

IN FOCUS: IMMUNIZATION

Promoting and strengthening a life-saving investment

Immunization is one of the world's most cost-effective public health interventions, saving millions of lives each year, and protecting children from illness and disability. Vaccines have helped to halve the number of child deaths worldwide since 1990 and represent a sound financial investment: every \$1 spent on childhood immunizations returns an estimated \$44 in economic and social benefits.

Despite the achievements of immunization programmes in the Europe and Central Asia Region in recent decades, reported immunization rates are uneven across countries — from as high as 98 percent in Albania to as low as 19 percent in Ukraine. The regional average for Eastern Europe and Central Asia stands at 92 percent, still not high enough to protect all children from preventable diseases. What's more, there was no improvement in coverage between 2014 and 2016. At national levels, disparities can be shocking, with the most vulnerable children often missing out on immunization.

Across the Region, more than half a million children have missed out on their routine measles vaccination, and many countries continue to face outbreaks of vaccine-preventable diseases that threaten the lives and well-being of children. Challenges to immunization include weak political commitment and health systems, 'vaccine hesitancy,' and concerns about the financial sustainability of national immunization programmes in middle-income countries.

UNICEF knows that the whole Region benefits when ALL countries achieve and maintain high vaccine coverage at both national and sub-national levels.

Halyna Yarych sits with fivemonth-old Sasha on her lap at a health centre in Ukraine. With her are five of her ten children, all waiting for their vaccinations. Halyna tracks their immunization schedules with great care, but this was not always the case.

"Three years ago, I woke up to five very sick children," she says. The diagnosis was whooping cough – easily preventable through immunization. Until then, Halyna had never bothered about vaccines. Her doctors had stressed the importance of vaccinating her children, but she opted to trust her neighbours, whose children were not immunized.

"When her children were ill, I again explained to her how vaccines work and why all her children were at risk because they had not been vaccinated. At that point, it sunk in," says Dr. Nataliya Seredyuk, a local paediatrician.

Realizing she could have lost five children and risked infecting the rest, Halyna makes sure that her children are now regulars at the local health centre.

Toward 2030





Target 3.8: Achieve universal health coverage, including [...] safe, effective, quality and affordable essential medicines and vaccines for all.

Immunization 1

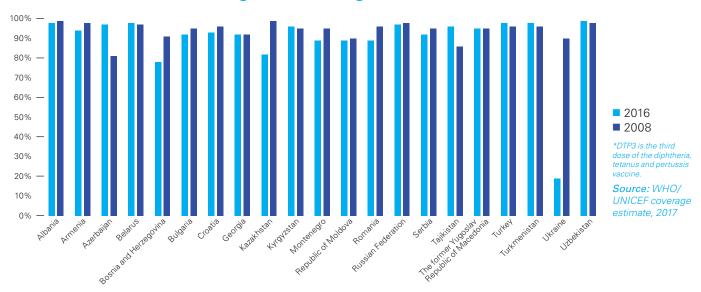
Challenges

Protecting children against preventable but deadly diseases requires constant vigilance. This is a Region where the DTP3 (diphtheria-tetanus-pertussis) coverage rate is 92 percent – not enough to protect every child from pertussis (whooping cough), for example. Adequate coverage requires a rate of 95 percent – achieved so far by only 40 percent of countries in the Region.

There are pockets of low immunization rates within countries. Eight countries in the Region have districts with DTP3 coverage below 80 percent, and 11 countries

have districts with MMR (measles, mumps, rubella) coverage below 80 percent. National averages also mask disparities, with Roma children and those from other vulnerable groups, including refugee and migrant children, all missing out on immunization. In Serbia, for example, only 13 percent of Roma children aged 18-29 months are fully immunized, compared 71 percent of non-Roma children. In Bosnia and Herzegovina, only 4 percent of Roma children are immunized versus 68 percent of non-Roma.

DTP3* immunization coverage rates among children under 12 months



Despite increased coverage of the first dose of the measles vaccine among children (up from 63 percent in 2000 to 93 percent in 2016), greater efforts are needed, as children are not fully protected unless they receive two doses of the vaccine, the first between 12 and 15 months, and the second, between the ages of 4 and 6 years. Today, second-dose coverage in the Region stands at 88 percent, which does not provide adequate protection for all children from this life-threatening but easily preventable disease.

