PMTCT

Special Aspects of PMTCT in Namibia

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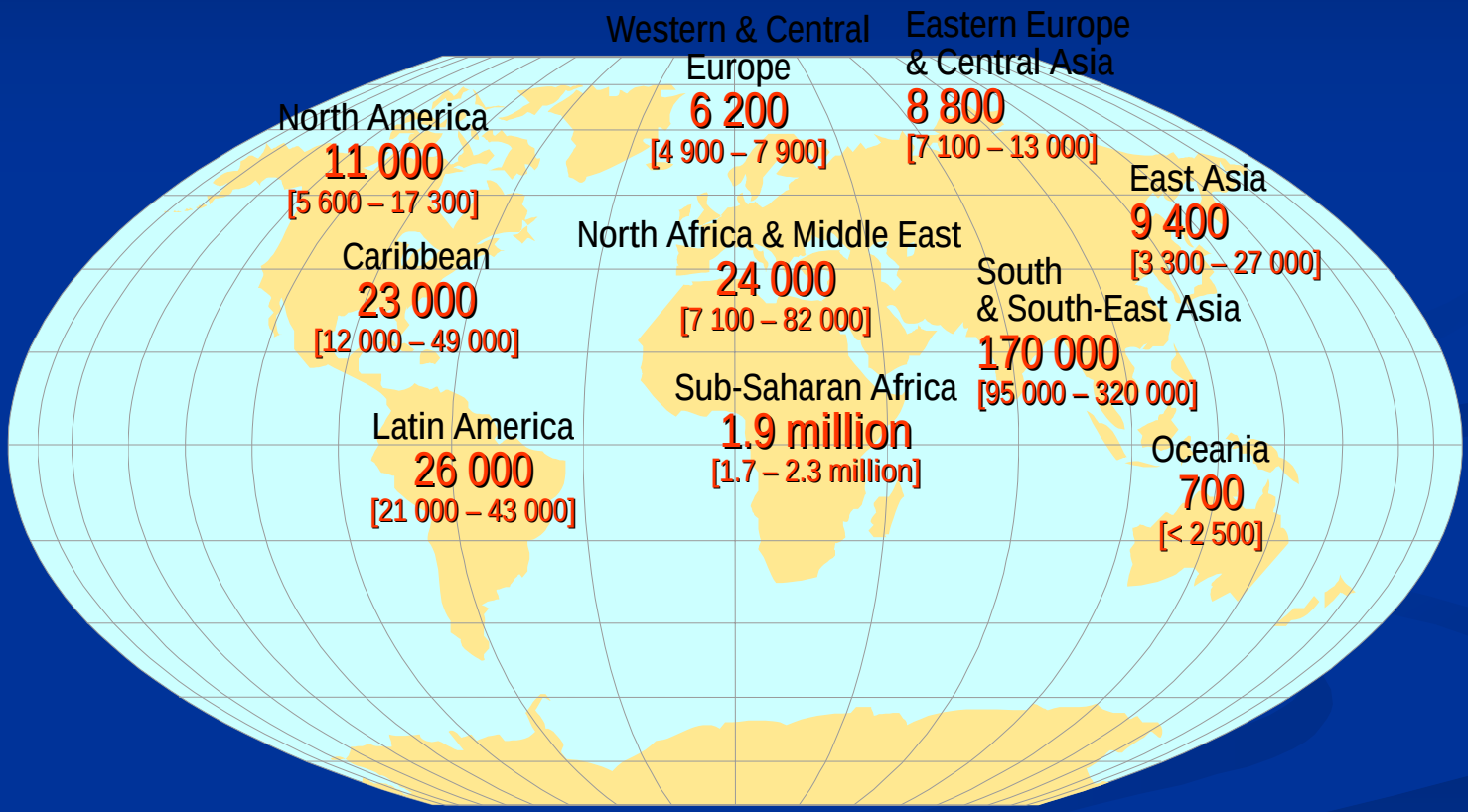
Adults And Children Estimated To Be Living With HIV As Of End 2004

