

# KEY FACTS ON IMMUNIZATION COVERAGE

## Key facts

- **More than 1 billion children vaccinated over the last decade**
- **Most children today receive lifesaving vaccines**
- **Uptake of new and underused vaccines is increasing.**
- **Immunization currently prevents 2-3 million deaths every year**
- **An estimated 19.7 million children under the age of one year did not receive basic vaccines**

## Overview

Global vaccination coverage – the proportion of the world’s children who receive recommended vaccines – has remained the same over the past few years.

During 2019, about 85% of infants worldwide (116 million infants) received 3 doses of diphtheria-tetanus-pertussis (DTP3) vaccine, protecting them against infectious diseases that can cause serious illness and disability or be fatal. By 2019, 125 Member States had reached at least 90% coverage of DTP3 vaccine.

## Global immunization coverage 2019

A summary of global vaccination coverage in 2019 follows.

***Haemophilus influenzae type b (Hib)*** causes meningitis and pneumonia. Hib vaccine had been introduced in 192 Member States by the end of 2019. Global coverage with 3 doses of Hib vaccine is estimated at 72%. There is great variation between regions. The WHO Region of South-East Asia is estimated to have 89% coverage, while it is only 24% in the WHO Western Pacific Region.

**Hepatitis B** is a viral infection that attacks the liver. Hepatitis B vaccine for infants had been introduced nationwide in 189 Member States by the end of 2019. Global coverage with 3 doses of hepatitis B vaccine is estimated at 85%. In addition, 109 Member States introduced one dose of hepatitis B vaccine to newborns within the first 24 hours of life. Global coverage is 43% and is as high as 84% in the WHO Western Pacific Region, while it is only estimated to be at 6% in the WHO African region

**Human papillomavirus (HPV)** is the most common viral infection of the reproductive tract and can cause cervical cancer in women, other types of cancer, and genital warts in both men and women. The HPV vaccine was introduced in 106 Member States by the end of 2019, including three countries with introduction in some parts of the country. This is the strongest year on year increase in HPV introductions (+15%) since the HPV vaccine came to market in 2006. However, since many large countries have not yet introduced the vaccine and vaccine coverage is suboptimal in many - global coverage with the final dose of HPV currently is estimated at 15%.

Nearly a third of these Member States (33) have also started to vaccinate boys.

**Meningitis A** is an infection that is often deadly and leaves one in five affected individuals with long-term devastating sequelae. Before the introduction of MenAfriVac in 2010 – a revolutionary vaccine developed in collaboration with Serum Institute of India through the WHO and PATH Meningitis Vaccine Project – meningitis serogroup A accounted for 80–85% of meningitis epidemics in the

African meningitis belt. In 2012, MenAfriVac became the first vaccine to gain approval for use outside the cold chain during campaigns – for as long as four days without refrigeration and at temperatures of up to 40°C. By the end of 2019 almost 350 million people in 24 out of the 26 countries in the meningitis belt had been vaccinated with MenAfriVac through campaigns. To sustain the dramatic effect of these campaigns, Ghana and Sudan were the first two countries to include the MenAfriVac in their routine immunization schedule in 2016, followed by Burkina Faso, Central African Republic, Chad, Mali and Niger in 2017, Côte d'Ivoire in 2018 and Gambia and Nigeria in 2019.

**Measles** is a highly contagious disease caused by a virus, which usually results in a high fever and rash, and can lead to blindness, encephalitis or death. By the end of 2019, 85% of children had received one dose of measles-containing vaccine by their second birthday, and 178 Member States had included a second dose as part of routine immunization and 71% of children received two doses of measles vaccine according to national immunization schedules.

**Mumps** is a highly contagious virus that causes painful swelling at the side of the face under the ears (the parotid glands), fever, headache and muscle aches. It can lead to viral meningitis. Mumps vaccine had been introduced nationwide in 122 Member States by the end of 2019.

**Pneumococcal diseases** include pneumonia, meningitis and febrile *bacteraemia*, as well as otitis media, sinusitis and bronchitis. Pneumococcal vaccine had been introduced in 149 Member States by the end of 2019, including three in some parts of the country, and global third dose coverage was estimated at 48%.

