

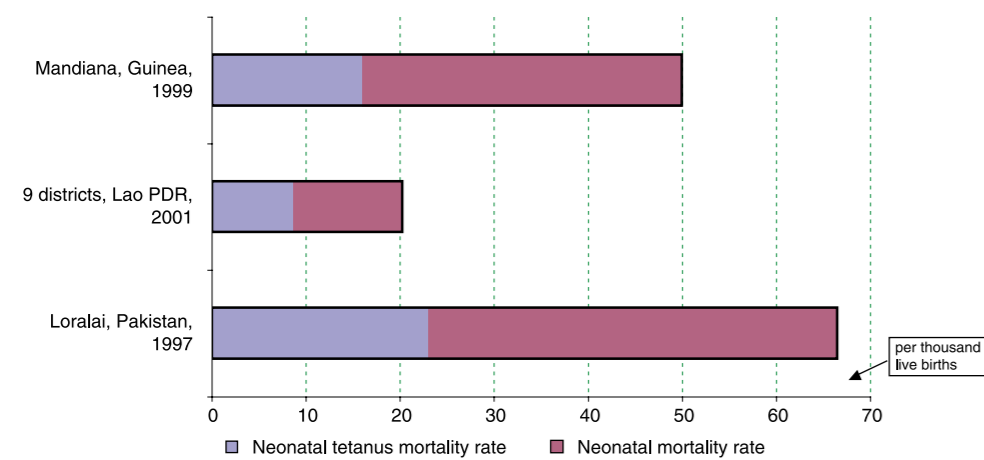
IMPROVING EQUITY BY ELIMINATING MATERNAL AND NEONATAL TETANUS

Neonatal tetanus is a marker of poverty and health-care inequity: Two thirds of the world's neonatal tetanus cases are in the poorest and least developed countries. The great majority of the countries that have yet to eliminate maternal and neonatal tetanus also rank among the 50 poorest countries on earth. Within these countries, past progress in vaccination coverage has driven the disease out of many districts, leaving it concentrated in small geographic areas within the poorest districts.

Maternal and neonatal tetanus are most prevalent among the extremely poor. Conducting anti-tetanus campaigns for this traditionally underserved population within the 'high-risk' approach – i.e. expanding routine immunization activities, outreach services and disease surveillance – has the added benefit of improving equity in access to health care.

In districts where tetanus remains a public health problem, the disease can be a major cause of newborn deaths. Neonatal tetanus was responsible for 42 per cent of the neonatal deaths in nine high-risk districts in the Lao People's Democratic Republic in 2001. In Guinea, a study found neonatal tetanus caused 32 per cent of all neonatal deaths in 1999 and was by far the most common cause of death among children younger than one month. The disease caused 36 per cent of all newborn deaths in 1996 in the urban slums of Lucknow, India. These examples illustrate the fact that any reduction or elimination of neonatal tetanus mortality can have a major impact on overall newborn mortality, particularly in high-risk countries.

NEONATAL TETANUS DEATHS ACCOUNT FOR A SUBSTANTIAL PROPORTION OF OVERALL NEONATAL MORTALITY



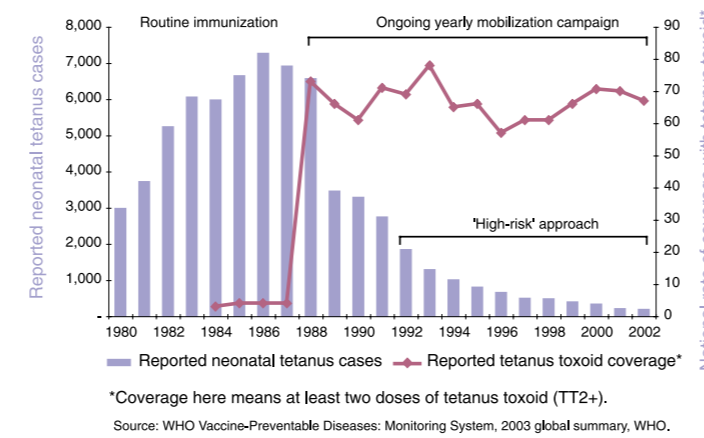
Sources: Guinea: Shumacher, R. et al., Mortality Study in Guinea: Investigating the causes of death in children under 5. Save the Children and BASICS II Project, Virginia, 2002; Lao PDR: Weekly Epidemiological Record, vol. 77, No. 33, WHO, 2002, pp. 277-280; Pakistan: Qudus, A., et al., 'Neonatal Tetanus: Mortality rate and risk factors in Loralai District, Pakistan', International Journal of Epidemiology, vol. 31, 2002, pp. 648-653.

