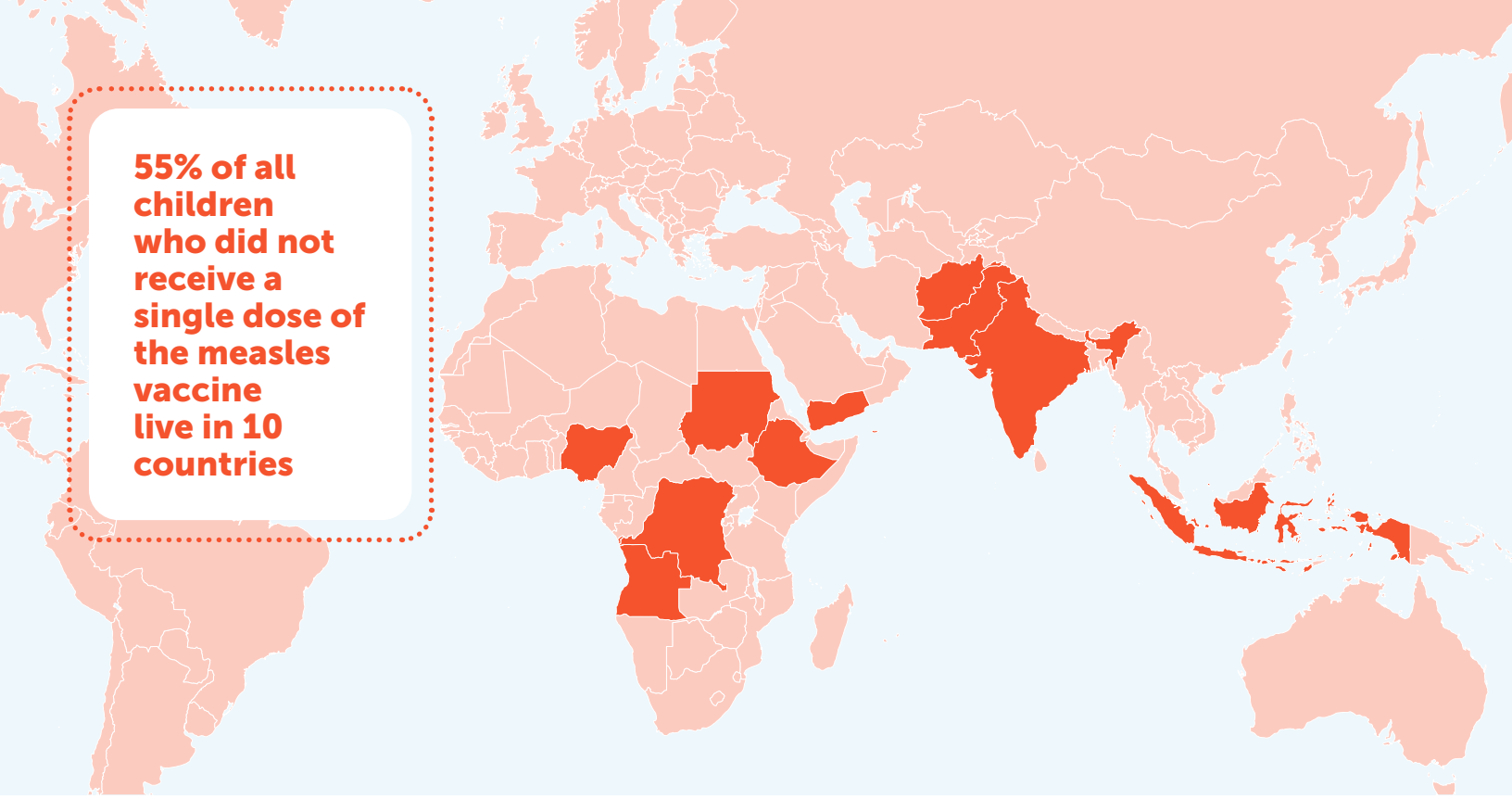
**This summary includes Measles & Rubella Partnership activities in 2024 and the latest coverage and mortality and morbidity data from 2023. 2024 coverage and mortality and morbidity data will be available in July and November of 2025, respectively.*

Now is the time to push forward—not fall back.



