



# Early Infant Diagnosis of HIV

**EGPAF/ANECCA Satellite Symposium**

ICASA December 3, 2008

Dakar, Senegal

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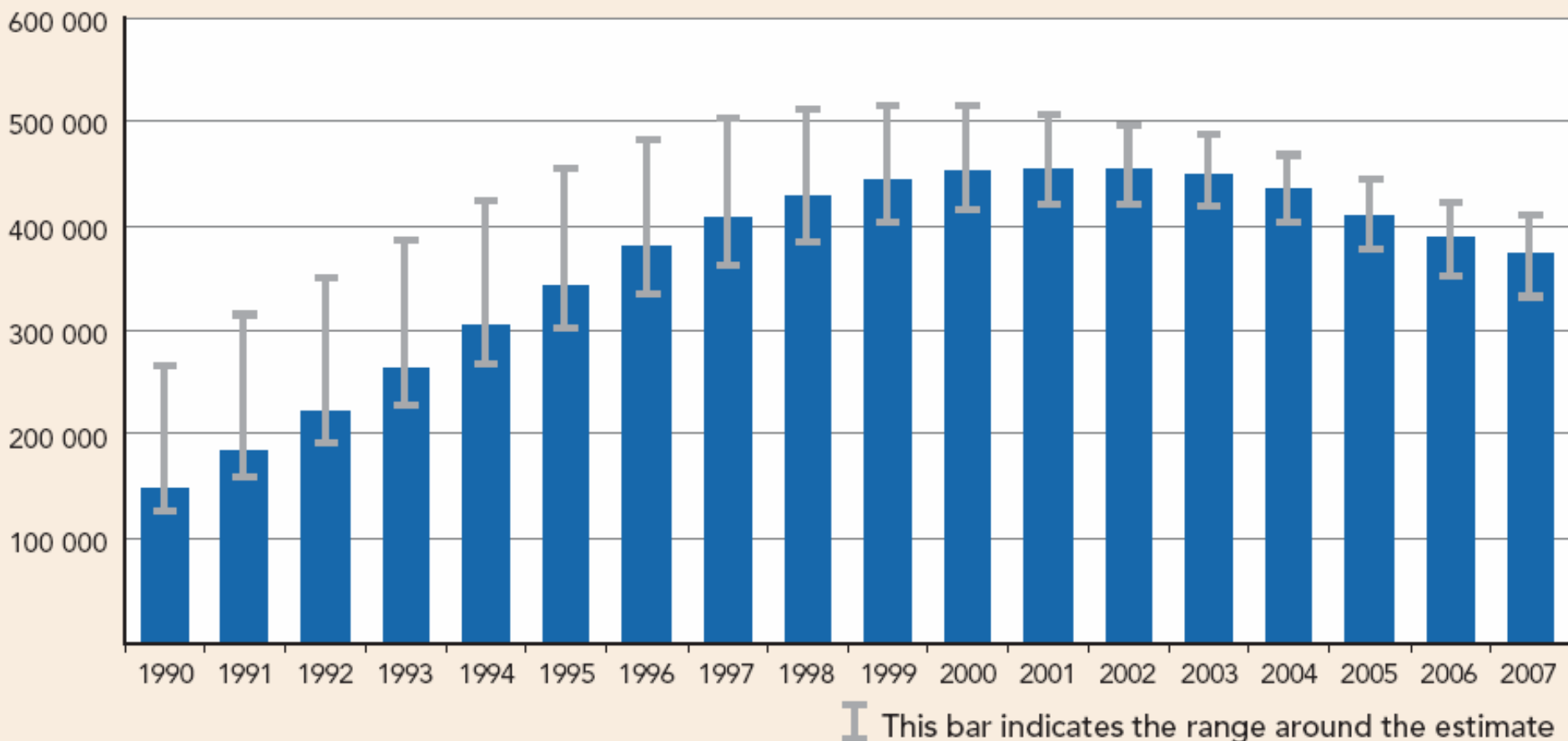
Director, Global Technical Policy

Elizabeth Glaser Pediatric AIDS Foundation

# Key issues for infant HIV testing

- 1. High Risk for HIV infection for HIV-exposed children**
- 2. High morbidity and mortality for HIV-infected children**
- 3. Ongoing exposure to HIV through breastfeeding**
- 4. Persistence of maternal HIV antibodies complicates diagnosis using serologic tests**
- 5. Early accurate diagnosis requires virologic tests before 9-12 months**
- 6. Poor access to HIV testing, care and treatment**
- 7. Losses to follow up at multiple points**

