

MATERNAL & PERINATAL CONDITIONS

Integrated Management of Pregnancy and Childbirth (IMPAC)

This low-cost strategy, based on WHO's Mother-Baby Package, which costs no more than US\$ 3 a year per capita in low-income countries, is designed to prevent maternal and infant deaths and the often lifelong disability due to complications of pregnancy and childbirth.

The strategy involves ensuring access to:

- antenatal care
- normal delivery care assisted by a skilled birth attendant
- treatment for complications of pregnancy (including haemorrhage, obstructed labour, eclampsia, sepsis, abortion complications)
- neonatal care
- family planning advice
- management of sexually transmitted infections.

Every year, about half a million women worldwide die from complications of pregnancy and childbirth – mainly severe bleeding, infections, unsafe abortions, hypertension, and obstructed labour. More than 90% of these deaths occur in Asia and sub-Saharan Africa. And most of them could be prevented at low cost.

In addition, over 50 million women suffer from acute pregnancy-related conditions – over a third of them with long-term, painful, and often distressing conditions that will affect them for the rest of their lives. They include permanent incon-

tinence, chronic pain, nerve and muscle damage, and infertility.

Meanwhile, perinatal conditions are the major cause of death among children under five – accounting for more than one in five deaths. Of these, over 3 million die during the first week of life. Most deaths are the result of poor maternal health and nutrition, inadequate care during pregnancy and delivery, lack of essential care for the newborn baby, infections, birth injury, asphyxia, and problems relating to premature births.

Sri Lanka reduces maternal deaths

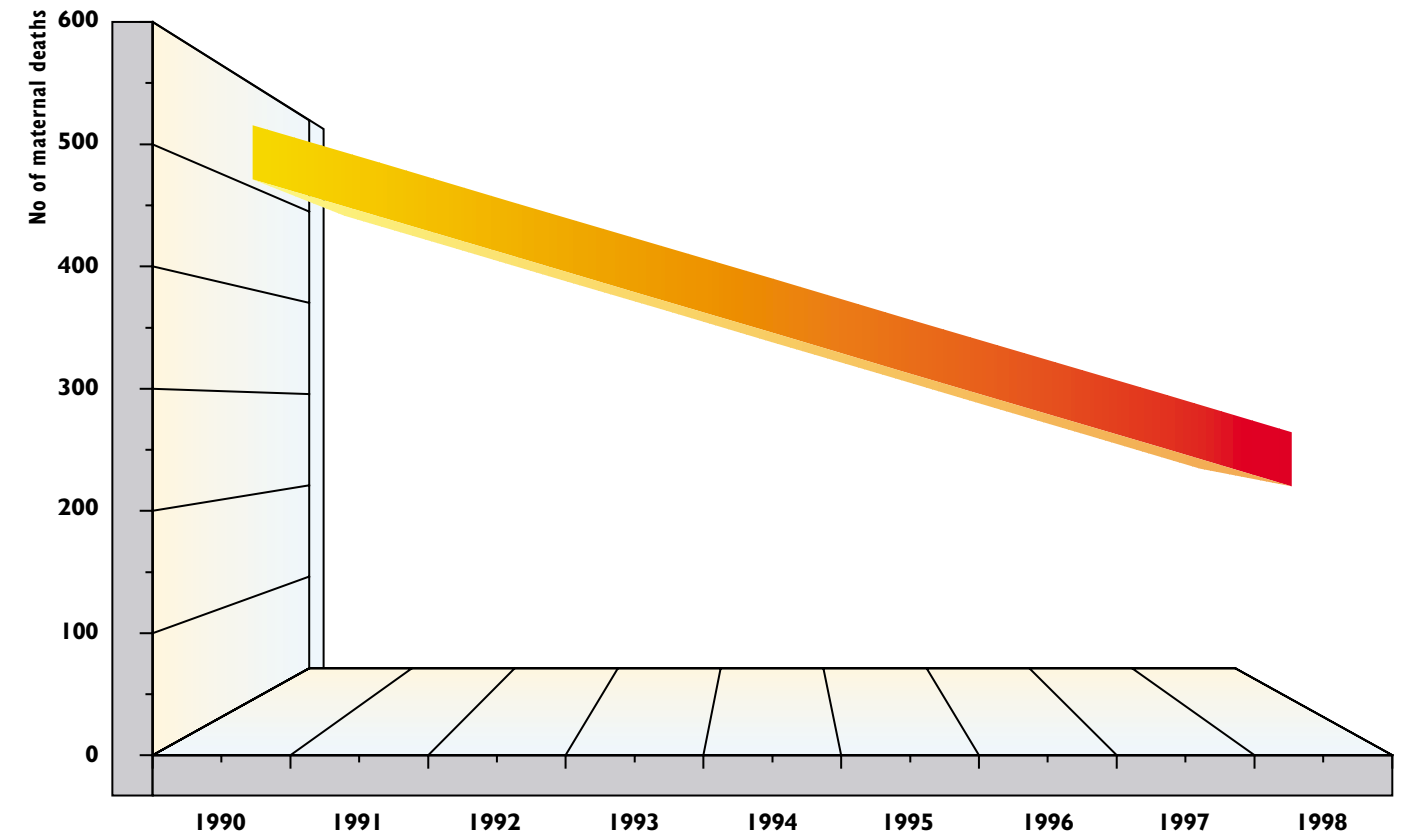
In Sri Lanka, where a third of the population are estimated to live below the national poverty line, maternal mortality ratios are among the lowest in the developing world. Most deliveries take place in a health facility, with the support of a skilled birth attendant. This achievement is the result of government commitment to improving education and health care in Sri Lanka, the relatively high status of women, and high female literacy rates.

