

# Unprotected People #85

## Measles

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### **"The Problem" by the Measles Initiative**

*Measles (rubeola) is more than a red rash. It is a leading vaccine-preventable killer of children in the developing world. According to the World Health Organization (WHO), more than 300,000 children (the vast majority are younger than five years of age) die from measles each year. As the following article describes, measles infections place a heavy burden on impoverished families and communities. Secondary complications such as pneumonia are common in areas where adequate nutrition and access to health care are limited. One of the most serious complications of measles infection is encephalitis, which can lead to blindness and profound brain damage in children. Measles can be easily prevented with a simple vaccination that costs less than one dollar per child. Largely due to the vaccination campaign launched by the Measles Initiative, measles deaths have decreased dramatically since 2001.*

*The following article is reprinted with permission from The Measles Initiative's website.*

#### **The Facts**

According to World Health Organization (WHO) data, global deaths due to measles fell by 48%, from 871,000 in 1999 to an estimated 454,000 in 2004. The largest reduction occurred in sub-Saharan Africa, the region with the highest burden of the disease, where estimated measles cases and deaths dropped by 60%. These statistics make measles one of the single leading causes of death among children in most developing countries—more than HIV, tuberculosis, and malnutrition—despite the availability of a safe, effective and relatively inexpensive vaccine for more than 40 years. In places where health conditions are extremely poor, living conditions are congested, and access to health care is minimal, measles can be easily prevented with a simple vaccination.

Since Africa had the highest measles mortality rate among children under five in 1999, the focus of mass measles campaigns started there. Because of the Measles Initiative's first five years success in reducing measles in Africa, the program has been able to expand its immunization activities into Asia where the measles burden remains high. In Bangladesh alone 20,000 children die every year due to measles and related complications. Over the past few years, mass measles campaigns have also reached into other areas including Kyrgyzstan and in tsunami affected areas.

This need for vaccination goes beyond areas where measles is endemic, but to countries where measles could become an enormous health concern; examples being crowded living situations, such as refugee camps, due to war or civil unrest, or areas affected by natural disasters.

"After a disaster the threat of disease often increased due to the close living conditions and poor hygiene that result from people being displaced from their homes," said Timothy E. Wirth, President of the United Nations Foundation. "While the Measles Initiative cannot prevent natural disasters, we can focus on addressing persistent, everyday, health issues in order to make communities safer, stronger, and better prepared for future disasters."

Dr. Irene Lubega, a pediatrician at Mulago Hospital in Kampala, the capital of Uganda, feels "It is very overwhelming to see so many sick kids knowing that with one shot they could live. It really breaks my heart to see children dying when you know it can be prevented."

"We want to prevent the disease rather than treat it," said Dr. Makumbi, Director of Uganda National Expanded Programme of Immunisation (UNEPI).

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"Children who get measles in Africa have a good chance of dying from it."

Nasrin Aktar, a volunteer from the Bangladesh Red Crescent Society emphasized, "My wish is that this campaign will eliminate measles and that none of my brothers and sisters in Bangladesh will ever die from measles again."

There are no measles transmissions in the Western Hemisphere. In developing countries such as South and Central America, national mass campaigns have helped to eliminate the disease. Because of routine immunizations and more sophisticated healthcare systems, measles is not an ever present threat to countries in the western hemisphere; however, in countries where measles has been largely eliminated, measles cases imported from developing countries remain a source of infection.

### **Why children die of measles**

Measles is a leading killer of children in many developing countries for several reasons. Children are already compromised with poor living conditions, they are infected at very young ages when their immune systems are not strong, malnutrition is rampant in many homes, and many families do not have access to medical care to treat measles and its complications. Measles, itself, does not kill children. Instead, complications from measles attack the child's already weak immune system. Measles attacks the body, inside and out. It is similar to HIV in the sense that when it knocks down the immune system, the child becomes susceptible to the myriad of diseases that fester in poor living conditions.

While the typical red spots of measles in a developed country may signal a mild disease, that same rash becomes a severe attack on all of the child's skin surfaces including the gut, cornea, and lungs. The direct damage caused by measles can be high fever, peeling of the skin, and encephalitis leading to brain damage. "The problem is children die from complications of measles such as pneumonia, diarrhea, brain damage, or suffer from blindness. Therefore, people aren't always aware of the issues inherent with measles illness," reported Dr. Ataur Rahman, UNICEF Health and Nutrition

Program Officer. Measles itself is just one more assault on the child's already unhealthy body.

There are two ways to contract measles—catching it outside the home, or spreading it inside the home. Because measles is one of the most highly contagious diseases known and carried in the air, some children contract it in crowded places like a market or school, or just by coming in contact with someone who has it. Then, when the child goes back home, where living conditions are usually very cramped, other siblings catch the disease and become sick as well.

One woman who brought her brothers' children to be vaccinated at the Kumi Girls Boarding School, during a Uganda campaign said, "Suppose there is a home with six children. They all might catch measles from each other. The last one to catch it will die because he has so much sickness from the others." The last child has basically been bombarded with high doses of measles from the others and the chances for survival at that point are slim. This reasoning may be the basis for the African saying "the second child with measles always dies." A mother in Bangladesh remembered, "At some point in time all three of my children had had measles."

"When my eldest boy got sick he had a high fever for three days. We were worried he might die" said a mother during a measles vaccination campaign in Bangladesh. "If they [children] don't get vaccinated they can get sick and die."

One tribe in Uganda has its own word to describe measles—Akwap. The word translates to "disease of the wind." Mothers know when a child has measles because the other children become infected so quickly, as the measles virus spreads through the air.

Once a child has contracted measles, treatment can be expensive, and many times the family does not realize the child needs treatment until it is too late. Folk tales, misinformation, and safety concerns also contribute to the child not being treated in time. If

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the child does recover from a bout with measles, he or she may die or be left with permanent disabilities.

The Measles Initiative strives to support the delivery of the safe, effective, and inexpensive vaccine needed to protect vulnerable children from measles. Measles vaccinations are one of the most cost-effective child-health interventions available today. Most importantly, for as little as \$1 a child can be vaccinated and protected against measles!

*As of year-end 2005, the Measles Initiative has vaccinated 213 million children in more than 40 African countries, saving more than 1.2 million lives. Because of the Measles Initiative's success in Africa, the program has expanded into Asia, where the measles burden remains high. For more information, visit their website at: [www.measlesinitiative.org](http://www.measlesinitiative.org)*