As children miss out on their scheduled measles vaccines, outbreaks have become a problem. Since 2013, there have been measles outbreaks in Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Romania, Serbia, Tajikistan and Ukraine. Outbreaks in one country can spread rapidly to others, making children vulnerable, no matter where they live.

There are concerns about 'vaccine hesitancy' – a growing mistrust or even refusal of immunization. Parents' refusal to immunize their children may stem from misinformed media stories that link a child's death to vaccination. It may be influenced by unfounded fears around vaccine safety spread by members of the so-called anti-vaccine movements, and exacerbated by a lack of clear and consistent information about the importance of immunization and its minimal risks.

Immunization programmes also face financial challenges, especially once countries 'graduate' from support provided by Gavi (The Vaccine Alliance). Financial commitment to immunization is not as strong as it should be in the Region. Most middle-income countries (MICs) that face challenges of competing priorities at home and unaffordable vaccine prices on the global market have experienced vaccine shortages, sometimes causing critical disruptions of immunization services.

Many countries in the region score poorly (under 80 percent) in terms of having an effective vaccine management system, and this poor performance has an impact on the timely delivery of vaccines and the quality of services.

The threat of vaccine-preventable disease remains ever present as the result of these challenges. The Region is certified as being polio-free, but there were outbreaks in Central Asia in 2010 and 2011, and an outbreak in Ukraine in 2015 and 2016 – a country where conflict and economic recession have depleted stocks of vaccines and vaccine hesitancy is reducing immunization coverage. The European Regional Certification Commission for Poliomyelitis Eradication (RCC) considers three countries in the Region – Bosnia and Herzegovina, Romania and Ukraine – as being at high risk for polio transmission.

Immunization 2

Our aim

The best defence against the spread of vaccine-preventable childhood diseases is a vaccine-protected population and a strong and responsive health system. UNICEF aims to support the achievement of universal immunization against preventable diseases across the Region, with every child protected in every community. We know that childhood immunization programmes require substantial and continuous investments, but their benefits to children and society vastly outweigh their financial cost. Investments in immunization and health systems make sense for national economies, for local communities and for the children within them.

Our Actions

UNICEF urges governments in Europe and Central Asia to invest in health systems that reach the most vulnerable children with life-saving immunizations to ensure that immunization is both universal and equitable. We know how to get the right vaccines to the right children at the right time, working with our partners to deploy new techniques and strategies to get vaccines to children in need and improve health systems.

Working with national governments, the World Health Organization, Gavi (The Vaccine Alliance), Bill & Melinda Gates Foundation, the US CDC and European CDC, the Measles & Rubella Initiative (MRI) and many other partners, as well as non-governmental organizations and vaccine manufacturers, we support the provision of quality-assured vaccines. We also mobilize funds and provide technical assistance to strengthen the development of evidence-based policies, increase the capacities of national immunization programmes, including budgeting for vaccine procurement and supply. We support countries to introduce new vaccines, such as those for Rotavirus, Pneumococcal Conjugate Vaccine (PCV) and Human papillomavirus (HPV) to protect children from a wider range of preventable diseases.

UNICEF helps to strengthen the capacity of national and subnational partners to create demand for immunization, aiming to address vaccine hesitancy, build public trust, tackle dangerous myths and combat misinformation. Our efforts include technical support to governments and partners on social science research to build greater understanding of the factors that influence vaccine hesitancy to inform communication strategies, capacity building plans for front-line health workers and community engagement. We work closely with national and local authorities to reinforce the routine tracking of public perceptions and attitudes around immunization to address issues related to vaccine hesitancy and the spread of misinformation by anti-vaccine campaigners.

UNICEF's Supply Division (SD) holds an annual global Vaccine Procurement Practitioners Exchange Forum (VPPEF), which focuses on fostering peer-to-peer learning and facilitates country-led planning to improve vaccine procurement outcomes, which several countries in the Region attend. Regional VPPEFs have also been held in direct response to participants' suggestion to hold these Forums regionally, providing an added layer of support tailored to the specific needs of countries in Europe and Central Asia.

