Forty per cent of HIV-infected children die before they reach their first year of life, mainly in the first 6 months. Data from the Children with HIV Early Antiretroviral Therapy (CHER) study indicate that even when infants appear well and their CD4 counts are >25% there is a 75% increased risk of mortality when antiretroviral therapy (ART) is deferred until threshold CD4 depletion occurs or clinical criteria are met. Even after starting ART, young infants have excess mortality within the first year of life. Every effort should therefore be made to identify HIV-infected infants as early as possible so that ART can be initiated without delay.

EARLY DIAGNOSIS

Owing to the high prevalence of HIV in southern Africa, the HIV status of all infants (and their mothers) accessing any health care facility (including consulting rooms of family practitioners, immunisation clinics, hospitals, etc.) for any reason should be determined.

- Mother known to be HIV positive, infant’s status unknown – DNA PCR testing for infant as early as possible.
- Mother’s HIV status unknown – rapid HIV test for mother or for infant if mother unavailable, followed by a DNA PCR for infant if either rapid test is positive.
- Mother HIV negative during pregnancy – offer repeat rapid HIV testing for mother and/or infant. If either is positive, then DNA PCR testing for infant.

All HIV-positive mothers should have a CD4 count done and be referred urgently for care if the CD4 count is <350 cells/µl. (The Southern African HIV Clinicians Society recommends initiation of ART in all pregnant HIV-positive women where resources are available.)

Once an HIV diagnosis is made in the infant, ALL HIV-infected infants should urgently be referred to an ART treatment site.

Start all HIV-exposed infants on co-trimoxazole from at least 4–6 weeks.

Immunisation should continue as per the Expanded Programme on Immunization.

When infants are diagnosed as HIV positive (i.e. by polymerase chain reaction (PCR)), mothers should be encouraged to continue or re-initiate breast-feeding.

ANTIRETROVIRAL THERAPY

According to recently updated recommendations from the World Health Organization (WHO) in June 2008, all HIV-infected infants <12 months of age must be fast-tracked to receive ART.

The interval between identification, adherence counselling and commencing ART should be as short as possible (1–2 weeks) as infants deteriorate rapidly. Adherence counselling should continue after commencement of treatment.

ART can be initiated after the first positive PCR, while awaiting confirmatory studies such as plasma HIV RNA (usually done at baseline before starting ART).

Infants diagnosed with HIV infection in hospital should be prepared and started on ART before discharge whenever possible (i.e. in most cases).

All infants in South Africa should be started on a combination of:
Stavudine 1 mg/kg/dose bd (abacavir at 8 mg/kg/dose bd preferred)

Lamivudine 4 mg/kg/dose bd

Lopinavir/ritonavir (LPV/r) 300 mg/m²/dose bd (the WHO recommends LPV/r when NVP is used for prevention of mother-to-child transmission (PMTCT)).

Even when infants start ART early they remain at increased risk of illness and death, particularly in the first few months. All infants under 12 months old, even after starting on ART, should be assessed monthly until their first birthday.