Total: 39.4 (35.9 – 44.3) million

Source: UN AIDS 2004 Report on the Global AIDS Epidemic

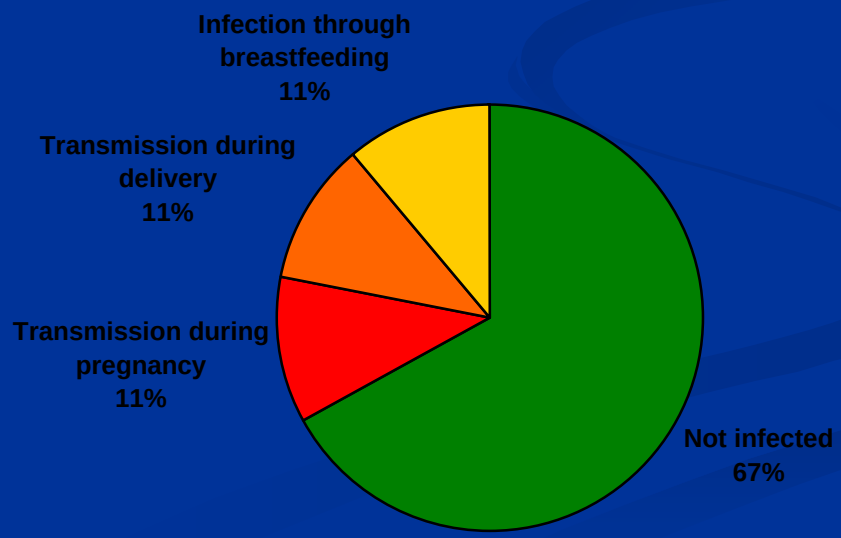
Children (<15 Years) Estimated To Be Living With HIV As Of End 2004