IN MANY DEVELOPING COUNTRIES, women still do not have access to good antenatal care or adequate nutrition during pregnancy. Only about half of all deliveries are assisted by a skilled birth attendant (a doctor, midwife, nurse or community worker with midwifery training) – one of the key requisites for safe motherhood. Every year, 60 million births take place in which the mother is helped by a family member or an untrained traditional birth attendant – or gives birth alone. The problem is often compounded by poor follow-up care for both mother and baby and by a lack of family planning services to ensure that any future births are well spaced. WHO estimates that providing this minimum level of care – the so-called Mother-Baby Package – would cost about US\$ 3 per person each year in low-income countries.

In the midst of this casual disregard for the human rights and well-being of millions of women in developing countries, Sri Lanka is one country that stands out for its long-term commitment to safe motherhood. Infection rates have been reduced and the maternal mortality ratio is one of the lowest in the developing world at 60 per 100 000 live births. Since 1990, the number of maternal deaths has been halved from 520 to 250 in 1998.

Today, over 96% of deliveries in Sri Lanka are attended by a skilled birth attendant and over 90% take place in a health facility – with a referral system in place to ensure transport to one of 45 hospitals if complications occur. All first pregnancies and high-risk pregnancies are referred to

The Safe Motherhood Initiative reduces maternal deaths in Sri Lanka



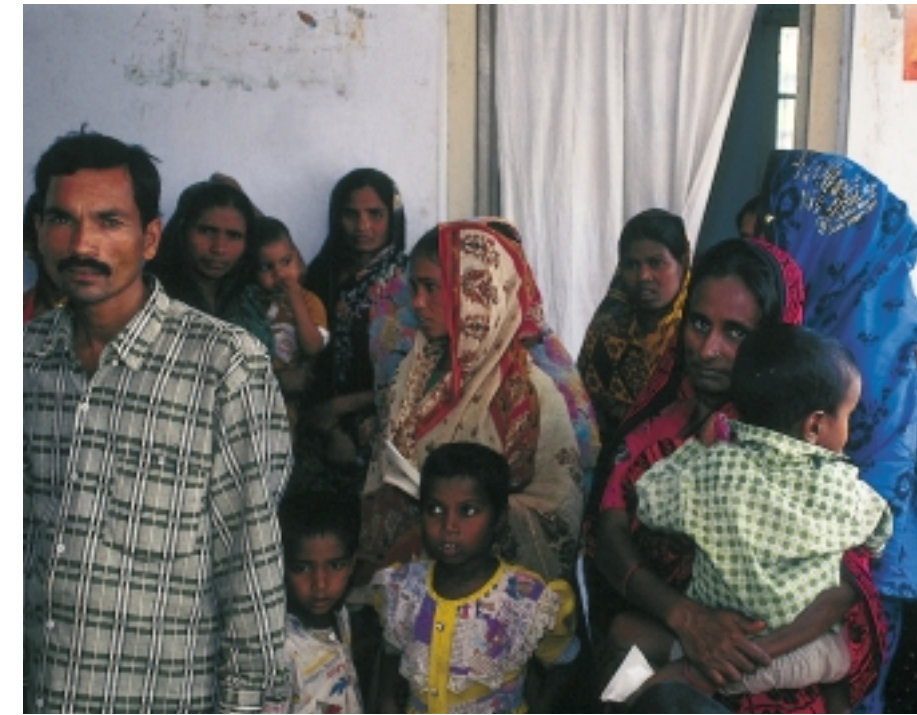
Source: FCH/RHR/WHO



health facilities with obstetricians. And a network of community midwives provides antenatal care for about 75% of women throughout their pregnancy.

