Progress and Challenges with Achieving Universal Immunization Coverage: 2016 Estimates of Immunization Coverage

WHO/UNICEF Estimates of National Immunization Coverage
(Data as of July 2017)
DTP3 coverage remains at 86% in 2016, leaving 19.5 million children vulnerable to vaccine preventable diseases.

86% of the world’s children received the required 3 doses of diphtheria-tetanus-pertussis containing vaccines (DTP3) in 2016, a coverage level that has remained stable at about 85% since 2010. As a result, 19.5 million children did not receive routine life-saving vaccinations. This falls short of global immunization targets.

In 2012, all 194 WHO Member States endorsed the Global Vaccine Action Plan (GVAP) and committed to ensuring no one misses out on vital immunizations, with a target of achieving 90% DTP3 vaccination coverage in all countries by 2015.

Unvaccinated includes all children that didn’t complete the three-dose schedule of a diphtheria-tetanus-pertussis containing vaccine, as well those that didn’t receive any dose of the same vaccine.

Source: WHO/UNICEF coverage estimates 2016 revision, for 194 WHO Member States, and “The World Population Prospects: 2017 revision” from the UN Population Division. Slide produced in July 2017 by Immunization, Vaccines and Biologicals (IVB), World Health Organization. All content of this slide may be reused, with credit to WHO.
1 in ten children remain unreached by immunization programmes

The recently released vaccination coverage estimates also suggest that about 1 in 10 infants worldwide do not have access to vaccination, not having received even the first DTP-containing vaccine dose (DTP1). Most of the children that remain un-immunized are the same ones missed by health systems.

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To reach GVAP objectives, nearly 10 million additional infants would need to have been vaccinated in 2016.

If all countries are to reach at least 90% DTP3 vaccination coverage, 9.9 million additional children would need to be vaccinated in 64 countries.

Three in four of these children live in fragile countries, including countries that are affected by conflict; 4 out of 10 live in the three countries that have yet to interrupt polio transmission, namely Nigeria, Afghanistan and Pakistan.

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Countries with fragile health systems have showed slow progress since 2000, or have experienced large drops in coverage as a result of conflict.

Out of the 11 countries that were prioritized by the WHO emergency programme, only the Democratic Republic of the Congo and Ethiopia have made significant progress since the decade of vaccine started.

Countries with very low immunization coverage

Eight countries had estimated DTP3 coverage of less than 50% in 2016: Central African Republic, Chad, Equatorial Guinea, Nigeria, Somalia, South Sudan, Syrian Arab Republic and Ukraine.

Children in these countries, already subject to multiple deprivations remain at risk of outbreaks of vaccine preventable diseases and threat to their lives.

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Introduction of a second dose of measles vaccine is accelerating

Coverage with the first dose of measles containing vaccines is at 85 percent, and a 2nd dose is now offered through routine programmes in 164 countries, with global coverage increasing from 39 to 64 percent between 2010 and 2016.

These coverage levels are however insufficient to prevent outbreaks, and to avoid preventable deaths.

The additional vaccination contact to provide a second dose of a measles-containing vaccine in the second year of life also provides an opportunity to bring children up to date with vaccination doses that may have been missed in infancy.

MCV2 has been introduced in 162 out of 194 member states at the time of publication of this document.

New vaccine introduction is lagging in middle income countries.

The global coverage levels of more recently recommended vaccines such as rotavirus and pneumococcal conjugated vaccine, are yet to reach 50%.

These vaccines have the potential significantly to reduce pneumonia and diarrhoea, which are the top two causes of death in children under 5 in the world.

Middle-income countries are lagging behind in the introduction of these newer and more expensive vaccines, as they may not receive external support and their health budgets are currently insufficient to cover the costs of these vaccines.

Subnational data collected at the global level

For the first time, WHO and UNICEF received subnational disaggregated coverage data at the global level. Out of 194 member states, 125 countries reported subnational coverage, 36 at the 1st subnational level and 89 at the 2nd subnational administrative level (often corresponding to districts). The 20,000 districts for which data were received are home to 88 million children, two-thirds of the surviving infants worldwide.

An initial analysis shows large differences in the size of these districts, and the coverage they report. A large proportion report coverage over 100%, revealing the challenges to accurately measure coverage at subnational level.

Detailed analysis and reported data will be made available by October 2017.

Source: DTP3 coverage data by district reported by national authorities to WHO and UNICEF as of July 2017.