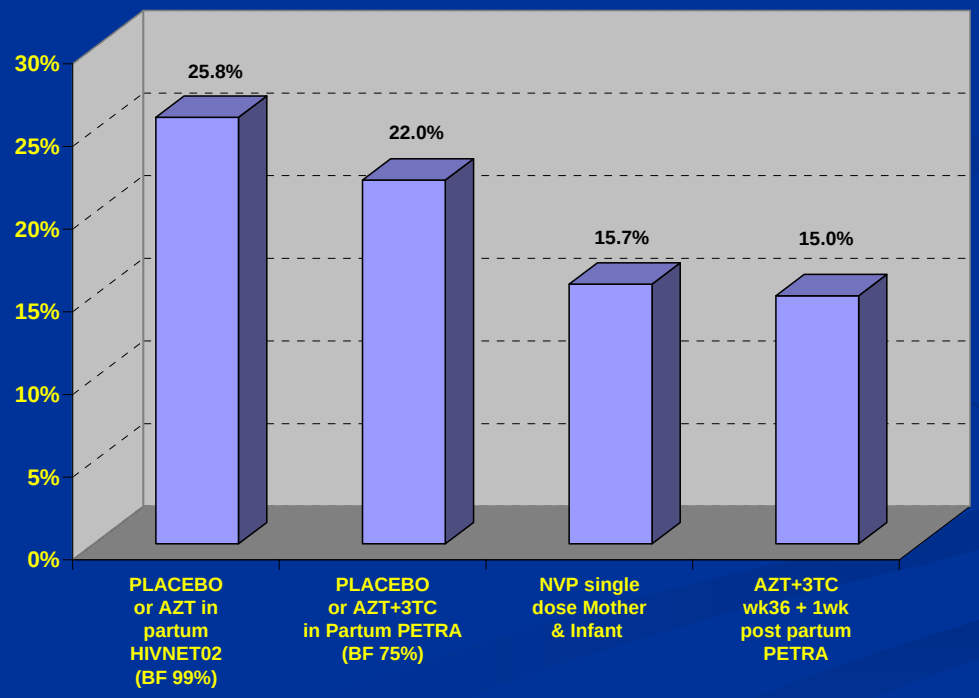
Total: 2.2 (2.0 – 2.6) million

Source: UN AIDS 2004 Report on the Global AIDS Epidemic

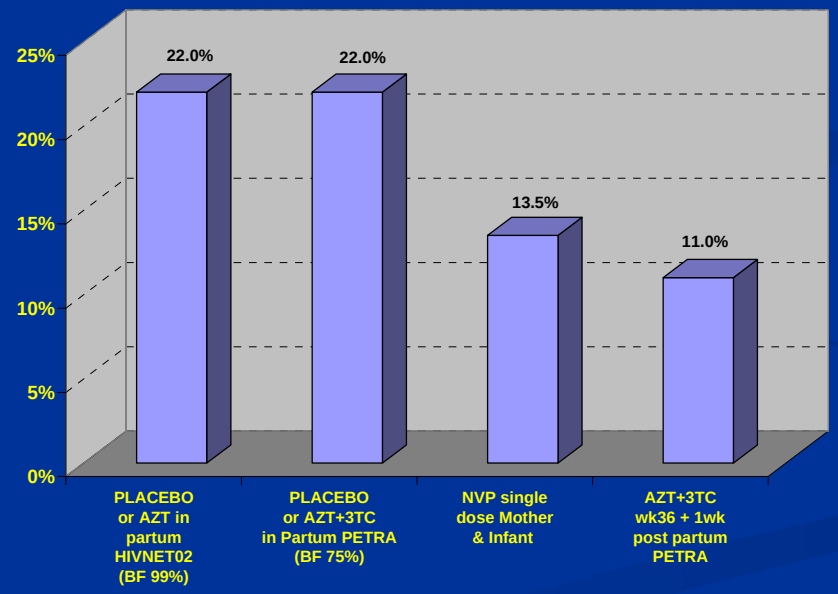
HIV TRANSMISSION FROM MOTHER TO CHILD



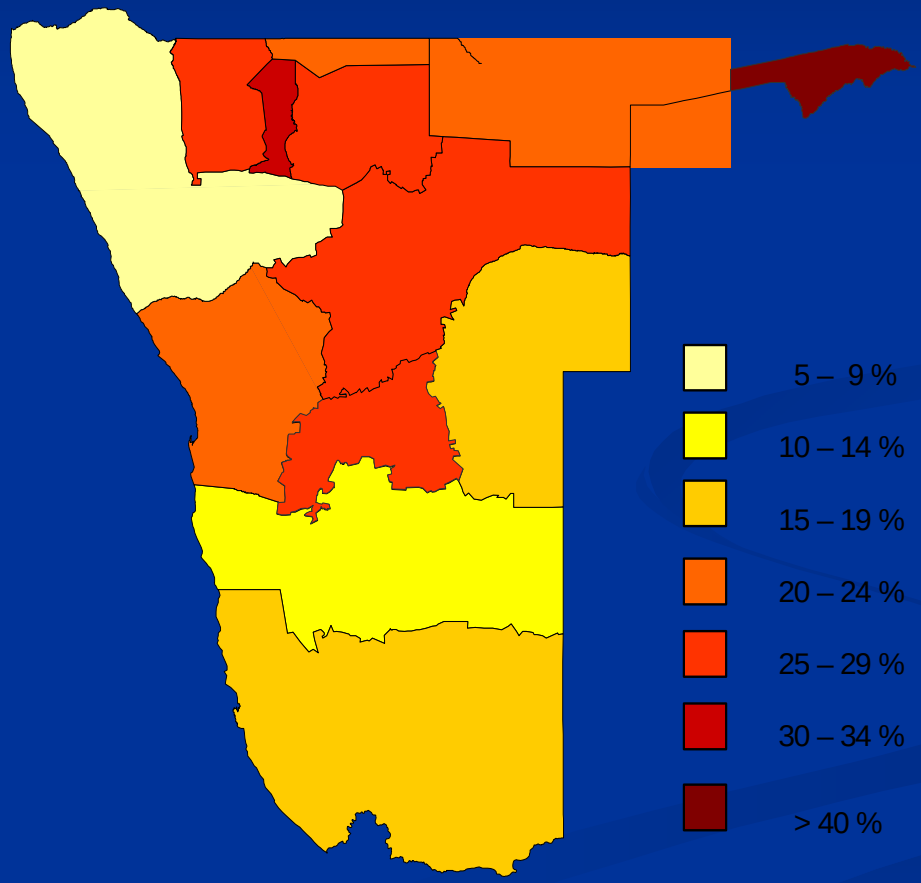
ARVs and Perinatal Transmission Africa in (breastfeeding at 18 months)



