



# **The SAGE Encyclopedia of World Poverty**

## **Child Immunization and Vaccination**

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A great deal of success has been achieved in immunizing children against potentially life-threatening diseases. The increase in immunizations has helped reduce global childhood mortality and disability at a relatively low cost because vaccine-preventable diseases are responsible for the high rates of infant morbidity and mortality. Immunization is a basic requirement to ensure child health; it is a form of intervention that can prevent the occurrence of a number of childhood diseases such as tuberculosis, poliomyelitis, measles, pertussis, diphtheria, tetanus, hepatitis B, and yellow fever. It is imperative that every child be vaccinated, but not every child is fully vaccinated, especially in developing countries.

Childhood vaccines save lives, prevent long-term suffering, and help in reducing medical costs by preventing diseases. Effective childhood immunization is economical, as estimates show that for every dollar spent on the measles, mumps, and rubella (MMR) vaccine and immunization activities, \$14 in societal costs are saved, and for each dollar spent on the pertussis vaccination, \$2.10 in health costs are saved.

### **Childhood Vaccination Rate**

The childhood vaccination rate measures the percentage of children who have received the requisite number of vaccine doses irrespective of the age at receipt of the vaccine. However, widespread disparities in immunization exist between continents and countries to the disadvantage of children from low socioeconomic backgrounds. The rate of vaccine-preventable diseases is also a traditional measure of the quality and effectiveness of a nation's overall health care delivery system. However, the resurgence of previously vaccine-preventable diseases in some regions could have serious implications for families and society. It is imperative that a child receive all immunizations within recommended intervals in order to achieve the needed protection against vaccine-preventable diseases. A fully immunized child is administered six standard epidermal-powdered immunization (EPI) antigens through eight vaccinations in the first year of life. However, this is subject to change because of the advances in vaccine research and production.

### **Constraints to Child Immunization**

Constraints to efficient and effective immunization can be found in any society depending on the peculiarity of the environment. However, common constraints can be identified across societies.

One constraint is accessibility—the availability of immunization services of acceptable quality to individuals and the affordability of these and other health care services. Lack of accessibility is a problem for many people across cultures that need to immunize their children. The problem of inadequate access to childhood immunization can be attributed to (1) the lack of a primary health care provider, (2) financial constraints to immunizations, and (3) the failure of private health insurance to cover immunizations.

People's perceptions that public clinics are unfriendly are another impediment to full immunizations. Some parents are skeptical about the need for vaccination. In addition, conflict and violence in some regions hamper access to clinics, public clinics have limited resources and hours of operation, and in some areas most people travel great distances to receive health care. The systemic problems of health care providers also contribute to the failure to fully immunize children, including inadequate patient reminder systems, which result in missed opportunities for immunization.

## Misconceptions About Child Immunization

Misconceptions of the role of immunization are still common in some parts of the developing world. Some of these misconceptions stem from people's beliefs and experiences. For example, some cultures believe that a sick child should not be immunized because the child will not be able to tolerate vaccines irrespective of the illness. Other misconceptions hampering immunization include overattribution and false expectations that immunization bolsters resistance to all forms of infection; the belief that certain diseases like measles are supernaturally caused, and that immunization will anger a disease-causing god or goddess, causing misfortune to befall the child or the household; and the belief that immunization is not effective in some cases because children who were vaccinated against certain diseases still contracted these diseases.

## Risk Factors Associated With Nonimmunization

An estimated three million children die each year of vaccine-preventable diseases, while estimates suggest that about 34 million children are not completely immunized, with about 98 percent of them residing in developing countries. These figures can be explained in the context of risk factors associated with nonimmunization. Evidence shows that certain social factors are implicated as risk-factors for non-immunization, including no education or low educational levels, family size, low socioeconomic status, single-parent families, low awareness and knowledge about the time vaccines should be given, starting the immunization series late, using public health hospitals as the main provider, beliefs and misinformation about vaccines, poverty, abuses by health care workers, and long distances to health facilities providing vaccines.

## Distribution of Vaccines

Vaccines are distributed from manufacturers to the end users, who are the children and other people who receive them. In Nigeria, for instance, routine immunization is provided at public health facilities. The federal government formulates national health policies, implements and coordinates national health programs, and evaluates and monitors health programs. The federal government also procures vaccines and distributes them to zonal stores in the states, and state governments are responsible for distributing these vaccines to central storage facilities run by local governments. Vaccines are then distributed from these storage facilities to primary health care facilities. Most children are vaccinated at primary health centers, complemented by secondary and tertiary health care facilities owned by the government. Vaccinations take place once every week in all the designated primary health centers.

The National Programme on Immunization in Nigeria targets eight main childhood diseases—tuberculosis, polio, pertussis, diphtheria, tetanus, measles, hepatitis B, and yellow fever. Using the 1995 standards of the U.S. Centers for Disease Control and Prevention, children receive between 11 and 15 vaccines, many in combination form and all requiring more than one dose, for a total of five immunizations by age 2.

## Motivation for Immunization

Certain factors have been identified as influential in fostering immunization status, including an adequate and regular supply of vaccines, accessibility of vaccination sites, convenient

hours for vaccination, an adequate number of immunization service providers, short waiting times, and low rates of missed opportunities for vaccination.

Continuing to maintain high child immunization rates requires improved awareness and knowledge about immunization and sufficient access to immunization services, as well as cooperation from parents, health care providers, the government, and manufacturers of vaccines.

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**See Also:** [Child Mortality](#); [Children](#); [Children with Disabilities](#); [Communicable Diseases](#); [Disease Eradication and Elimination Programs](#); [Equity in Health](#); [Health Investment in Measles](#); [Mortality Rate](#); [Polio](#); [Tuberculosis](#).

### Further Readings

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