Measles

Measles is a highly infectious viral disease caused by a Morbillivirus. It only affects humans and rapidly spreads among individuals who have not been vaccinated. Measles is a leading cause of vaccine-preventable deaths among children. In 2006, an estimated 242,000 people died of measles; about 217,000 of these deaths were among children under 5 years of age. About 1-5% of children with measles die from complications of the disease. In refugee settings, the death rate from measles may be as high as 30%.

Immunization from measles is effective, and has resulted in significant reductions in case burden in many parts of the world. Unfortunately, a large percentage of children in the African region never receive their first measles vaccine dose in time for immunity to take hold. The cost of protecting a child against measles is less than USD 1.00, and when correctly administered at 9 months of age, the measles vaccine offers lifelong protection to approximately 85% of those vaccinated.

The Role of the Immunization and Vaccine Development (IVD) Programme

- Strengthen routine immunization against measles.
- Establish disease surveillance, laboratory confirmation and data management systems.
- Plan and implement supplemental immunization activities (SIAs).
- Monitor and evaluate the program implementation.
- Mobilise resources.
- Advocate with local and international partners.

The WHO African Regional Strategy for Measles Control

- **Provision of first dose measles vaccine through routine immunization**: Administration of first dose of measles vaccine to children of 9 months and older through routine immunization services.
- **Provision of a second opportunity for measles immunization**: Supplemental immunization activities (SIAs) to reach children that have never been vaccinated in the routine immunization program and children that have not been protected after the first dose.
- **Case based surveillance with lab confirmation**
- **Improved clinical management of measles cases**: Providing supplemental doses of vitamin A to all suspected cases of measles and the appropriate and early management of measles complications.

What WHO/AFRO is doing to combat measles

WHO is a core member of the Measles Initiative, launched in 2001 to mobilise resources and provide support to the African Region to reduce measles deaths globally. The Measles Initiative has supported measles vaccination of over 395 million children in the African Region through measles supplemental immunisation activities from 2001 – 2008. To date, 40 countries in the Region have been supported to establish case-based surveillance for measles as a strategy to monitor the impact of vaccination activities and to document the reduction of disease burden. Additionally, a network of 36 national measles laboratories and 4 Regional Reference Laboratories (RRL) has been established for the confirmation of measles cases and outbreaks as well as the isolation of locally circulating measles virus strains.

Challenges

**Adequate funding support from partners and National governments**: In addition to the funding support from the Measles Initiative, national governments are expected to mobilize more and more funds to support the operations during follow up measles SIAs.
Attaining high measles vaccination coverage rates: Measles Pre-elimination can only be achieved with high routine vaccination coverage rates (at least 90% of infants in all regions need to be vaccinated before their first birthday), and periodic vaccination supplemental immunization activities (SIAs) every 3 to 4 years reaching at least 95% of the targeted population. Follow up SIAs target children who were too young to receive measles vaccine and who were born since the last SIAs.

Our Accomplishments
- Regional routine measles vaccination coverage has improved from 53% in 2000 to 84% in 2007 in the African region.
- Between 2001 and 2008, a total of 41 countries have had one catch-up and at least one follow-up Supplemental Immunization Activities (SIAs) reaching over 395 million children.
- Measles SIAs have provided the opportunity for the integration of additional components to measles immunizations programs in administering Vitamin A supplements, de-worming tablets, Polio vaccinations, and treated nets for malaria prevention. For example, 40 of 41 rounds of measles SIAs have incorporated the integration of at least one additional child survival intervention between the years 2006 and 2008.

Our Goals
- To strengthen routine immunization through campaigns and technical support, promote advocacy with partnering entities and governments.
- To plan, implement all supplemental immunization activities (SIAs), and also ensure sustainability and mobilization of resources.
- To provide technical support for planning and organization of mass preventive and response campaigns.
- To strengthen national health systems for the early detection and prompt response to epidemics and promoting essential operations research.
- To initiate, monitor and evaluate programs, set standards for laboratory confirmation, data management and disease surveillance.
- To strengthen disease surveillance and laboratory confirmation to monitor the impact of immunization activities, and to identify in time and appropriately respond to outbreaks of measles.

Our Partners
The Measles Initiative is led by the American Red Cross, the United Nations Foundation, CDC, UNICEF, and WHO. This Initiative has further partnered with the GAVI Alliance, Canadian International Development Agency, Japanese International Agency for Development Cooperation, Bill & Melinda Gates Foundation, Vodafone Group Foundation, Izumi Foundation, The Church of Jesus Christ of Latter-day Saints, Exxon Mobile, International Federation of Red Cross and Red Crescent Societies and Becton Dickinson.

Helpful Resources or Websites
- www.measlesinitiative.org

Contact Information
Dr. Balcha Masresha
WHO Regional Office for Africa / DDC – IVD
Coordinator of Accelerated Diseases Control
Tel: +47 241 39314
Fax: +47 241 39641
E-mail: masreshab@afro.who.int