PERSISTENT INEQUITIES IN VACCINE ACCESS

Since 2000, measles vaccination has saved an estimated 60.3 million lives—more than any other vaccine. Yet, millions of children, especially those in fragile and conflict-affected settings, still lack access to lifesaving vaccines, including those for measles and rubella. Without urgent action, global immunization goals will remain out of reach.

According to the latest World Health Organization/UNICEF Estimates of National Immunization Coverage (WUENIC) for 2023, ten countries accounted for 55% of all children who did not receive a single dose of the measles vaccine. Those countries were Afghanistan, Angola, the Democratic Republic of Congo (DRC), Ethiopia, India, Indonesia, Nigeria, Pakistan, Sudan, and Yemen.

The burden of vaccine inequities is not just a matter of missed doses but one of cascading health, social, and economic consequences for children and their families. Children in underserved communities have limited access to healthcare and face higher risks of malnutrition, disease outbreaks, severe illness, and death. UNICEF's Executive Director Catherine Russell reflects on the data, stating, "Closing the immunization gap requires a global effort, with governments, partners, and local leaders investing in primary healthcare and community workers to ensure every child gets vaccinated, and that overall healthcare is strengthened."

Now more than ever, the Measles & Rubella Partnership (M&RP) is committed to deepening its engagement with governments in countries where vaccine-preventable diseases are most prevalent. Initial efforts will prioritize countries with the highest disease burden and largest populations at risk, including Nigeria, Ethiopia, the DRC, and Pakistan. M&RP plans to support these countries through technical assistance and advocacy to ensure highly effective MR introductions and measles follow-up campaigns, leveraging critical measles and rubella expertise and facilitating the timely release of adequate domestic funding. M&RP will also continue to engage civil society, including Red Cross and Red Crescent National Societies, to mobilize thousands of local volunteers from communities with un- and under-vaccinated children. Because these volunteers are from the same communities, and thus speak the local language and understand the local customs, they are uniquely positioned to encourage vaccination.

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WIDESPREAD MEASLES OUTBREAKS

Large or disruptive measles outbreaks defined 2023, with 57 countries affected—a sharp rise from 36 countries in 2022. Outbreaks spanned the globe, occurring in five World Health Organization Regions, including European, South-East Asian, and Western Pacific Regions.

While deadly measles outbreaks have occurred in both high- and low-income countries, stronger immunization programs and health systems have helped limit the impact of measles in many high-income countries, such as France and the United Kingdom. In places where these protections are weaker, the consequences can be far more severe. Furthermore, measles is a highly contagious disease. If cases continue to increase, no region will be safe for children, despite the strength of health systems.

In the DRC, persistent gaps in routine and supplementary immunization have fueled recurring outbreaks, leading to the death of nearly 6,000 children.

The toll of measles is not just measured in numbers but in lives lost and futures cut short. It is imperative that we support countries in strengthening their vaccination efforts to protect young children—three out of four of whom live in a country that has experienced a measles outbreak in the past five years.

This work is being made much more difficult due to shifting political priorities in global health, which have placed the Global Measles and Rubella Laboratory Network (GMRLN)—the backbone of measles, rubella, and other vaccine-preventable disease surveillance—on the brink of collapse.

This vast network of over 760 labs is the world's first line of defense to detect against measles outbreaks, preventing rapid spread across borders. It also plays a vital role in global health security, detecting SARS-CoV-2, avian influenza, Mpox, and other deadly pathogens. Yet, despite its life-saving impact, the evolving geopolitical context has weakened coordination of the laboratory network. This puts outbreak detection and response at risk. Without urgent action, GMRLN is at risk of failing, which opens the door to surges of preventable disease, global instability, and countless unnecessary deaths.

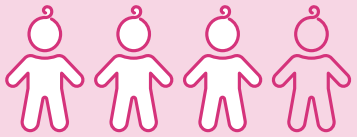
We must act now to safeguard this critical global defense system.

However, even amid these challenges, the fight is not lost. Over the last several years, progress has still been made. The African Region achieved a 2-point increase in measles vaccination coverage, marking a significant turnaround in a year when many countries saw declining coverage. "Against a backdrop of increasing measles outbreaks, lower-income countries have undertaken historic efforts to improve coverage and respond to emergencies," Derrick Sim, Chief Vaccines Programmes and Markets officer at Gavi, the Vaccine Alliance, said of this achievement. "We must sustain this effort to reach the high levels of coverage needed to prevent outbreaks and deaths."