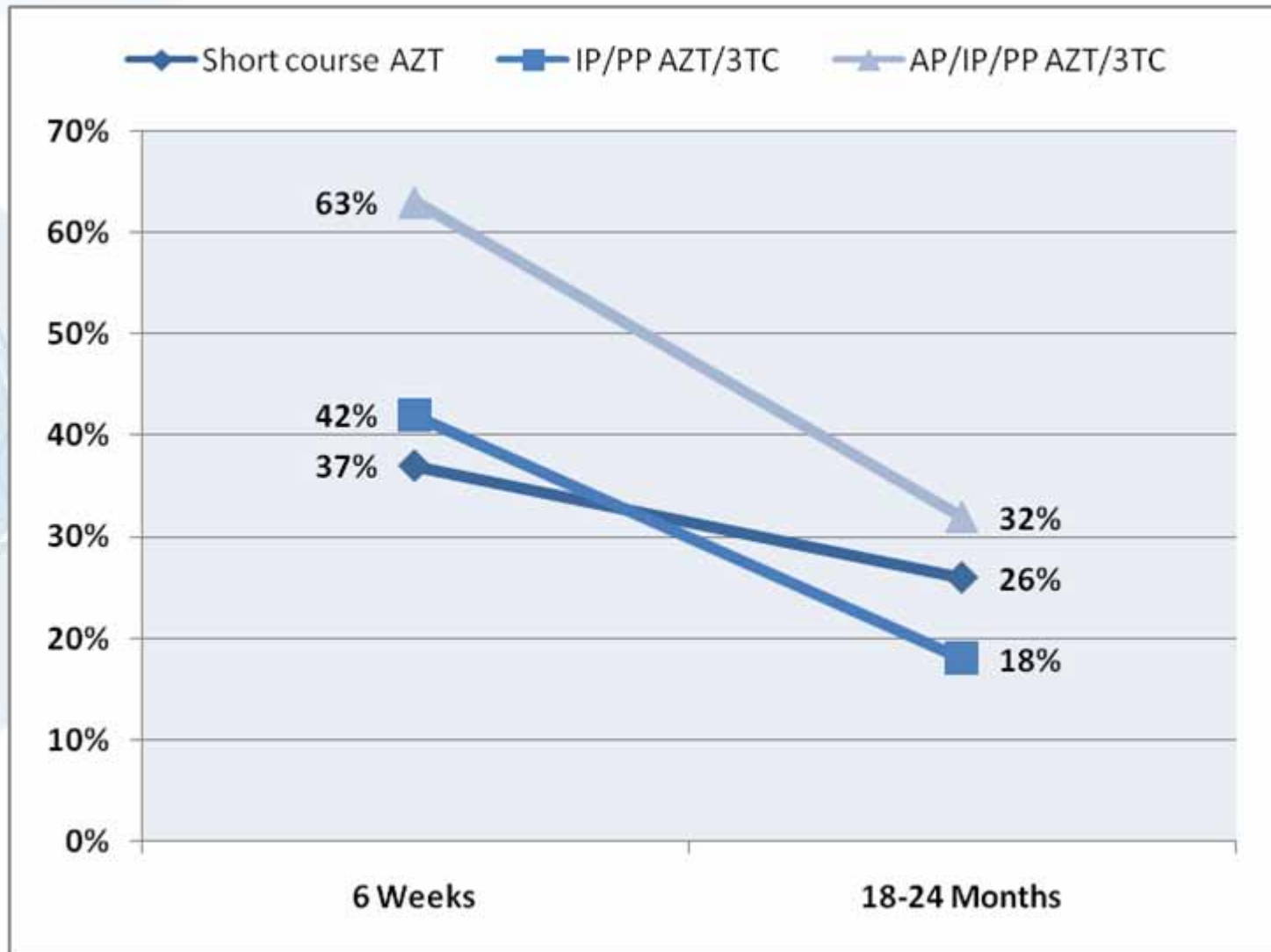
# New HIV infections among children 1990–2007



# Mother-to-Child HIV Transmission Timing

<b>&lt;36 wks</b>	<b>&gt;36 weeks</b>		<b>Early: 0-6 mo</b>	<b>Late: 6-24 mo</b>
<b>Pregnancy</b>		<b>Labor &amp; Delivery</b>	<b>Breastfeeding</b>	
<b>5-10%</b>		<b>10-20%</b>	<b>5-20%</b>	