SUCCESS STORIES

Bangladesh

One of many success stories is that of Bangladesh, where intensified immunization activities raised the proportion of women immunized against tetanus from 4 per cent in 1986 to 90 per cent in 2001. Over the same period, the number of newborns dying of neonatal tetanus each year fell from about 40 per 1,000 live births to about 3 per 1,000 live births. Today in Bangladesh, some 12,000 newborn babies die each year from neonatal tetanus, compared with about 100,000 in the early 1980s.

EGYPT'S SUCCESSFUL USE OF THE 'HIGH-RISK' APPROACH

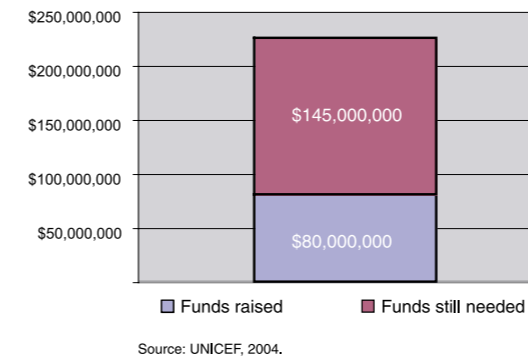


*Coverage here means at least two doses of tetanus toxoid (TT2+).
Source: WHO Vaccine-Preventable Diseases: Monitoring System, 2003 global summary, WHO.

Morocco

In Morocco, thanks to an anti-tetanus drive carried out between 1987 and 1992, the proportion of women of childbearing age immunized against tetanus rose from 32 per cent to 75 per cent. As a result, the number of neonatal tetanus cases dropped significantly. Before the drive, tetanus was responsible for 20 per cent of neonatal deaths. It caused only 2 per cent of neonatal deaths after the drive. A 2002 survey found that the neonatal tetanus mortality rate had fallen to less than 1 death per 1,000 live births in all districts, signifying that Morocco had effectively eliminated the disease.