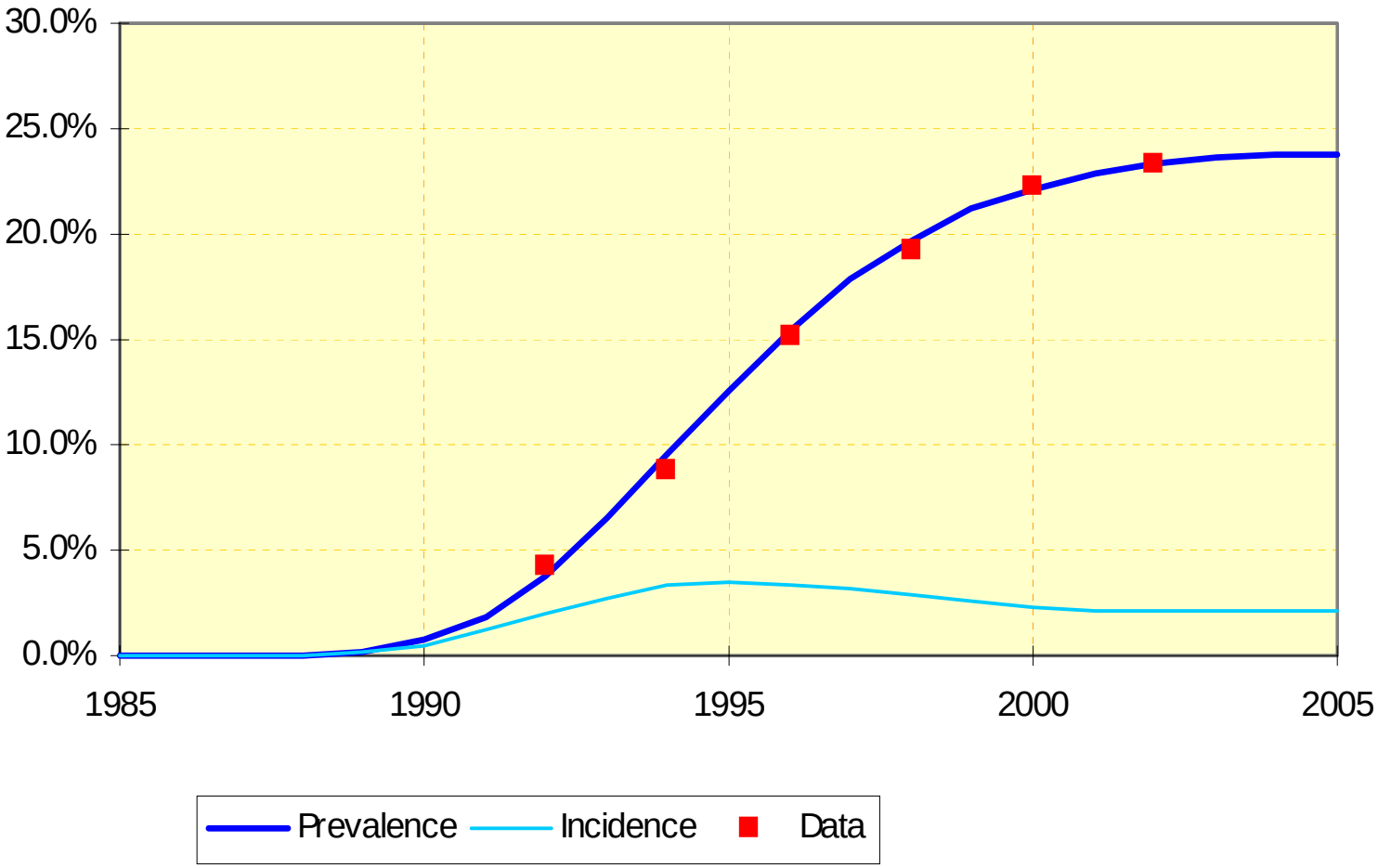
ARVs and Perinatal Transmission in Africa (breastfeeding at 4 months)



HIV Prevalence per Region, Namibia 2002



Trend in HIV Prevalence in Pregnant Women, Namibia



Mother–to-child transmission of HIV

Key questions regarding MTCT of HIV are;

- Magnitude of transmission
- Timing of infection
- Co-factors for Mother-to-Child Transmission of HIV
- Strategies for prevention

Strategies to prevent MTCT of HIV in pregnant women

- **Quality antenatal care** (micronutrient supplementation, screening and treatment of STD's, intermittent treatment for malaria)
- **Provision of routine HIV counseling and voluntary HIV testing services.**
- **Safe delivery** (avoidance of invasive procedures and premature rupture of membranes, ECS)
- **ART** where indicated
- **ARV prophylaxis e**.g single dose Nevirapine
- **Infant feeding counseling** to guide informed choice.
- **Long-term** care of the baby and mother

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- Population census(2001) 1.8M
- Birth per Annum 70000
- HIV prevalence in mothers 22%(2002)
- Total numbers of births to HIV positive mothers at risk of MTCT 15,400
- Estimated No of HIV positive babies per year 4620

HIV AND INFANT FEEDING: THE DILEMMA

WHO Infant feeding Guidelines

At age 6 months, if known to be HIV-infected:

- Continue to BF up to 2 years or beyond
- Give safe and appropriate complementary food introduction.