# Breastfeeding erodes the efficacy of antiretroviral prophylaxis





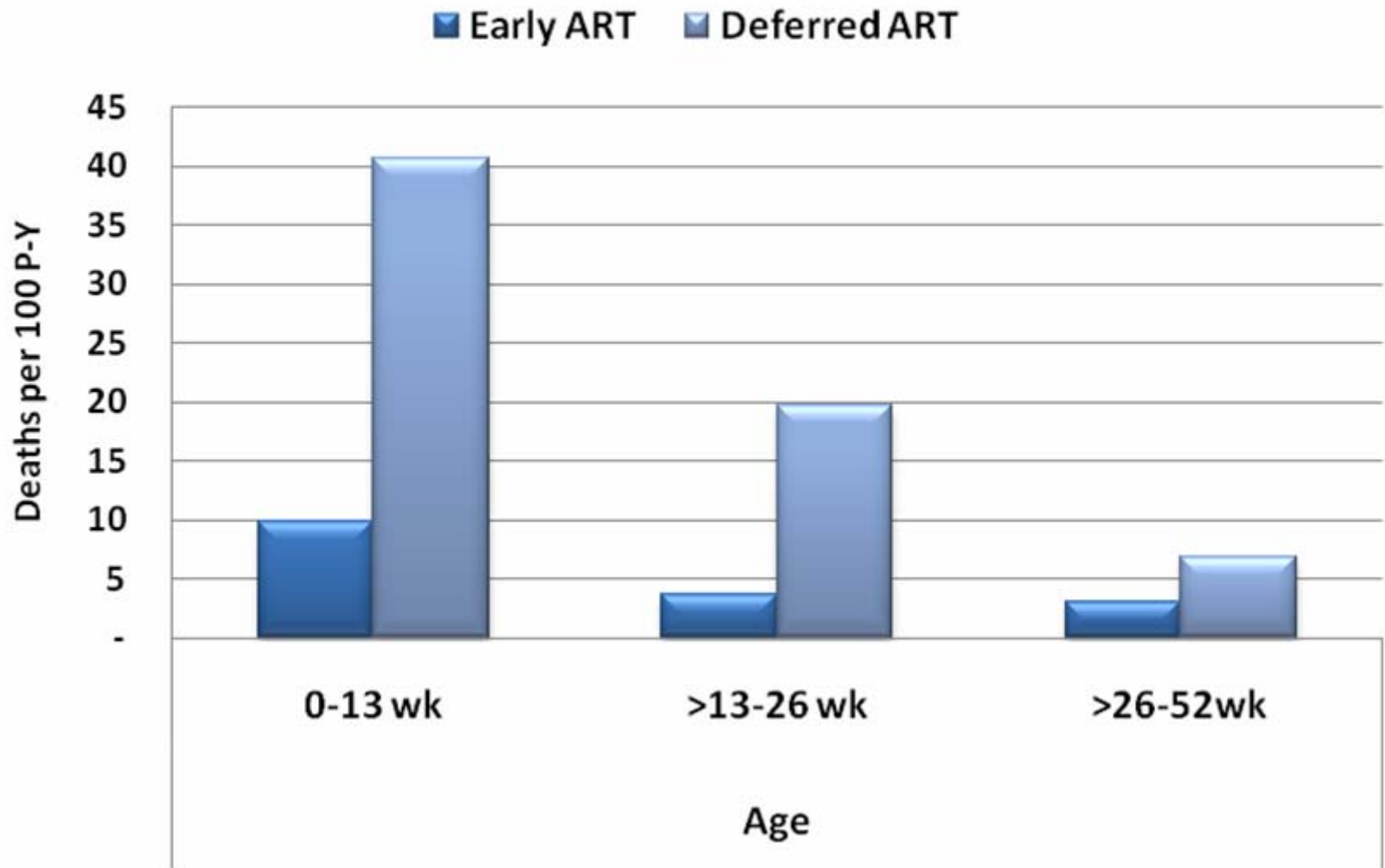
# **Pediatric HIV: Mortality**

**By 1 year: 26% die**

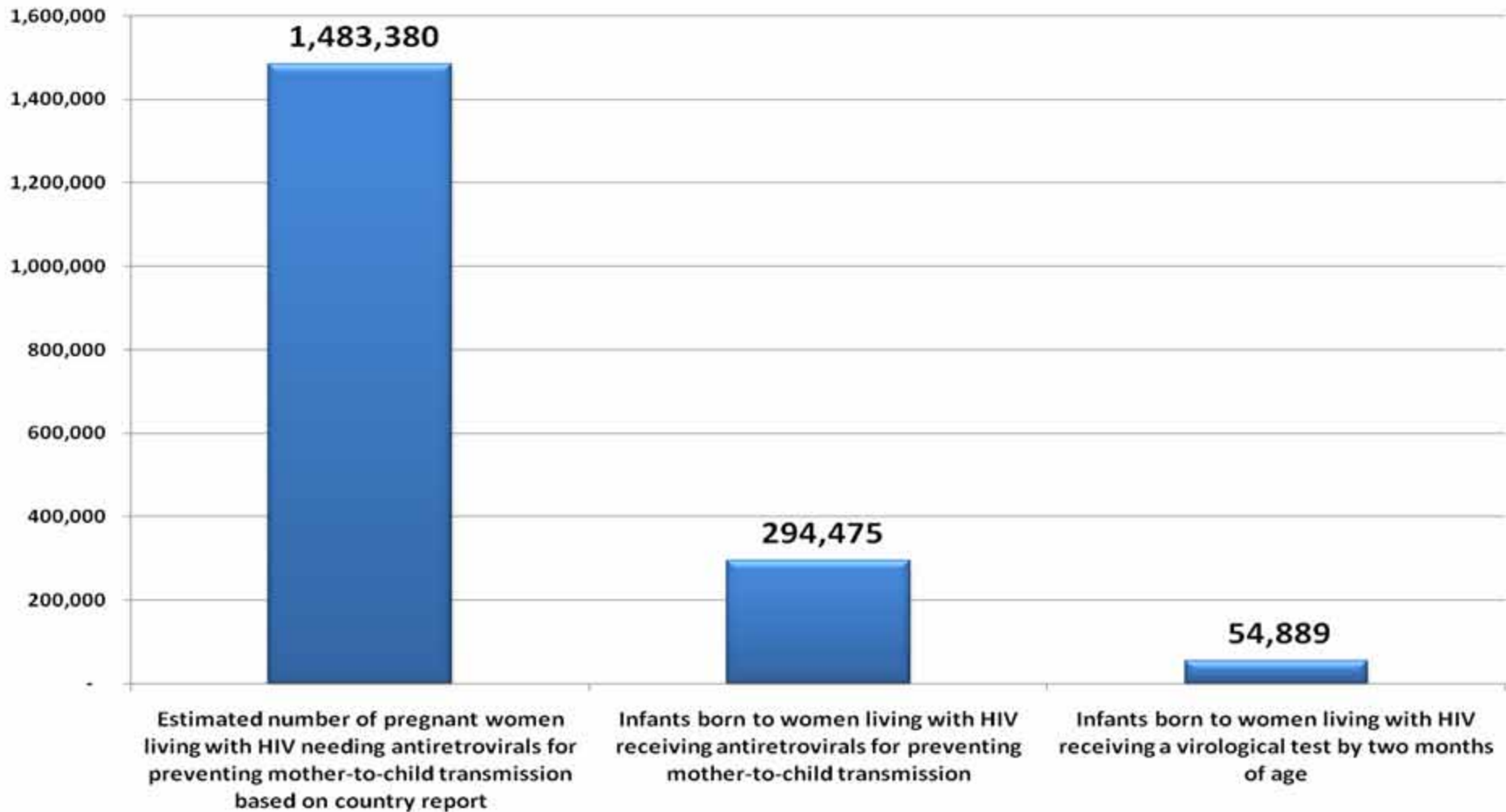
**By 2 years: 45% die**

**By 5 years: 62% die**

# Mortality Rates Early vs. Deferred ART



# HIV + women, Infants receiving ARV, and Infants tested for HIV, 2007



# Therefore...

- Goals of EID
  1. To identify HIV infection in children before clinical disease arises for appropriate intervention
    - HIV Care and Antiretroviral Treatment
  2. To exclude HIV infection
- WHO Technical Reference Group, 2008
  1. 4 EID recommendations

# Recommendation 1

Infants known to be exposed to HIV should have a virological test (HIV nucleic acid test) at 4-6 weeks of age or at the earliest opportunity for infants seen after 4-6 weeks.

**STRONG RECOMMENDATION**

## Recommendation 2

Urgent HIV testing is recommended for any infant presenting to health facilities with signs, symptoms or medical conditions that could indicate HIV.

**STRONG RECOMMENDATION**

## Recommendation 3

All infants should have their HIV exposure status established at their first contact with the health system, ideally before 6 weeks of age.

