# PMTCT FOR INFANTS 2019

First version April 2020

INFANT HIV PROPHYLAXIS AT BIRTH			
RISK	MOTHER SCENARIO	INFANT TREATMENT	
LOW RISK INFANT (BREASTFED OR EFF)	• Mother VL < 1000 c/mL at delivery	NVP at birth and daily for 6 weeks	
HIGH RISK INFANT AND BREASTFED	<ul> <li>Mother not on ART at delivery, or</li> <li>Mother on ART with HIV VL ≥ 1000 copies/mL at delivery, or prior 12 weeks</li> <li>No HIV VL result available at delivery or prior 12 weeks</li> </ul>	AZT for 6 weeks + NVP for a minimum of 12 weeks Infant NVP only discontinued after confirmation of maternal VL < 1 000 copies/mL and/or until 4 weeks after cessation of all breastfeeding	
HIGH RISK INFANT AND EFF FROM BIRTH	<ul> <li>Mother not on ART at delivery, or</li> <li>Mother on ART with HIV VL ≥ 1000 copies/mL at delivery, or prior 12 weeks</li> <li>No HIV VL result available at delivery or prior 12 weeks</li> </ul>	AZT + NVP for 6 weeks  Provided that avoiding breastfeeding is documented and sustained	

INFANT HIV PROPHYLAXIS AFTER DELIVERY			
RISK	MOTHER SCENARIO	INFANT TREATMENT	
HIGH RISK INFANT DURING THE BREASTFEEDING PERIOD	<ul> <li>Mother who tests HIV-positive during breastfeeding with continued breastfeeding or has breastfed in the past week, regardless of infant's age</li> <li>Breastfeeding mother with VL ≥ 1000 after previous suppression on ART</li> </ul>	AZT for 6 weeks +  NVP for a minimum of 12 weeks Infant NVP only discontinued after confirmation of maternal VL < 1 000 copies/mL  If the mother decides to stop breastfeeding, prophylaxis should be continued for 4 weeks after cessation of all breastfeeding	
UNDEFINED RISK	Mother who tests positive after the baby is born and is not breastfeeding or stopped breastfeeding > 1 week ago	No ARV prophylaxis	

	INFANT TESTING	PCR results must be checked within 7 days. If
Mom HIV-positive during pregnancy or diagnosed during labour	<ul> <li>PCR at birth</li> <li>PCR at 10 weeks</li> <li>PCR at 6 months</li> <li>Rapid test at 18 months</li> <li>Age-appropriate test* 6 weeks after stopp</li> </ul>	positive, stop prophylaxis, start ART and do confirmatory test
Mother who tests HIV-positive during breastfeeding (continued or has breastfed in the past week)  Mother has VL > 1000 after previous suppression on ART	<ul> <li>PCR immediately</li> <li>PCR at 10 weeks</li> <li>PCR at 6 months</li> <li>Rapid test at 18 months</li> <li>Age-appropriate test* 6 weeks after stopp</li> <li>Age-appropriate test* 6 weeks after stopp</li> </ul>	
Unknown status of mother; no continued breastfeeding (includes orphans and abandoned babies)	<ul> <li>PCR and rapid test immediately:         PCR-positive: confirm with second PCR,         PCR-negative: repeat PCR at 10 weeks of         PCR at 6 months</li> <li>Rapid Test at 18 months</li> </ul>	

### \*AGE-APPROPRIATE TESTING IN INFANTS

AGE OF CHILD	HIV SCREENING TEST	HIV CONFIRMATORY TEST	<ul> <li>Test a symptomatic child any age</li> <li>Any child under two years old with a positive HIV-PCR or a positive HIV rapid test should have their HIV status confirmed with an HIV-PCR test on a new sample</li> <li>At the clinician's discretion, the HIV-PCR may be replaced by a viral load test, which has the</li> </ul>
< 18 months	PCR	PCR	advantage of both confirming the HIV diagnosis and providing a baseline VL for monitoring the
18 months - 2 years	Rapid	PCR	<ul> <li>child's response to ART</li> <li>Any child who tests HIV-positive should initiate ART according to the Paediatric ART guideline as a matter of urgency</li> </ul>



> 2 years



Rapid



Rapid



Based on the Guideline for the Prevention of Mother to Child Transmission of Communicable Infections . National Department of Health, South Africa. 2019, updated March 2020.