At age 6 months, if unknown HIV status or known uninfected:

- Counsel to stop BF as soon as feasible (taking into account local circumstances, individual woman's situation, and risks of replacement feeding)
- Appropriate milk substitute and safe and appropriate complementary foods

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Infant feeding options for HIV + mothers :

- Exclusive breast feeding from birth to 4 months and abrupt stopping.
- Replacement feeding e. g infant formula, cow and goat milk

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Results for 2004/2005

Number of sites reporting at least one month's data: 79/108

Number of women starting ANC: 24,118

Total number of women pre-test counseled: 21,938

Total number of women delivering knowing their status: 12,108

- Total number of women provided with a complete course of ARV prophylaxis in a this year 2455

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Achievements in Namibia have included

- Establishments of Pilot sites in oshakati and Windhoek that gave good lessons for the other regions in 2002

Rapid roll out of the PMTCT program country wide in a two year period

the availability of PMTCT VCT within ANC clinics offered at least at 108 sites and

trained staff in PMTCT and ARV therapy

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Republic of Namibia

Ministry of Health and Social Services

GUIDELINES FOR THE PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

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Achievements in Namibia have included

access to laboratory services with at least availability of CD4 Testing for most sites

Availability of guidelines for PMTCT and ARV therapy.

These guidelines are in a process of change.

Public program for ARV therapy that incorporates special features for pregnant women and exposed infants

. System of continuous training and orientation of Health workers

Continuous system of monitoring and evaluation for both ARV and PMTCT programs

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- **Challenges:**
- Acceptablity routine HIV testing during pregnancy by expectant mothers
- Availability of good quality counseling within health facilities to address the needs of clients
- Large distances for some of the mothers to travel that many may deliver at home
- Most mothers book late in pregnancy that those who require full antiretroviral therapy may not be adequately assessed or may not start HAART timely

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- **Challenges:**
- Partner involvement is limited for fears of rejection by male partner and withdraw of their support.
- Some of the male partners do not want to be involved at all and refuse their partners to tested
- infant feeding options as in the PMTCT guidelines are difficult options as most mothers cannot afford safe alternative feeding to breast milk: as Unemployment is >50 % in Namibia.
- Early weaning at 4 months is not practical for most mothers as they do not have access to affordable infant feeds
- Many mothers may practice mixed feeding as they may not be able to breast feed exclusively all the time.

SPECIAL FEATURES OF PMTCT

Development of resistance to single dose nevirapine

	sdNVP	sdNVP plus 4 days AZT/3TC	sdNVP plus 7 days AZT/3TC
Number who developed resistance /number in treatment arm (%	41/68 (60)	8/67 (12)	7/68 (10)
Baseline viral load (median)	23,200	24,700	35,000
Viral load at nadir (median)	8,300	< 400	436

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the real-time assay detected the K103N mutation in a further 17 (43%) of This gave a total incidence of 65% of women with resistance, an increase of 63% on previous estimates.. A similar pattern was seen for the Y181C mutation

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use of nevirapine for a second pregnancy is still of benefit (10%) in preventing mother-to-child transmission of HIV, when compared to the drug-free transmission rate of at least 25%

Martinson N et al. *Effectiveness of single-dose nevirapine in a second pregnancy*. Twelfth Conference on Retroviruses and Opportunistic Infections,

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This suggests that archiving of the nevirapine resistance may be a rare event

Revised WHO guidelines on prevention of mother to child transmission

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Covering Nevirapine's Tail - sdNVP plus AZT/3TC or AZT
Dr. James McIntyre, who presented the most recent data from the Treatments Options Preservation Study (TOPS) in Rio. In short, TOPS found that adding four to seven days of AZT/3TC after birth to mothers who have received sdNVP during labour significantly reduces the risk that they will develop resistance to nevirapine, and may preserve their future treatment options.

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No resistance to AZT/3TC was detected in the study. However, adding AZT/3TC significantly reduced the rate of NNRTI resistance among mothers from 60% to 12% (4 days) and 10% (7 days). It also greatly reduced the viral load which could be of critical importance. Among the mothers who took only sdNVP, the median viral load (at baseline and nadir) was higher in the mothers who developed resistance, (43,650 and 16,600 copies/ml) than in those who did not, (10,600 and 4,160 copies/ml).

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Resistance may develop in babies exposed to single dose nevirapine .Two infants had NNRTI mutations at birth, one in the sdNVP and another in the 4-day arm but no new NNRTI mutations emerged in any of the 13 infants who received AZT/3TC. However, 6 out of 9 (66.7%) of the infected infants in the sdNVP only arm developed new NNRTI mutations.

PMTCT IN NAMIBIA
and the way forward

The main strategies include Prevention of Sexually transmitted infections before and during pregnancy

Prevention of unintended pregnancies

Provision of routine counseling and HIV testing for all pregnant women.

Modification of care during pregnancy, Labor, and delivery for all HIV+ mothers.

PMTCT IN NAMIBIA
and the way forward

Management of the HIV exposed new born.

Correct management of antiretroviral drugs during pregnancy, intra partum and

Post partum

This healthcare package is offered to the expectant couple and their children.