Similarly, the Americas have demonstrated that measles elimination is achievable through sustained commitment to immunization. Despite a global surge in cases, the region has prevented endemic transmission, with Brazil and Venezuela recently regaining their measles-free status. In 2023, the region reported its lowest number of cases in history, and for the first time in years, vaccination coverage began to climb again.

Large or disruptive outbreaks defined 2023

36 countries 2022 → **57** countries 2023



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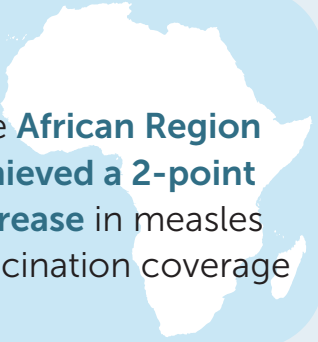

The **African Region achieved a 2-point increase** in measles vaccination coverage

Brazil and Venezuela recently regained their **measles-free** status

THE ROAD TO RUBELLA ELIMINATION

The global community also achieved a significant win in the fight against rubella. M&RP and its partners successfully engaged with the Strategic Advisory Group of Experts on Immunization (SAGE) to lift the longstanding ≥80% measles vaccine coverage threshold for introducing rubella-containing vaccines (RCV).

The threshold, set in 2000, aimed to prevent a paradoxical rise in birth defects resulting from rubella infection in pregnancy, known as congenital rubella syndrome (CRS). It was suggested that this theoretical increase could occur in countries where rubella susceptibility had shifted to older ages due to sub-optimal immunization coverage.

However, based on a collective effort to generate updated evidence, including mathematical modeling and empirical data, experts deemed the criteria for setting this threshold as too conservative and resulted in SAGE recommending universal rubella vaccination introduction regardless of the level of measles vaccination coverage.

Rubella elimination may be more achievable than measles because rubella is less contagious, and even moderate vaccination coverage can significantly reduce transmission. With universal RCV introduction, countries have a clearer pathway to stopping rubella spread and preventing CRS.

"This decision marks a pivotal moment in the fight against rubella and congenital rubella syndrome," said Natasha Crowcroft, former senior technical advisor on measles and rubella at the WHO and M&RP co-chair in 2024.

"For years, the measles vaccine coverage threshold limited access to rubella vaccination in the last remaining countries which caused great inequity. With this shift, we now have a strategy to protect children from congenital rubella syndrome in all countries, and a clear pathway to eliminating rubella worldwide."

This milestone is especially critical because rubella poses serious risks during pregnancy. If a pregnant woman contracts rubella in early pregnancy, there is up to a 90% chance her baby will develop CRS, which can cause severe heart defects, cataracts or glaucoma, hearing loss, and developmental delays. Up to 33% of infants born with CRS die before their first birthday. Rubella infection during pregnancy can also lead to miscarriages, further underscoring the importance of rubella vaccination to protect mothers and their babies.

M&RP and its partners have advanced efforts to achieve universal rubella vaccine introduction. As a result, the number of countries without RCV in their routine immunization programs dropped from 19 in 2023 to 15 in 2024. "Rubella vaccines work—let's finish the job," said Dr. Tedros Adhanom Ghebreyesus, the director-general of the World Health Organization (WHO).

The remaining 15 countries are: Gabon, Chad, Djibouti, Guinea, Madagascar, Liberia, Equatorial Guinea, Central African Republic (CAR), South Sudan, Afghanistan, Ethiopia, Niger, Nigeria, the Democratic Republic of the Congo (DRC) and Somalia. The DRC and Nigeria are planning to introduce the combined measles and rubella vaccine in 2025.

If a woman contracts rubella in early pregnancy, there is up to a 90% chance her baby will have CRS

Up to 33% of infants born with CRS die before their first birthday

More countries are protecting children from CRS. Only 15 countries have yet to introduce the rubella-containing vaccine.

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IMMUNIZATION AGENDA 2030—LEAVING NO ONE BEHIND

The Immunization Agenda 2030 (IA2030) set an achievable vision for global immunization: reducing the number of zero-dose children by half and achieving universal vaccination coverage by 2030.