• Do not wait for the confirmatory result before initiating ART but ensure result is checked

DOSING OF NVP (10 mg/ml suspension) FOR PMTCT REMEMBER TO ADJUST FOR WEIGHT AT EACH VISIT					
AGE OF INFANT WEIGHT DOSE VOLUME					
Birth to 6 weeks  Dosing for premature infants <35 weeks	< 2.0 kg		0.2 ml/kg daily 0.4 ml/kg daily		
gestational age should be determined	2.0 – 2.49 kg	10 mg daily	1 ml daily		
using expert guidance	≥ 2.5 kg	15 mg daily	1.5 ml daily		
> 6 weeks to 6 months	Any weight	20 mg daily*	2 ml daily		
> 6 to 9 months	Any weight	30 mg daily	3 ml daily		
> 9 months until 4 weeks after breastfeeding stopped	Any weight	40 mg daily	4 ml daily		

<sup>\*</sup> If infant still weighs < 2 kg at 6 weeks of age, continue with dose of 4mg/kg daily (0.4 ml/kg daily) until infant reaches 2 kg

DOSING OF AZT (10 mg/ml syrup) FOR PMTCT REMEMBER TO ADJUST FOR WEIGHT AT EACH VISIT			
AGE OF INFANT	WEIGHT	DOSE	VOLUME
Birth to 6 weeks Dosing for premature infants	< 2.0 kg and > 35 weeks gestation	4mg/kg/dose twice daily	0.4ml/kg/dose twice daily
<35 weeks gestational age should be	2.0 – 2.49 kg	10 mg twice daily	1 ml twice daily
determined using expert guidance	≥ 2.5 kg	15 mg twice daily	1.5 ml twice daily
	< 3 kg	4 mg/kg/dose twice daily	0.4 ml/kg/dose twice daily
> 6 weeks	3.0 – 5.9 kg	60 mg twice daily	6 ml twice daily
(dose according to ART dosing chart for children)	6.0 – 7.9 kg	90 mg twice daily	9 ml twice daily
Tor ciliarcity	8 – 13.9 kg	120 mg twice daily	12 ml twice daily

WHO REQUIRES COTRIMOXAZOLE PREVENTIVE THERAPY?			
INFANT STATUS AND AGE	WHEN TO START	WHEN TO STOP	
All HIV-exposed infants	Start at 6 weeks of age	<b>Breastfed:</b> stop if PCR-negative 6 weeks after stopping breastfeeding AND infant is clinically HIV-negative <b>Formula-fed:</b> stop if PCR-negative at 10-week test, provided breastfeeding has not occurred within past 6 weeks	
HIV-positive infants under 1 year	Start from 4-6 weeks of age or at diagnosis	All HIV-positive infants < 12 months old should remain on cotrimoxazole prophylaxis, irrespective of CD4 % or stage	
HIV-positive children 1-5 years old	All children with WHO Stage 2, 3, 4 <u>or</u> CD4 ≤ 25%	Stop once ART-associated immune reconstitution has occurred i.e. CD4 > 25%	
HIV-positive children	Start when PJP treatment is completed	Continue until 5 years of age and stop only when CD4 > 200	

DOSING OF COTRIMOXAZOLE (200/40 mg per 5 ml solution) FOR PROPHYLAXIS			
WEIGHT OR AGE OF CHILD	DAILY DOSE	SUSPENSION	
2.5 – 4.9 kg	100 mg SMX/ 20 mg TMP	2.5 ml daily	
5 – 13.9 kg	200 mg SMX/ 40 mg TMP	5 ml daily	

#### **BREASTFEEDING**

- Breastfeeding should be initiated within one hour of delivery
- Exclusive breastfeeding for first 6 months of life
- If mother is suppressed on ART, mixed feeding is not a reason to stop breastfeeding
- Introduction of age-appropriate solids from 6 months onwards
- Continue breastfeeding until 2 years of age or older
- Ensure mother is on ART, adherent and VL is suppressed
- It is recommended that women with a VL ≥ 1000 c/mL on first-line ART continue to breastfeed. Infant prophylaxis should be extended / restarted while a concerted effort is made to re-suppress the mother's VL
- Stopping breastfeeding should be done **slowly**, over a month
- Breastfeeding should be avoided in mothers who are failing second- or third-line ART

## WHAT DOES EXCLUSIVE BREASTFEEDING MEAN?

For the first six months of life, the baby only gets mother's milk and medication. This means no water, formula, other foods or fluids



#### NEED HELP?

Contact the TOLL-FREE National HIV & TB Health Care Worker Hotline 0800 212 506 /021 406 6782

Alternatively "WhatsApp" or send an SMS or "Please Call Me" to 071 840 1572

**ART** = antiretroviral treatment; **AZT** = zidovudine; **CPT** = cotrimoxazole preventive therapy; **EFF** = exclusively formula fed; **HIV** = human immunodeficiency virus; **NVP** = nevirapine; **PCR** = polymerase chain reaction; **PMTCT** = prevention of mother to child transmission; **RTHB** = road to health booklet; **Rx** = treatment; **SMX** = sulfamethoxazole; **TMP** = trimethoprim; **VL** = viral load;