ANNEXURE 1: UNIFIED TESTING ALGORITHM FOR HIV-1 EXPOSED INFANTS AND CHILDREN <18 MONTHS:2015

1. CPT to be initiated for all HIV exposed babies from 6 weeks of age and continued until proven HIV negative by final confirmatory antibody test at age 18 months or later. All three antibody tests should be performed regardless of any interim HIV test results (DNA PCR or Antibody) and irrespective of their BF status. In case the baby is found to be HIV infected by final confirmatory diagnosis, CPT should be continued until 5 years of age.

2. If the child has been started on exclusive replacement feeding, continue the same for 6 months. Avoid mixed feeding as far as possible.

3. In children (≤18 months) with signs and symptoms of HIV whose exposure status is unknown, perform rapid test for HIV antibodies. If negative, label child as uninfected. If positive, follow the algorithm above. Attempt to determine the HIV infection status of the parents to determine if the child is HIV exposed; thereafter, follow the algorithm to determine the infection status in the child.

4. In rare cases of Sero Discordance, i.e., the infant tests negative on the Antibody test after having been confirmed positive by DNA PCR, contact NACO (Labs Service Division, or Care, Support, Treatment Division).

5. HIV-1 DNA detected

   - Test for HIV Antibody for definitive diagnosis using 3 Serological tests at 18 months of age.
   - Collect & send Dried Blood Spot (DBS) of babies between 6 weeks to < 6 months of age for HIV-1 DNA PCR (At ICTC)
   - If rapid test positive, follow flow chart from step onwards. If negative repeat rapid test at 12 months
   - Infant is probably not infected, but is at risk
   - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
   - In asymptomatic child repeat testing as below at 6 months of age

6. HIV-1 DNA not detected

   - Rapid antibody test not recommended
   - If baby is < 6 weeks, HIV-1 DNA PCR not recommended
   - 6 weeks and above is the optimal age for a routine first HIV-1 DNA PCR test

   - Infant is HIV infected

   - Collect blood and test for HIV antibodies using 3 Serological tests. Also prepare a Dried Blood Spot (DBS) for HIV-1 DNA PCR (At ICTC)
   - If rapid test positive, follow flow chart from step onwards. If negative repeat rapid test at 12 months
   - Infant is probably not infected, but is at risk
   - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
   - In asymptomatic child repeat testing as below at 6 months of age

7. HIV-1 DNA not detected by DBS

   - If HIV-1 DNA detected by DBS Lab will request for fresh DBS from ICTC centre if result is discordant and rely on the second Confirmatory DBS test result
   - Infant is probably not infected, but is at risk
   - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
   - In asymptomatic child repeat testing as below at 6 months of age

8. HIV-1 DNA not detected

   - If HIV-1 DNA detected Collect and send DBS for Confirmatory HIV-1 DNA PCR
   - Follow Advisory 1
   - Infant is HIV infected

   - Collect blood and test for HIV antibodies using 3 Serological tests. Also prepare a Dried Blood Spot (DBS) for HIV-1 DNA PCR (At ICTC)
   - If rapid test positive, follow flow chart from step onwards. If negative repeat rapid test at 12 months
   - Infant is probably not infected, but is at risk
   - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
   - In asymptomatic child repeat testing as below at 6 months of age

9. HIV-1 DNA not detected

   - Antibody (3 test algorithm) negative – does not need HIV-1 DNA PCR
   - Send Dried Blood Spot (DBS) of child for HIV-1 DNA PCR
   - Follow Advisory 1

   - Infant is HIV-1 uninfected

   - Breastfed in the 6 weeks before test
   - Not breastfed in the 6 weeks before test

   - Avoid putting baby to breast

10. HIV-1 DNA detected

    - Refer to ART centre

    - Collect and send DBS for Confirmatory HIV-1 DNA PCR
    - Follow Advisory 1
    - Infant is HIV-1 infected

    - Collect blood and test for HIV antibodies using 3 Serological tests. Also prepare a Dried Blood Spot (DBS) for HIV-1 DNA PCR (At ICTC)
    - If rapid test positive, follow flow chart from step onwards. If negative repeat rapid test at 12 months
    - Infant is probably not infected, but is at risk
    - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
    - In asymptomatic child repeat testing as below at 6 months of age

11. HIV-1 DNA not detected

    - Lab will request for fresh DBS from ICTC centre if result is discordant and rely on the second Confirmatory DBS test result
    - Infant is probably not infected, but is at risk
    - If child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
    - In asymptomatic child repeat testing as below at 6 months of age

12. HIV-1 DNA detected

    - Refer to ART centre

    - Test for HIV Antibody for definitive diagnosis using 3 Serological tests at 18 months of age

13. HIV-1 DNA not detected

    - IF child develops signs and symptoms of HIV infection at < 6 months of age repeat HIV-1 DNA PCR by DBS
    - In asymptomatic child repeat testing as below at 6 months of age