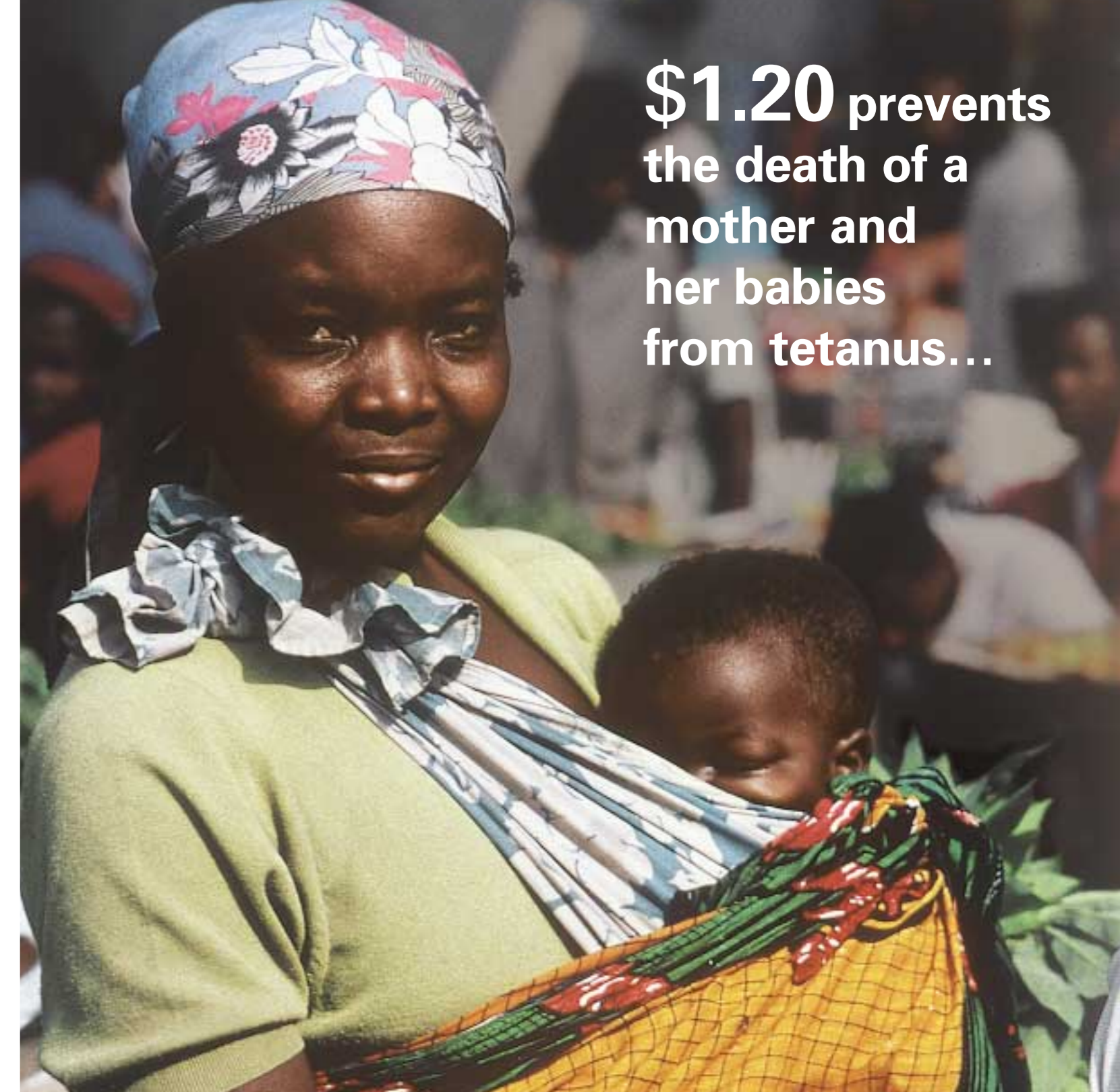
MATERNAL AND NEONATAL TETANUS FUNDING STATUS (AS OF MARCH 2004)



Source: UNICEF, 2004.

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June 2004



\$1.20 prevents the death of a mother and her babies from tetanus...

ELIMINATING MATERNAL AND NEONATAL TETANUS

For every child
Health, Education, Equality, Protection
ADVANCE HUMANITY



A GLOBAL INITIATIVE...

Why do we allow 180,000 infants and 30,000 women to die in pain every year from tetanus when a mere \$1.20 buys protection for a mother and her future babies?

