

immunization plans. The highly infectious nature of measles demands that governments build a long-term vision and plan. Measles has repeatedly demonstrated its ability to quickly infect areas with low vaccination coverage.

**Ensuring adequate and sustainable financing of routine immunization programmes**

In many countries with a high measles burden, ineffective and inadequately planned financial management has led to insufficient resources at local level for supervision, training of staff, and logistics support necessary to achieve high routine immunization coverage.

To maximize the impact of the strategy and ensure continuity in sustainable measles mortality reduction activities, measles

activities must be included in national immunization financial sustainability plans. The majority of resources for measles mortality reduction activities need to be mobilized from national governments and their local partners. International partners can help to fill financing gaps, but should not be considered as a primary source for long-term funding.

## Partnership: the key to success

The tremendous progress towards reducing measles deaths is the result of the hard work and dedication of the affected governments and all our partners to achieve a common goal – reducing measles mortality. From health workers and nongovernmental organizations to international bodies and foundations, our partners help the government make things possible. They have proven invaluable in providing financial contributions, strengthening advocacy, political and social commitment, and in communicating the positive impact and success of measles mortality reduction activities.

WHO and UNICEF have close working relationships with the United States Centers for Disease Control and Prevention (CDC), which provides technical and financial assistance to countries and partner organizations.

Organizations such as the Global Alliance for Vaccines and Immunization (GAVI Alliance), Canadian International Development Agency (CIDA), Japanese International Agency for Cooperation (JICA), the Department for International Development of United Kingdom (DFID), and the United States Agency for International Development (USAID) have made significant financial contributions to regional and global measles mortality reduction efforts.

The United Nations Foundation (UNF), Bill & Melinda Gates Foundation, Vodafone Foundation, and nongovernmental organizations such as the International Federation of the Red Cross and Red Crescent Societies (IFRC) and the American Red Cross have been instrumental in the effort to reduce global

measles disease burden.

An important factor in the remarkable decrease in measles deaths in Africa has been the strong support provided by the Measles Initiative, a unique partnership initiated by the American Red Cross, CDC, UNF, UNICEF and WHO.

As the partnership embarks on the next phase of the measles mortality reduction efforts, WHO and UNICEF look forward to working closely with our current partners and forging relationships with new partners to secure the necessary support and financial resources to further reduce global measles deaths.

### DID YOU KNOW THAT...

Donor contributions pay for measles vaccines, syringes, logistics, refrigeration equipment, recruitment of vaccinators to administer the vaccine, and community mobilization.

### Measles Initiative

The Measles Initiative ([www.measlesinitiative.org](http://www.measlesinitiative.org)) is a partnership formed to sustainably reduce and control measles deaths. Launched in 2001, the Measles Initiative plays an important role in providing technical and financial support to measles priority countries and in strengthening political and social commitment in the fight against measles. The Initiative is spearheaded by the American Red Cross, CDC, UNF, UNICEF and WHO.

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Front cover : A crowd of children stand outdoors after receiving their vaccination against measles in Kenya © UNICEF/HQD-0238/THERRY GEENEN



# The Problem

Measles is a highly contagious respiratory infection caused by a virus. The highest fatality rates are usually among children under five, and up to 20% in infants less than one year old. Children affected by measles may suffer lifelong disabilities, including brain damage and blindness. Measles is a widespread killer. In 2004, approximately 454,000<sup>1</sup> people died from the disease, often from secondary complications related to pneumonia, diarrhoea

and malnutrition. A highly effective vaccine has been available since the 1960s. Despite this, measles remains the leading cause of vaccine-preventable deaths in the world, accounting for over 40% of the 1.4 million annual deaths<sup>2</sup> due to vaccine-preventable diseases. Inequalities in access to vaccines within countries mean that death and disability from measles is concentrated primarily among the poorest, most marginalized

## DID YOU KNOW THAT...

- The measles vaccine has been available for more than 40 years and is very effective and safe.
- Less than a dollar is needed to protect a child for life against measles.

and remote people. Failure to deliver at least one dose of measles vaccine to all infants remains the primary reason for high measles mortality.

# The Solution

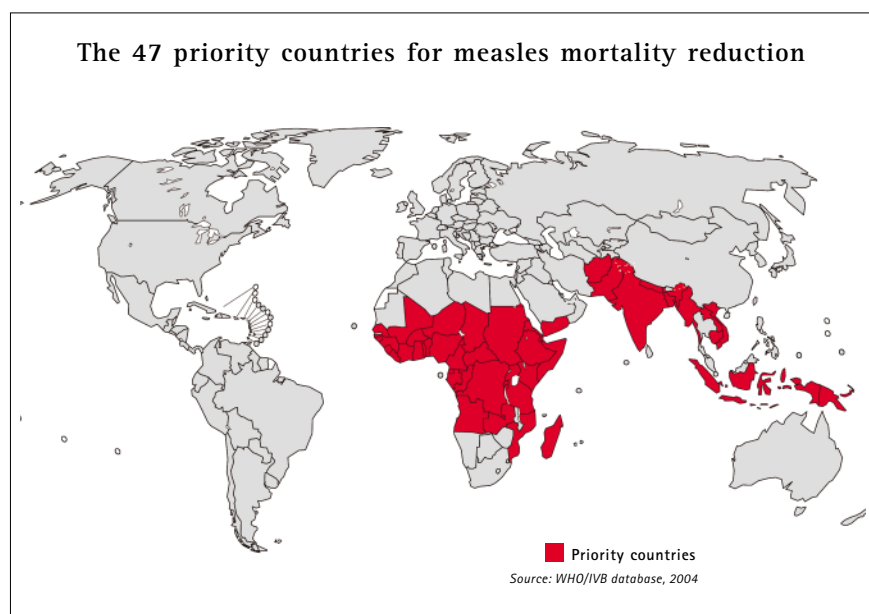
The WHO/UNICEF global plan focuses on 47 priority countries<sup>3</sup> that account for approximately 98%<sup>4</sup> of global measles deaths. These countries, characterized by weak health systems and chronically low immunization coverage, are among the world's poorest.