Yet Sri Lanka is not a rich country. In 1998, its GDP was only US\$ 802 per capita and more than a third of the population were estimated to be living below the national poverty line. By comparison, in Côte d'Ivoire, with a slightly higher GDP of US\$ 823, maternal mortality ratios are ten times higher.

Sri Lanka's success in preventing maternal deaths has been achieved against a backdrop of government commitment to improving education and health care. Over 93% of people today have access to basic health care. Health services are provided free of charge – although over 50% of people use the private sector – and few people are more than 1.4 km from the nearest health centre. Maternal and child health services are available at community level as part of integrated reproductive health services. Contraception is used by over 60% of



married women – allowing them to space pregnancies and limit family size. This has also helped reduce maternal deaths.

Another driving force today is the education and relatively high status of women. Adult literacy rates among women are 88% and girls have access to free education up to university level. As a result, there has been an increase in the age of marriage – to 25 in 1993 – and women are better able to take advantage of family planning and maternal health services.

However, continuing efforts will be needed to reach the small percentage of women in Sri Lanka who still do not have access to good maternal health care. Of the 5% of women who give birth at home, not all have access to a skilled birth attendant. And maternal death ratios are far higher in the north of the country due to the ongoing civil conflict and poor living conditions. Elsewhere, unsafe abortions account for an estimated 5%-9% of maternal deaths each year.

Mekong countries join hands in preventing HIV transmission to children

In Thailand, a programme to reduce mother-to-child transmission of HIV has helped in halving the number of young children infected in this way. Today Thailand is providing technical assistance to other countries in the Mekong region to help them achieve similar results.



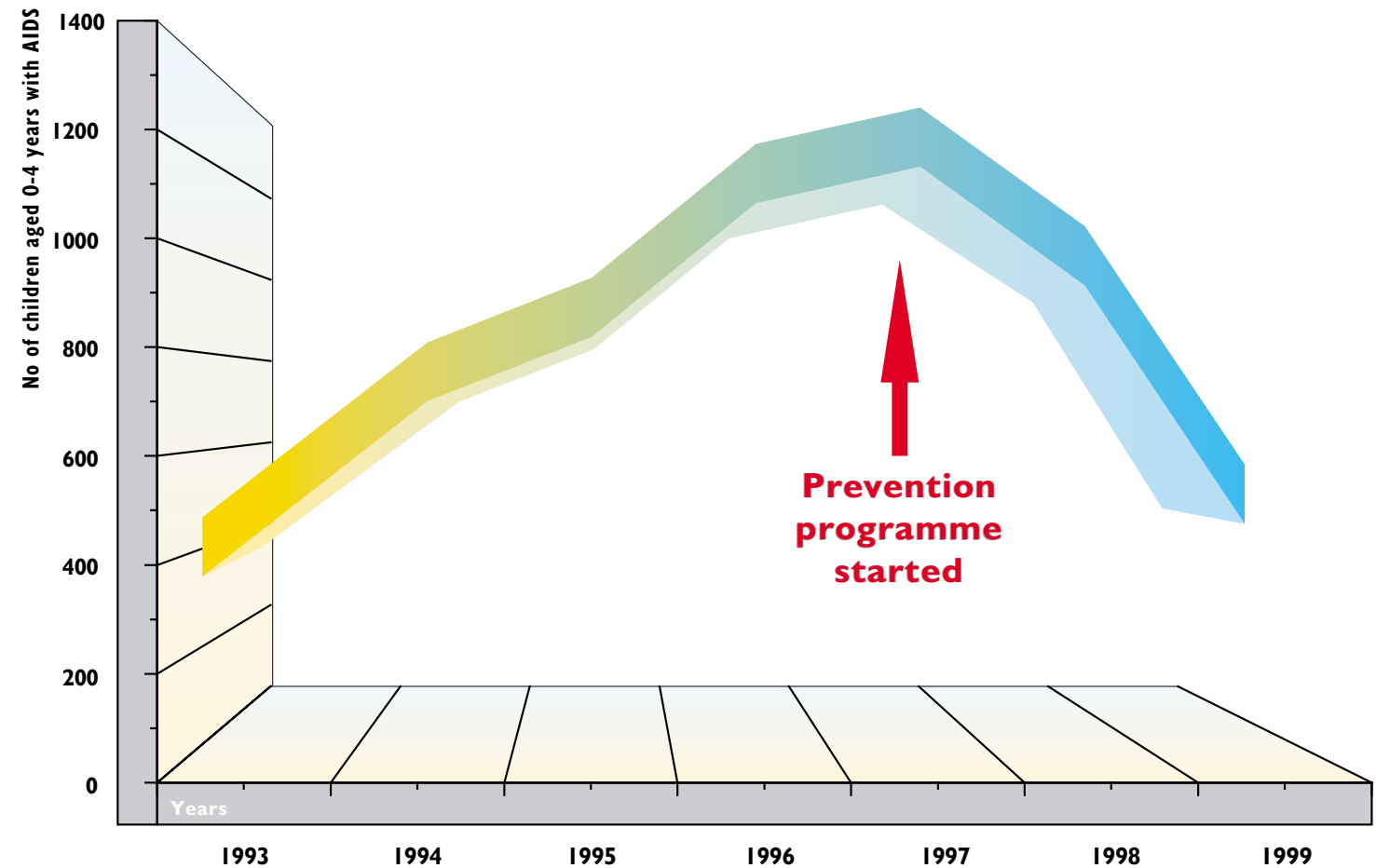
IN THAILAND, concerted efforts to reduce the rate of mother-to-child transmission of HIV have helped in achieving a 50% reduction in the number of children under four infected with the virus.