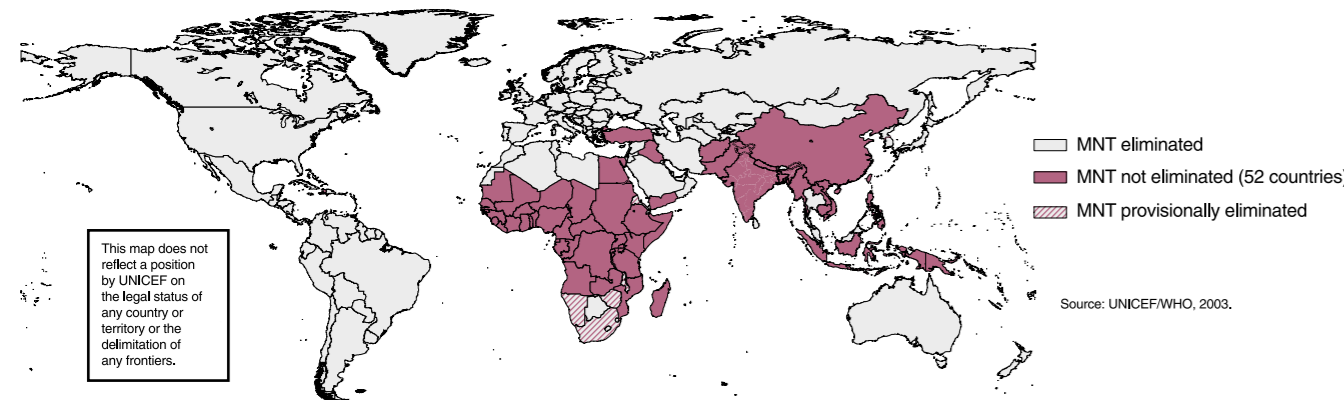
Tetanus is caused by the spores of *Clostridium tetani*, a bacterium that lives on dead or decaying matter and is present worldwide. For babies born in unhygienic or otherwise unsafe conditions, tetanus spores can enter the umbilical cord stump, causing the violent spasms and stiffness that are characteristic of neonatal tetanus and fatal in more than 70 per cent of cases. In adults, tetanus generally enters through an open wound or even a tiny pinprick. Women may be infected during deliveries carried out in unhygienic conditions. But the disease can easily be prevented. In the case of neonatal and maternal tetanus, prevention lies in immunizing the mother and in conducting deliveries in hygienic conditions.

Since the World Health Organization (WHO) called for global elimination of the disease in 1989, substantial progress has been made. The number of neonatal tetanus deaths has decreased from 800,000 worldwide in the 1980s to 180,000 in 2002, most of these in just 52 countries. In addition, maternal tetanus causes up to an estimated 30,000 deaths annually.

An effective strategy: The 'high-risk' approach

The remarkable reduction in the number of cases and deaths from tetanus is partly due to improvements in the conditions under which deliveries take place, particularly in developing countries, as well as improved immunization coverage of pregnant women. In addition, a focused approach to extending immunization coverage has been very effective in protecting mothers and children who are typically at highest risk. Dubbed the 'high-risk' approach, it calls for supplemental immunization activities in specific geographic areas where routine immunization is lacking or inadequate. Over a twelve-month period, three doses of tetanus vaccine are administered to all women of childbearing age living in high-risk districts – that is, districts that lack skilled health professionals, where facilities offering immunization and clean delivery are scarce or non-existent, and where neonatal tetanus is prevalent (i.e., with more than 1 case per 1,000 live births). Elimination of the disease is sustained by improving routine immunization in these districts and launching outreach services and disease surveillance, while also promoting clean deliveries.

PROGRESS IN THE ELIMINATION OF MATERNAL AND NEONATAL TETANUS



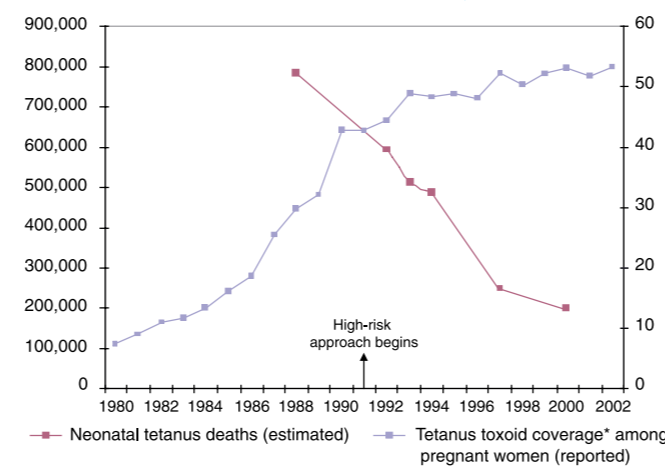
In 1995, maternal and neonatal tetanus was not yet eliminated in 82 countries. By the end of 2003, the number had fallen to 52.