WHO and UNICEF have developed a comprehensive strategy for sustainable measles mortality reduction that was endorsed by the World Health Assembly in 2003.

## Why children need to receive a "second opportunity" for measles immunization

A second opportunity for measles immunization is essential to ensure protection against measles. About 24%<sup>5</sup> of children worldwide never receive a single dose of measles vaccine. Moreover, approximately 15% of children vaccinated against measles at nine months of age will not develop a protective immune response. However, virtually all older children who receive a second opportunity for measles immunization vaccination, delivered either through routine immunization services or periodic supplementary immunization activities (SIAs), are completely protected for life against measles.

The 47 priority countries for measles mortality reduction



The objectives of the four-part strategy are to:

1. provide every child with a dose of measles vaccine by 12 months of age;
2. give all children from nine months to 15 years of age a second opportunity for measles immunization;
3. establish effective surveillance; and
4. improve clinical management of complicated cases, including vitamin A supplementation.

Using this strategy, measles has been eliminated from the WHO Region of the Americas. Furthermore, three other WHO regions (Europe, the Western Pacific and the Eastern Mediterranean) have also set regional measles elimination goals.

# The strategy works!

Priority countries that fully implemented the strategy experienced a dramatic drop in measles deaths. Millions of children were immunized against measles through routine immunization services, and nearly 500 million children were immunized through "catch-up" and "follow-up" vaccination activities between 1999 and 2004.<sup>6</sup> Through this effort, global measles mortality decreased by 48%<sup>7</sup>. The largest gains come from the African region where measles cases and deaths have decreased by 60%<sup>7</sup>. The priority countries are on track to cut measles deaths in half by 2005 from 1999 estimates.

*We used to bury two or three children every week during measles epidemics. This does not happen any more.*  
– Serigne Dame Leye, chief of Nguoye Diaraf village, Senegal

Immunization reaches more children than any other health intervention and is often the only basic healthcare service that children receive in their first year of life. And where immunization goes, other life-saving services such as insecticide-treated nets and anthelmintics for deworming follow.

# Goals

Across countries and continents, the success of the measles mortality reduction strategy demonstrates that the strategy works and that by the end of 2005 priority countries can cut measles deaths in half. Building on this achievement, the global goal now is to reduce annual global measles deaths by 90% by 2010 from 2000 estimates.<sup>8</sup> In 2000, the UN Millennium Summit set a

goal to reduce the under-five mortality rate by two-thirds, between 1990 and 2015. Routine measles vaccination coverage is used as an indicator and measles mortality reduction is an important step towards achieving this goal.

*Cutting measles deaths in half over the last five years is one of the greatest public health successes to date. We must build upon these gains to save additional lives. Protecting children against measles will make a significant contribution to reducing child deaths – a key millennium development goal.*  
Ann M. Veneman, Executive Director of UNICEF

# The challenges ahead

## Increasing routine immunization in every priority country

While substantial progress has been achieved since 1999 in reducing measles deaths, routine immunization coverage remains below 60% in 16 of the 47 priority countries.<sup>10</sup> Many of these countries lack national and district level immunization plans, and poor management in some countries has led to high dropout rates and many missed opportunities for immunization. The challenge in the next five years is to increase routine immunization coverage

and strengthen disease-surveillance systems for sustainable reduction of measles deaths.

## Obtaining political commitment

The primary responsibility for reducing measles deaths lies with national governments. Governments play a central role in establishing goals and policies, choosing appropriate strategies and developing national plans of action for implementation of these strategies. Partners can provide technical and financial support to

## DID YOU KNOW THAT...

- In conflict or emergency areas, WHO and UNICEF have a commitment to ensure that, at a minimum, measles vaccine and vitamin A supplements<sup>9</sup> are administered.
- Along with measles vaccine and vitamin A, children in temporary shelters can also be given other vital health interventions such as insecticide-treated mosquito nets to prevent malaria and anthelmintics for deworming.

governments in the implementation of national plans. It is important that measles activities be fully integrated into multi-year

<sup>1</sup>WHO estimates for 2004 <sup>2</sup>WHO estimates for 2002  
<sup>3</sup>Afghanistan, Angola, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial

Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea-Bissau, India, Indonesia, Kenya, Lao People's Democratic Republic, Liberia, Madagascar, Mali, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Senegal, Sierra Leone,

Somalia, Sudan, Timor-Leste, Togo, Uganda, United Republic of Tanzania, Viet Nam, Yemen and Zambia <sup>4</sup>WHO estimates for 2004 <sup>5</sup>WHO/IVB database for 2004

<sup>6</sup>WHO/IVB database as of October 2005  
<sup>7</sup>WHO estimates for 2004 <sup>8</sup>WHO/UNICEF global immunization vision and strategy (GIVS), 2006–2015 <sup>9</sup>WHO/UNICEF joint statement: reducing measles mortality in emergencies, 2002

<sup>10</sup>WHO/UNICEF estimates of national immunization coverage for 2004