**STRONG RECOMMENDATION**

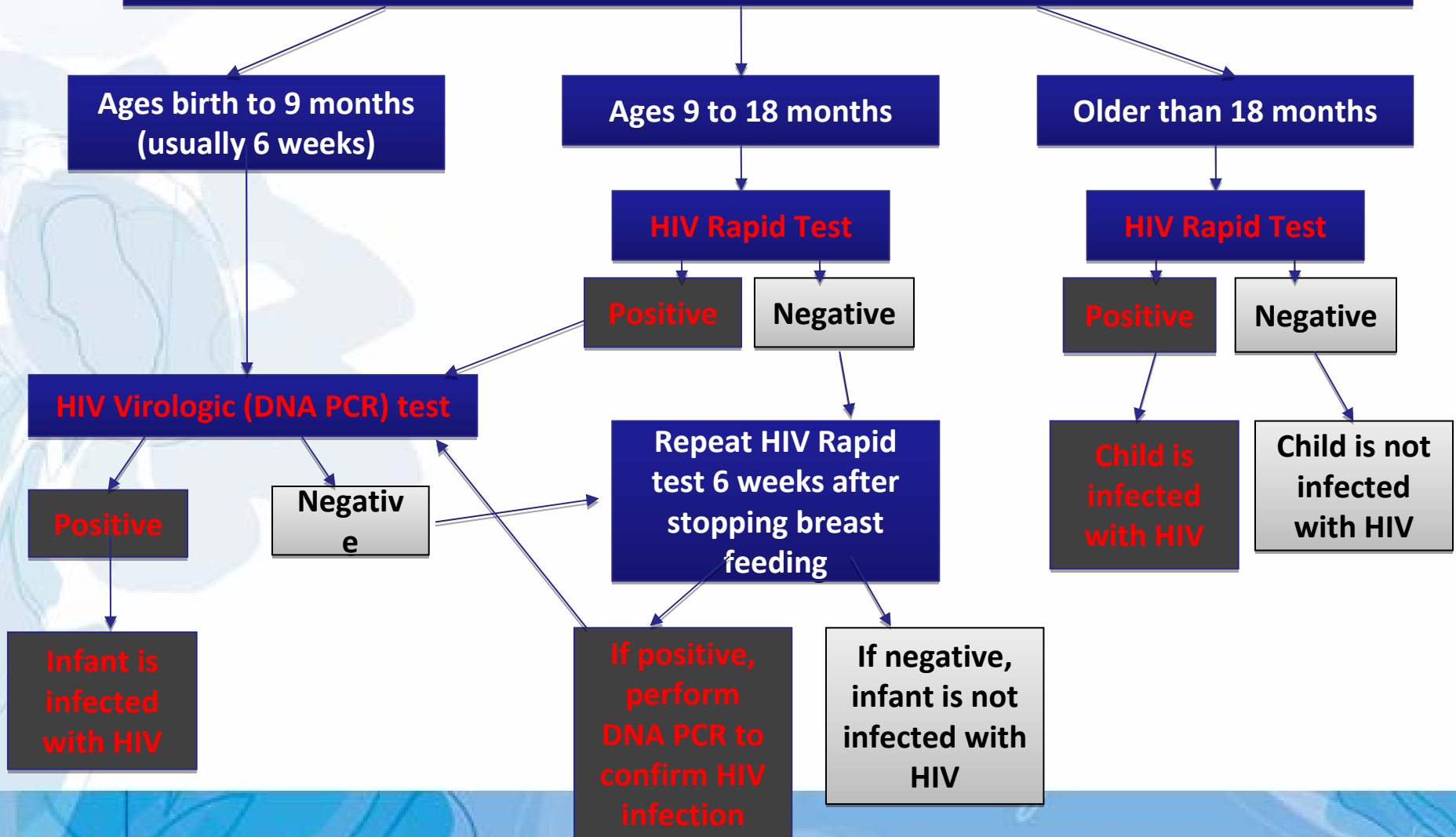
## Recommendation 4

Infants under 6 weeks of age, of unknown HIV exposure status and in settings where local or national antenatal HIV seroprevalence is greater than 1%, should be offered maternal or infant HIV antibody testing and counselling in order to establish exposure status.

**CONDITIONAL RECOMMENDATION**

# Testing Algorithm for Well Infants born to HIV-infected Mothers

## Testing Algorithm for Well Infants born to HIV-infected Mothers



# Challenges

- Losses to follow-up from PMTCT
- Losses to follow-up from C & S
- Monitoring and Evaluation
- Working within National Systems
- Co-location of PMTCT and CST services
- Training
- Nascent DBS EID systems and “Technology paralysis”



**END**