Fast Facts

Immunization challenges in Europe and Central Asia

- Over 500,000 children are still not immunized in the Region, and most of these (more than 70 percent) live in middle-income countries that do not receive support from Gavi (the Vaccine Alliance).
- Countries graduating from Gavi support may struggle to ensure financial sustainability after graduation. They may continue to need donor support for immunization.
- Other middle-income countries face funding challenges caused by competing priorities, problems in buying vaccines at affordable prices and noneligibility for funding from external sources, such as Gavi.
- There is poor planning and forecasting for vaccine procurement in some countries as well as weak vaccine management systems – only 25 percent of countries in the Region have vaccine management systems that are recognized as being adequate, signalling the need to strengthen immunization systems.
- Parental hesitancy or refusal to immunize children is being fuelled by misinformation. As parents refuse to have their children immunized, coverage trends for childhood vaccines, such as DTP3 (Diphtheriatetanus-pertussis) and MCV (Measles Containing Vaccine) are falling.
- The failure to immunize the most vulnerable children, including Roma children, those from other ethnic minority groups and refugee and migrant children, puts them at greater risk of preventable diseases.

Immunization 3

Safeguarding immunization during emergencies

UNICEF is ready to respond to outbreaks of vaccine-preventable diseases and to safeguard the immunization of children in emergencies. We work with partners to enhance the ability of governments to respond, helping on vaccine procurement and providing technical support for additional immunization activities as well as working closely with affected communities.

Together with the World Health Organization, Médecins Sans Frontières and Save the Children, UNICEF was part of the development of the Humanitarian Mechanism to facilitate access to Gavi pricing for vaccines for people facing humanitarian emergencies. As part of our response to Europe's refugee and migrant crisis, for example, UNICEF supported the provision of 50,000 doses of the MMR (measles, mumps and rubella) vaccine in Greece in 2016 and 23,000 doses in 2018. In Turkey, UNICEF conducted nine rounds of polio vaccinations for refugee children from 2013 to 2015, with measles vaccinations added to some rounds; in 2017, more than 376,000 children under the age of five were reached.

In Ukraine, critical shortages of essential medicines and vaccines prompted the Ministry of Health to ask international organizations, including UNICEF, to support vaccine procurement in 2015 while the Ministry reformed its procurement system. Our delivery of the first supplies in 2016 was closely linked to the response to the polio outbreak and efforts to increase demand for immunization. UNICEF provided more than 12 million doses of oral polio vaccine and 1.5 million doses of inactivated polio vaccine and, together with other partners, supported three rounds of vaccination nationwide. UNICEF continues to support the procurement of vaccines on behalf of the Ukrainian Government.

An unfinished agenda

Low vaccination rates and ongoing measles outbreaks in the Region call for vigilance and greater efforts to improve universal routine immunization to protect children. Immunization is a shared responsibility of governments, legislators, health care providers, parents, caregivers, the pharmaceutical industry and other stakeholders. Everyone has a role to play in vaccinating and protecting all children.

UNICEF has a long history of bringing stakeholders together to safeguard and promote immunization, both globally and in the Europe and Central Asia Region. We will continue to work with partners to strengthen routine immunization systems and step in whenever necessary to bolster immunization. The task ahead is to ensure fully sustainable, well-resourced and managed immunization systems that guarantee vaccinations for each and every child – with no exceptions.

"UNICEF is urging governments in Europe and Central Asia to invest in health systems that prioritize reaching the most vulnerable children with lifesaving immunizations, alongside tailored interventions to address the concerning trend of growing vaccine hesitancy."

Afshan Khan, UNICEF Regional Director for Europe and Central Asia

Key government commitment to immunization

Convention on the Rights of the Child, 1989, ratified by all countries in the Region

• Article 24: States Parties recognize the right of the child to the enjoyment of the highest attainable standard of health and to facilities for the treatment of illness and rehabilitation of health. States Parties shall strive to ensure that no child is deprived of his or her right of access to such health care services.



A baby is vaccinated at a clinic in Armenia. UNICEF is the main provider of vaccines and immunization devices in the country.



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