**Polio** is a highly infectious viral disease that can cause irreversible paralysis. In 2019, 86% of infants around the world received three doses of polio vaccine. In 2019, the coverage of infants receiving their first dose of IPV in countries that are still using OPV is estimated at 82%. Targeted for global eradication, polio has been stopped in all countries except for Afghanistan and Pakistan. Until poliovirus transmission is interrupted in these countries, all countries remain at risk of importation of polio, especially vulnerable countries with weak public health and immunization services and travel or trade links to endemic countries.

**Rotaviruses** are the most common cause of severe diarrhoeal disease in young children throughout the world. Rotavirus vaccine was introduced in 108 countries by the end of 2019, including three in some parts of the country. Global coverage was estimated at 39%.

**Rubella** is a viral disease which is usually mild in children, but infection during early pregnancy may cause fetal death or congenital rubella syndrome, which can lead to defects of the brain, heart, eyes, and ears. Rubella vaccine was introduced nationwide in 173 Member States by the end of 2019, and global coverage was estimated at 71%.

**Tetanus** is caused by a bacterium which grows in the absence of oxygen, for example in dirty wounds or the umbilical cord if it is not kept clean. The spores of *C. tetani* are present in the environment irrespective of geographical location. It produces a toxin which can cause serious complications or death. Maternal and neonatal tetanus persist as public health problems in 12 countries, mainly in Africa and Asia.

**Yellow fever** is an acute viral haemorrhagic disease transmitted by infected mosquitoes. As of 2019, yellow fever vaccine had been introduced in routine infant immunization programmes in 36 of the 40 countries and territories at risk for yellow fever in Africa and the Americas. In these 40 countries

and territories, coverage is estimated at 46%.

### **Key challenges**

In 2019 14 million infants did not receive an initial dose of DTP vaccine pointing to lack of access to an immunization and other health services and an additional 5.7 million are partially vaccinated. Of the 19.7 million more than 60% these children live in 10 countries: Angola, Brazil, the Democratic Republic of the Congo, Ethiopia, India, Indonesia, Mexico, Nigeria, Pakistan and the Philippines.

Monitoring data at subnational levels is critical to helping countries prioritize and tailor vaccination strategies and operational plans to address immunization gaps and reach every person with life-saving vaccines.

### **WHO response**

WHO is working with countries and partners to improve global vaccination coverage, including through these initiatives adopted by the World Health Assembly in May 2012.

### **Immunization Agenda 2030**

IA2030 sets an ambitious, overarching global vision and strategy for vaccines and immunization for the decade 2021–2030. It was co-created with thousands of contributions from countries and organizations around the world, and will come into effect by the end of 2020 after WHA endorsement. It draws on lessons from the past decade and acknowledges continuing and new challenges posed by infectious diseases (e.g. Ebola, COVID-19).

Through collective endeavour, countries and partners will achieve the vision for the decade: A world where everyone, everywhere, at every age, fully benefits from vaccines for good health and well-being.

The strategy intends to inspire and align the activities of community, national, regional and global stakeholders. IA2030 will become operational during 2020-21 through regional and national strategies, a mechanism under development to ensure ownership and accountability and a monitoring and evaluation framework to guide country implementation.

[\(https://www.who.int/immunization/immunization\\_agenda\\_2030/en/\)](https://www.who.int/immunization/immunization_agenda_2030/en/)

### **The global strategy towards eliminating cervical cancer as a public health problem**

In 2020 will WHA adopt the global strategy towards eliminating cervical cancer. In this strategy, the first of the three pillars requires the introduction of the HPV vaccine in all countries and has set a target of reaching 90% coverage. With introduction currently in 55% of Member states and average HPV vaccination coverage at only 54%, in the next 10 years, large investments towards introduction in low and middle-income countries will be required as well as programme improvements to reach the 90% coverage targets in low and high-income settings alike will be required to reach the 2030 targets.

### **World Immunization Week**

Celebrated in the last week of April, World Immunization Week aims to promote the use of vaccines to protect people of all ages against disease. Immunization saves millions of lives every year and is widely recognized as one of the world's most successful and cost-effective health interventions.