However, the global immunization community is currently off-track to meet these targets. The inability to reach under-vaccinated children or zero-dose children—identified by proxy as those who have not received the first dose of the diphtheria-tetanus-pertussis (DTP1) vaccine—remains a significant barrier. These children often live in marginalized communities where access to healthcare is limited or nonexistent.

Achieving the IA2030 goals requires a reinforced commitment to addressing the root causes of vaccine inequities, including strengthening health systems, particularly in fragile, conflict, and vulnerable settings. Strong routine immunization systems are a core part of any strong health system. Partnership members continue to advocate for and implement proven solutions, such as 5-dose vials that can cost-effectively improve routine immunization (RI) coverage. However, these solutions are not sufficient to reach our goals and M&RP remains committed to working with other programs to build on the second-year-of-life platform and ensure that children everywhere are receiving the full course of immunizations via their national routine system.

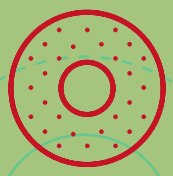
Investments in innovative vaccination delivery mechanisms, such as measles-rubella microarray patches (MR-MAPs) may help bridge gaps in access in the not-so-distant future. This innovation allows for easier vaccine delivery in hard-to-reach areas without extensive cold chain infrastructure. The first clinical trial data on the use of any microneedle patch to deliver vaccines to children had positive results. This success has sparked new development of patch vaccines for other diseases. Building on the rapid advancements in vaccine development during the COVID-19 pandemic, M&RP urges fast-tracking MR-MAPs to address critical immunization gaps and improve global health outcomes.

Collaboration among governments, non-governmental organizations, and international agencies will also play a critical role in ensuring that no one is left behind.

IA2030

Achievable vision for global immunization: reducing the number of zero-dose children by half

5-dose vials can cost-effectively improve routine immunization (RI) coverage



Measles-rubella microarray patches (MR-MAPs) may help bridge gaps in access in the not-so-distant future

THERE'S MORE FOR US TO DO

The vision for global immunization is clear: close the remaining gaps in vaccination coverage, prevent outbreaks, and ensure that every child has access to lifesaving immunizations.

Measles outbreaks are a sign that health systems are failing to reach children through routine immunization programs—it is the proverbial "canary in the coalmine." In addition to finding ways to effectively respond to the increasing number of outbreaks, M&RP will be partnering with countries to strengthen routine immunization (RI). Strengthening RI must continue to be a critical focus in the years to come if we hope to realize M&RP's vision of a world free of measles and rubella.

In 2024, M&RP made significant strides toward this vision. These efforts included developments that are laying the groundwork for lasting change:

Successfully engaged with SAGE to recommend lifting the longstanding ≥80% measles vaccine coverage threshold for introducing rubella-containing vaccines (RCV), opening the door to universal rubella vaccination.

Provided critical measles outbreak response support in six countries, reaching more than 6.5 million at-risk children, often in remote or conflict-affected areas.

Improved the ability to respond to an increasing number of measles outbreaks worldwide, including streamlining the process for affected countries to apply for outbreak response funding.

Developed a measles and rubella database to track and resolve bottlenecks in measles and rubella campaigns. Partners now use to track country activities, improving M&RP coordination and impact.

Key priorities for 2025

- Addressing immunity gaps by implementing high-quality and timely measles and rubella campaigns and strengthening RI using specific measures such as switching from 10- to 5-dose vaccine vials which increases vaccination coverage and reduces waste.
- Strengthening surveillance, outbreak preparedness, response, and management through activities such as identifying and addressing barriers to accessing the Outbreak Response Fund (ORF) and assisting priority countries with outbreak prevention and response.
- Partnering with countries that are introducing the combined measles-rubella vaccine into their routine immunization programs this year and providing technical support to increase the timeliness and quality of the MR catch-up campaigns at the time of the introduction.

"Partnership has always been at the heart of progress in global immunization, and the road ahead will demand even greater collaboration. As we move forward, we must continue to hold ourselves accountable, innovate in vaccine delivery, and work hand in hand to ensure that every child, no matter where they are born, is protected from measles and rubella."

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