

Texas Department of State Health Services
HIV/STD Prevention & Care Branch

TECHNICAL ASSISTANCE BULLETIN

**Detection of Acute HIV infection using
HIV Nucleic Acid Amplification Testing (NAAT)**

Background:

- The standard test for HIV looks for antibodies that the body makes in response to the infection. The standard test does not look for the virus itself. Therefore, there is a period of time, shortly after infection with HIV, when the antibody test can be non-reactive even though a person might be infected with HIV.
- HIV infection can be detected in **blood** as early as **9-11 days** after infection using a newer technology, HIV Nucleic Acid Amplification Testing (NAAT). The test detects HIV ribonucleic acid (**RNA**) or deoxyribonucleic acid (**DNA**), rather than antibody.
- Diagnosing **acute HIV infection** (AHI) is an important tool for HIV prevention. Acute HIV infection means there are high levels of circulating virus in the blood and genital fluids, making persons more likely to transmit HIV if they are having unprotected sex or sharing needles.

Limited HIV NAAT in Texas

- Specimens processed through the **DSHS Laboratory, San Antonio Metro and Tarrant County Health Department** will be **forwarded** to **Dallas County Laboratory** for NAAT if the HIV antibody test result is **indeterminate or by special request**. Indeterminate results will be returned to the submitter with a note stating referred for NAAT.
- If the NAAT result is not available at the scheduled return appointment, clients should be notified the initial test was indeterminate and has been referred for further testing. Clients should be notified of their NAAT result immediately upon receipt of the result.
- NAAT will not be performed on rapid HIV test.
- Contractors that use the **Dallas County Laboratory** will have negative HIV antibody test referred for NAAT.
- Future HIV NAAT Testing site: City of Houston.

Post test counseling for Positives:

- Persons who receive a reactive NAAT result should be told they are able to transmit the infection very easily and should be strongly advised to abstain from any sexual contact or needle sharing until they can discuss their HIV prevention and medical care options with their HIV specialist or early intervention provider. .
- Recent partners of persons with a reactive NAAT test must be notified in a timely manner to increase their chances of early detection as well as to prevent disease transmission.