Launched in 1997, the programme includes voluntary counselling and testing for women attending antenatal care, a short course of anti-retroviral drugs during pregnancy for women found to be HIV-positive, and subsidies for breast-milk substitutes for one year. By 1999, the number of children under four years old infected during pregnancy, at birth, or through breastfeeding had been halved – from over 1200 in 1997 to 600 in 1999.

Mother-to-child transmission of HIV is today a high priority in East Asia, due to the rapid spread of HIV/AIDS, especially among women of reproductive age. In Thailand, where the government launched broad-based efforts to halt the spread of HIV, less than 2% of pregnant women are infected with HIV. In Myanmar, a study in early 1999 found that 2.6% of pregnant women were HIV-positive – with as many as 10%-13% of women testing positive at some test sites.

Today, Thailand is sharing technical assistance and expertise with Myanmar, Cambodia, and other countries in an effort to reduce mother-to-child transmission of HIV throughout the region. Rapid and flexible tools for assessing HIV transmission to children have been developed.

Thailand reduces mother-to-child transmission of HIV



Source: Ministry of Health, Thailand



Results from these assessments in various countries have underlined the critical importance of continuing primary prevention of HIV in women and men, and the need to strengthen community-based efforts to care for and support individuals and families affected by HIV/AIDS. The Thailand success story has also shown that these efforts must involve all levels and sectors of government as well as communities.

With assistance from Thailand, a bold programme is being developed in Myanmar to halt mother-to-child transmission of HIV. The programme will include training health workers in prevention issues, encouraging voluntary counselling and confidential testing, supporting the use of anti-retroviral drugs, assisting mothers in making the best choices for infant feeding, promotion of birth spacing, and strengthening existing health care for mothers and infants. The programme will involve working in partnership with NGOs and community-based organizations to provide care and support for people affected by HIV/AIDS. All of these activities will take place within the overall framework of HIV/AIDS prevention nationwide.

In Myanmar, some of this work has already begun. A working group has developed voluntary-counselling training manuals for health care providers, NGOs, and community leaders. And by the end of 2000, 120 participants – including health staff, NGO representatives, and community and religious lead-

ers – from the three pilot townships will have been trained in various aspects of preventing mother-to-child transmission of HIV.

