

MEASLES MORTALITY REDUCTION AND REGIONAL GLOBAL MEASLES ELIMINATION

WHAT IS THE PUBLIC HEALTH ISSUE?

Measles caused an estimated 644,000 deaths worldwide in 2002 and is the leading cause of childhood death from a vaccine-preventable disease globally. In 1989–1991, a measles outbreak affected more than 55,000 Americans, resulting in 123 deaths. The United States remains at risk of importation of measles from countries that have not yet eliminated the disease. A total of 54 confirmed measles cases were reported in the United States in 2003. From July 13 to September 13, 2003, a total of 647 measles cases were reported on Majuro Atoll in the Republic of the Marshall Islands. This was the first measles outbreak reported there since 1988. Low coverage rates, at the time, contributed significantly to the spread of the disease. This outbreak resulted in the importation of 21 cases of measles into the United States.

WHAT HAS CDC ACCOMPLISHED?

Transmission of indigenous measles virus in the Americas was interrupted as of November 2002, demonstrating the effectiveness of current control strategies in a large geographic area. During 2003, the provisional number of confirmed measles cases reported in the Western Hemisphere was 104. These cases occurred mainly in Mexico and the United States, with all cases related to importations from endemic countries outside of the Western Hemisphere. U.S. success in measles-control efforts is the result of routine measles vaccination coverage achieved among over 90% of children by the age of 1 year, combined with successful follow-up campaigns implemented in the Western Hemisphere since 1988.

With funds from CDC's immunization appropriations, CDC contributed about \$42 million in grants and other scientific and technical assistance to control measles globally during 2003. CDC grantees included the Pan American Health Organization (PAHO) to eliminate measles from the Western Hemisphere, and the Measles Partnership—a joint effort by the American Red Cross/The International Federation of Red Cross and Red Crescent Societies, the World Health Organization (WHO), the United Nations Children's Fund, the United Nations Foundation, and CDC—to reduce measles-related mortality in Africa. To date, the partnership has vaccinated over 115 million children and prevented an estimated 220,000 deaths in Africa.

Example of Program in Action

CDC provides epidemiologic and laboratory assistance for disease tracking, vaccine for outbreak control and other supplementary immunization activities, and assignments of CDC scientific staff to priority countries. In 2003, CDC provided scientific, technical, and programmatic support for measles outbreak investigation and control activities in Niger and Burkina Faso. These efforts resulted in recommendations for improved surveillance and control activities and showed that measles mortality rates in an outbreak may be higher than previously expected.

WHAT ARE THE NEXT STEPS?

In 2004, CDC and its partners will continue to apply current measles control strategies to maintain elimination of measles in the Western Hemisphere. CDC will promote PAHO strategies in Africa and other regions to reduce mortality from measles and to stop endemic measles transmission in WHO regions with a measles elimination goal.

For additional information on this or other CDC programs, visit www.cdc.gov/program

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