...WITH TANGIBLE RESULTS...

After the high-risk approach was deployed in Latin America and the Caribbean in 1992, the number of reported neonatal tetanus cases in the region fell more than 30 per cent in just three years. From 1992 to 2002 the number fell by more than 85 per cent. The disease is now considered to be eliminated in the entire Americas region, except Haiti. 'Elimination' is defined as less than 1 case of neonatal tetanus per 1,000 live births in every single district of a country.

Globally, the initiative has seen a surge in activities and impressive progress in recent years. Through the use of the high-risk approach, 33.8 million women at high risk were protected with at least two doses of tetanus vaccine between 1999 and 2003. This has resulted in the prevention of over 20,000 neonatal tetanus deaths annually. Now, only 52 countries have yet to eliminate maternal and neonatal tetanus.

TETANUS TOXOID COVERAGE* AND NEONATAL TETANUS DEATHS, 1980-2002

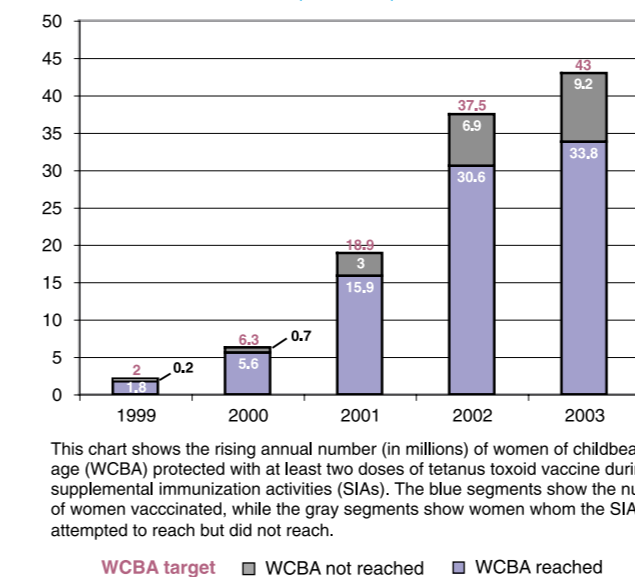


*Data here reflect reported coverage with at least two doses of tetanus toxoid vaccine (TT2+).
 Sources: For neonatal tetanus deaths, World Health Organization estimates. For tetanus toxoid coverage (TT2+), WHO Vaccine-Preventable Diseases: Monitoring System: 2003 global summary, WHO.

Egypt achieved a dramatic reduction in neonatal tetanus cases in the late 1980s, when it scaled up its immunization activities targeting pregnant women with yearly mobilization campaigns. But progress began to slow by 1991. When the high-risk approach was deployed from 1992 onward, the pace of progress picked up again, with the number of reported neonatal tetanus cases falling nearly tenfold by 2002.

It costs on average only \$1.20 to immunize a woman with three doses of tetanus toxoid vaccine, protecting not only her but also any babies born to her for up to 10 years. The total 'cost per death averted', an indicator taken into consideration by development economists when comparing alternative policy options, can be as low as \$94.00, depending on local circumstances, incidence of neonatal tetanus, level of routine tetanus immunization coverage and local logistical costs. The total cost per disability-adjusted life year (DALY), another costing indicator, can be as low as \$3.00.

PROGRESS IN PROTECTING WOMEN AT RISK FROM TETANUS (in millions)



This chart shows the rising annual number (in millions) of women of childbearing age (WCBA) protected with at least two doses of tetanus toxoid vaccine during supplemental immunization activities (SIAs). The blue segments show the number of women vaccinated, while the gray segments show women whom the SIAs attempted to reach but did not reach.