The Thailand experience also highlighted the importance of complementing technical efforts for prevention of mother-to-child transmission of HIV with a social mobilization campaign. A social mobilization campaign has been launched in the pilot townships, which addresses the key role of families, communities, and religious leaders in building support for HIV prevention efforts. The campaign will focus on the need to encourage pregnant women to make better use of antenatal facilities, including services to prevent mother-to-child transmission of HIV, and to support mothers in making informed choices about infant feeding. Meanwhile, continuing efforts will also be needed to reduce the social stigma associated with HIV/AIDS and to provide assistance to people living with HIV.



Bangladesh reduces neonatal tetanus death rates by 90%

In Bangladesh, where most women still do not have access to a clean birth or skilled birth attendant, death rates for neonatal tetanus have been reduced by over 90% in just over a decade. Government commitment and support from a range of partnerships have led to a massive increase in tetanus toxoid immunization coverage among women of childbearing age, ensuring that both mothers and babies are protected against tetanus infection.

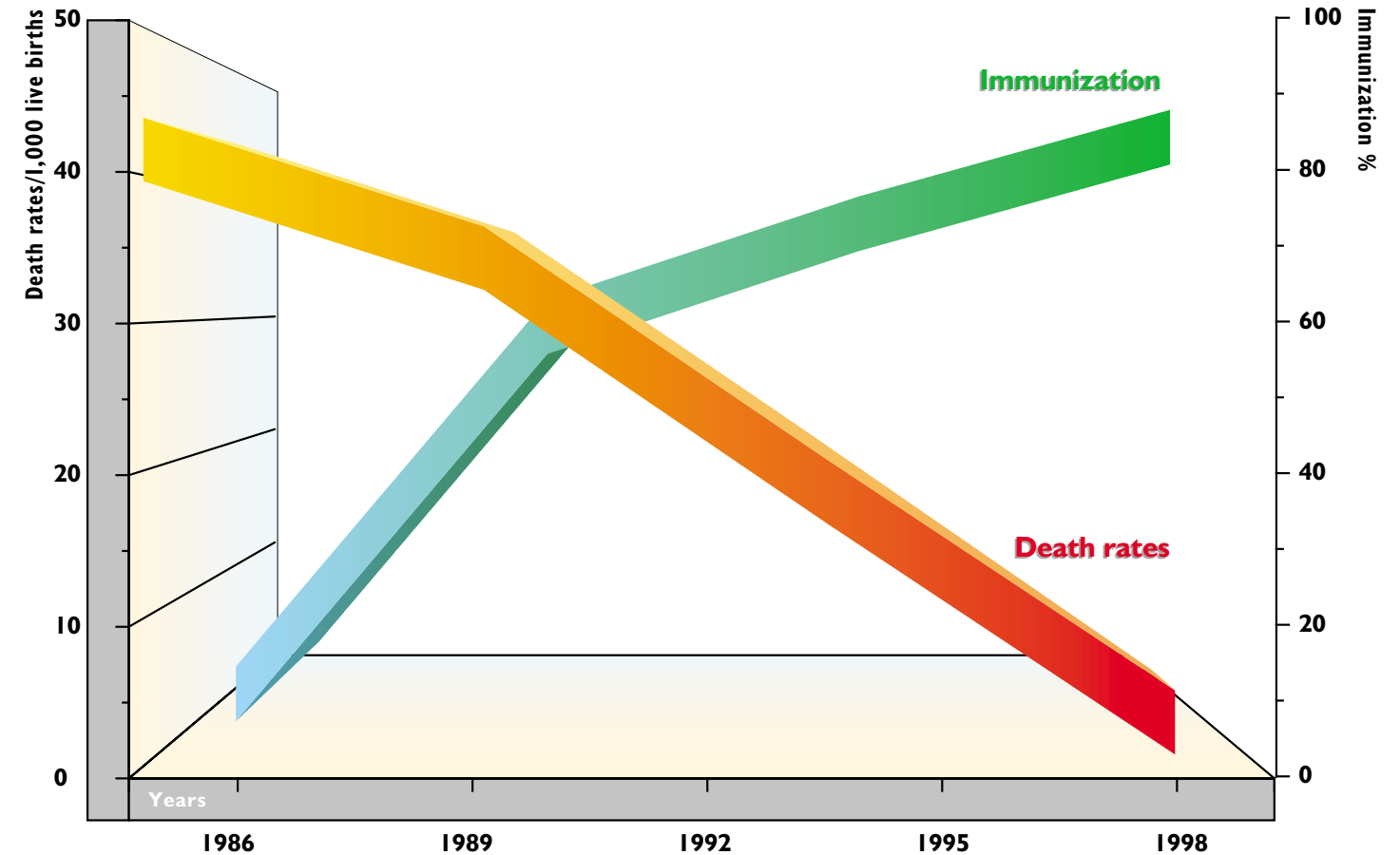
DURING 1998, ABOUT 215 000 BABIES WORLDWIDE died from neonatal tetanus infections. The disease strikes during the first few days or weeks of life when babies are most vulnerable to infection. Their short and painful lives often go unrecorded – neither the birth nor death officially registered. Infection usually starts because the umbilical cord stump has been exposed to dirt containing tetanus spores – through dirty hands or the use of a soiled implement to cut the cord.

