All women, whether they are HIV positive or not, should be offered good care and support through their labour and delivery. For women who are known to be HIV positive however, there may be additional types of care or treatment available which can help to reduce the risk of mother-to-child HIV transmission. Health workers have no reason to be afraid of looking after HIV-positive women. Universal precautions for infection control should be used for all deliveries, whatever the woman’s HIV status, and if used properly, will minimise the risk of HIV infection for the health worker during the delivery (see Section 6, page 17).

Many women do not know their HIV status, so the following advice on care during labour and delivery should be followed for all women. However, interventions specifically for HIV-positive women, such as ARV therapy (where it is available), will only be possible where women can find out their status and have access to confidential voluntary counselling and testing (see Section 3, pages 7-9).

**General care during labour**

**Keep the skin intact** Avoid, as far as possible, all practices that break the baby’s skin or increase the baby’s contact with the mother’s blood, for example, episiotomy and fetal scalp electrodes (for listening to the baby’s heart beat).

**Keep the membranes intact** The risk of HIV being transmitted to the baby increases after the membranes have been ruptured (‘waters broken’) for more than four hours. It follows that it is better if the health worker does not rupture the membranes (‘break the waters’) unless there is a very good reason for doing so, as this opens up a route for HIV and other infections to reach the baby.

It is already known that it is better not to do more vaginal examinations during labour than absolutely necessary, and this is even more important when the membranes have ruptured, as it increases the risk of infection to the mother and baby. The risk of transmitting infections may be reduced by washing the vagina (see box).

**Elective caesarean section**

If the baby is delivering by elective caesarean section (a planned caesarean delivery which is done before labour begins), the risk of HIV transmission is reduced by half. In resource-rich settings, elective caesarean section is becoming a routine part of care for HIV-positive women.

However, the situation is very different in many parts of sub-Saharan Africa. In resource-poor settings, the risks of serious complications after a caesarean delivery may outweigh the potential benefits. This is particularly true for HIV-positive women who are more vulnerable to other infections and whose wounds may be slow to heal. All women who have a caesarean delivery should be given antibiotics to prevent infection, whether they are HIV-positive or not.

**Antiretroviral therapy (ARV)**

Antiretroviral therapy (ARV) is one of the most effective ways of reducing the risk of mother to-child transmission, but it is also the most expensive. The drugs work by reducing the viral load in the mother, making it less likely that she will pass on HIV to her baby.

Several different regimens for short courses of ARV drug treatment to reduce mother-to-child transmission during pregnancy and delivery have been studied, and these are summarised in the table on page 11. Further research is needed to find out whether longer treatment of infants following delivery can prevent transmission, whether mothers breastfeed and not.

Decisions on the appropriate drugs to use will be made by health planners and policy makers according to which is the most affordable and cost-effective option. The most recent research does suggest, however, that single-dose nevirapine given to the woman at the onset of labour and then to the baby, may offer the most affordable option for many countries. For example, in order to treat all HIV-positive pregnant women in Uganda, the costs for nevirapine would be US$640,000 per year while for zidovudine the cost would be US$21,450,000.

**WASHING THE VAGINA**

Known as ‘vaginal lavage’, this technique consists of cleaning inside the vagina with a disinfectant such as chlorhexidine hydrochloride shortly before the baby is born (when the woman begins to push). Research shows that vaginal lavage reduces the risk of HIV transmission to the baby when the membranes have been ruptured for more than four hours, but not in other cases. It also seems to reduce other types of infection in the baby. More research is being done on this at the moment.