Source: WHO, January 2004.

...THANKS TO A GLOBAL PARTNERSHIP.

A global partnership was launched in 1999 by UNICEF, WHO and the United Nations Population Fund and has been joined by many partners committed to achieving the elimination of maternal and neonatal tetanus.

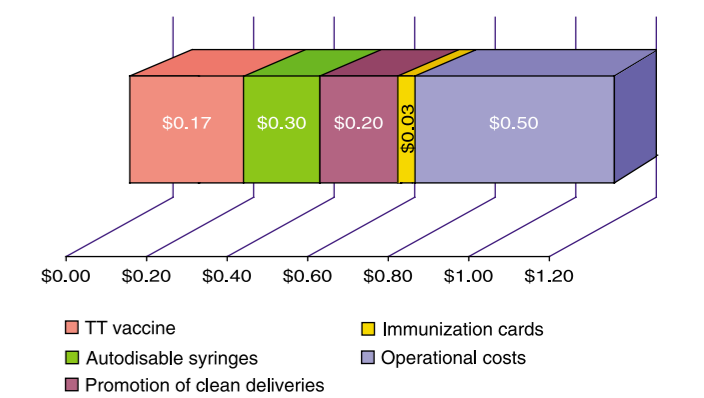
MAJOR IMPLEMENTING PARTNERS IN THE GLOBAL EFFORT TO ELIMINATE MATERNAL AND NEONATAL TETANUS

- Centers for Disease Control and Prevention (United States)
- Program for Appropriate Technology in Health
- Save the Children
- United Nations Children's Fund
- United Nations Population Fund
- United States Agency for International Development
- World Health Organization

Over the last four years, \$80 million has been raised for planning and implementing anti-tetanus activities in 29 countries.

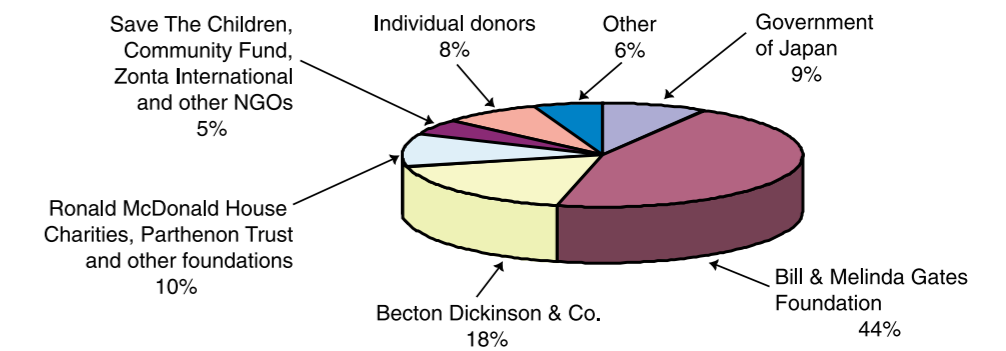
But to protect women not yet reached and to achieve the global goal of eliminating maternal and neonatal tetanus, another \$145 million is still needed. This amount will complement funding contributed to the initiative by developing countries themselves.

AVERAGE COST* TO IMMUNIZE ONE WOMAN AGAINST TETANUS: \$1.20



*This is the average cost, in US dollars for three doses of tetanus toxoid, administered as part of a typical supplemental immunization programme.
 Source: WHO/UNICEF, 2003.

\$80 MILLION HAS BEEN RAISED FOR THE ELIMINATION OF MATERNAL AND NEONATAL TETANUS (As of March 2004)



The majority of this funding has been secured with support from the United States Fund for UNICEF, the United Kingdom Committee for UNICEF and other National Committees for UNICEF.

Sources: UNICEF and the US Fund for UNICEF, 2004.