Neonatal tetanus has been eliminated today in over 100 countries – through ensuring that women are immunized with tetanus toxoid during pregnancy and that they have access to a safe birth. The aim is twofold: to protect women against tetanus infection during pregnancy – which today accounts for 30 000 deaths worldwide – and to ensure that mothers pass this immunity to their unborn child. In this way, babies are protected against tetanus during the first two months of life, up to the age when they themselves can be immunized against the disease.

Tetanus toxoid is one of the cheapest, safest, and most effective vaccines. It costs about US\$ 1.20 on average to protect a mother and her newborn babies against tetanus infection – a sum that includes the purchase and delivery costs of three doses of vaccine as well as efforts to promote clean births. Yet in some of the poorest countries in the world less than one in three women of childbearing age have been immunized.

In Bangladesh, one of the world's least developed countries, over 80% of women give birth without any help from

Immunization against tetanus reduces mother & child deaths in Bangladesh



Source: EPI/WHO



a skilled birth attendant. Most deliveries take place at home, often in conditions of very poor hygiene – placing the lives of both mother and child at risk. An added problem in Bangladesh, especially in rural areas, is the traditional practice of using home-made ghee (clarified butter) to “heal” the umbilical stump. Yet despite this unpromising start to life, death rates for neonatal tetanus in newborn babies have been reduced by over 90% in Bangladesh in little more than a decade.

The turnaround is the result of mass immunization campaigns to protect women of childbearing age against tetanus infection. Nationwide efforts to increase coverage with tetanus toxoid vaccine have boosted immunization rates from 5% in 1986 to 86% by 1998.

In the mid-1980s, Bangladesh had one of the highest rates of neonatal tetanus in the world: 41 cases for every 1000 live births. Only 5% of women of childbearing age were immunized with tetanus toxoid and only 5% of pregnant women had access to a clean birth. Not surprisingly, neonatal tetanus accounted for one in four infant deaths.

Since then, the Bangladesh Government has orchestrated a nationwide effort to immunize all women of childbearing age with tetanus toxoid. With support from a consortium of partners including UNICEF, USAID, and WHO, thousands of vaccinators have been trained and a cold chain system established to ensure the safe storage and transport of vaccine. Vaccinators have used every means of transport at their disposal – including rickshaws, boats, and bikes – to ensure that supplies of vaccine are available even in the remotest areas.



In the early 1990s, there were fears that progress would be stalled when an inspection of local manufacture of tetanus toxoid revealed that the vaccine was sub-potent. The government responded by temporarily increasing imports of tetanus toxoid from outside suppliers and overhauled local vaccine production with support from the Finnish Government – ensuring that local production conformed to good manufacturing practices. A survey carried out two years later revealed that neonatal deaths rates were still on a downward trend.

Today, Bangladesh has succeeded in reducing death rates from 41 for every 1000 live births in 1986 to only 4 per 1000 by 1998. And in a final push to reach the WHO global target for elimination of neonatal tetanus – less than one neonatal tetanus death per 1000 live births in every district in every country – the focus has now switched to women in the highest-risk areas. In the latest round of this campaign in August 2000, up to 3 million women were targeted in high-risk areas. Contingency plans to use boats to reach and vaccinate women in areas cut off by the seasonal monsoon weather were not needed when the women regrouped to settle temporarily on dry land, making mass immunization a lot easier.

Even when the elimination target has been reached in Bangladesh, routine immunization and disease surveillance will have to continue, together with efforts to promote safe births. Unlike polio, maternal and neonatal tetanus can never be eradicated since the tetanus spores that cause the disease will persist in the environment.

