**Mother-to-child transmission of HIV**

The transmission of HIV from mother to child is responsible for over 90% of infections among children under the age of 15. The effects are dramatic. AIDS is beginning to reverse decades of steady progress in child survival. But effective and feasible interventions to reduce mother-to-child transmission are now available and could save the lives of 300,000 children each year.

### Children at risk

- In 2000 alone, an estimated 600,000 infants acquired HIV—over 90% of them through mother-to-child transmission (MTCT). About 90% of those infections occurred in sub-Saharan Africa.

- HIV can be transmitted to an infant during pregnancy, labour and delivery or breastfeeding. The risk of transmission varies between 15% and 30% among infants who are not breastfed. Breastfeeding increases the risk of transmission by 10-20%. In breastfeeding populations, roughly 20% of infants carry the virus are infected during pregnancy, about 50% become infected during labour and delivery, and 30% during breastfeeding.

- Mother-to-child transmission in the developed world has been virtually eliminated thanks to effective voluntary counselling and testing, access to combination antiretroviral therapy or use of long-term regimens of MTCT prevention, safe delivery practices (including elective caesarean sections), and the widespread availability of breast milk substitutes.

### Preventing infection

- A three-fold strategy is needed in order to prevent MTCT. It requires that women be protected against infection, and that unwanted pregnancies be avoided among HIV-infected women and women at risk. It also entails preventing transmission of the virus from HIV-infected women to their infants during pregnancy, labour and delivery, as well as during breastfeeding. Voluntary counselling and testing are an essential part of the strategy.

- It is clear that short-term antiretroviral prophylactic treatment is an effective and feasible method of preventing MTCT. When combined with infant feeding counselling and support, and the use of safer infant feeding methods, it can halve the risk of infant infection.

- These regimens are mainly based on the use of nevirapine or zidovudine. Nevirapine is administered in one dose to the mother at delivery, and in one dose to the child within 72 hours of birth. A typical short-course zidovudine regimen is administered daily to the mother from the 36th week of pregnancy up to and during delivery. MTCT programmes supported by a United Nations Inter-Agency
Task Team provide these drug regimens free of charge. In 2000, the manufacturers of nevirapine, in partnership with the United Nations system, offered the drug free of charge to developing countries for a period of five years.

- Most HIV-infected women live in deprived conditions and lack access to clean water and sanitation. This limits their ability to employ safe breast milk substitutes. Research on how to make breastfeeding safer is a high priority. Results from one study suggest that exclusively breastfed children are less likely to acquire HIV than those receiving breast milk and other foods. But these results need to be confirmed in other settings. Meanwhile, studies are under way to determine whether antiretroviral drugs provided to a mother or infant during the breastfeeding period can prevent HIV transmission.

Major challenges remain

- There is a need for greater awareness of the facts that HIV can pass from an infected mother to her child, and that measures exist to reduce the risk of transmission.
- Access to voluntary counselling and testing must be improved.
- The reluctance of many women to be tested for HIV infection must be addressed. That unwillingness is often a response to stigma and is associated with women's concern that they will be deprived of social or medical support if found to be infected.
- Reproductive health services remain inadequate and must be bolstered if they are to accommodate MTCT prevention programmes.
- Women's access to antenatal and delivery care should be improved. Safer breastfeeding options should also be developed.
- Ultimately, if infants are to be better protected from the virus, women's vulnerability to HIV infection must be reduced. Such an approach should include HIV-negative women who are pregnant and lactating, in order to protect them and children they may subsequently have.
- The focus should always be on women themselves, regardless of their HIV status, rather than on the women's potential for transmitting the virus to their infants.

Building on successes

- The UN Inter-Agency Task Team on MTCT is supporting an ongoing programme to prevent mother-to-child transmission. The programme, which is being enlarged, currently includes projects in Burundi, Botswana, Côte d'Ivoire, Kenya, Rwanda, Uganda, the United Republic of Tanzania, Zambia, Zimbabwe, Honduras and Cambodia.
- By the end of 2000, the Team's projects had already served about 81,000 pregnant women, two-thirds of whom had been counselled and tested for HIV. A third of those found to be HIV-positive were provided with antiretroviral regimens and were counselled on safer infant feeding practices. While some projects are still in their early stages, the experience gained in countries such as Brazil, Thailand, Barbados and the Bahamas shows that MTCT prevention programmes can and should be scaled up to achieve national coverage.