Revisions Recommended for the Surveillance Case Definition for HIV Infection

CSTE 2012 Position Statement

The Association of Public Health Laboratories (APHL) has developed a summary of the Council of State and Territorial Epidemiologists (CSTE) issued revisions recommended for the surveillance case definition for HIV infection.

These revisions will impact the laboratory by expanding what needs to be reported. This CSTE Position Statement on HIV addresses the new HIV testing algorithms published in June 2011 by the Clinical and Laboratory Standards Institute (CLSI). The position statement addresses the current surveillance case definition for HIV infection which states that an antibody test used for confirmation must be either Western blot or indirect immunofluorescence assay test. Since the new testing algorithms are being adopted by laboratories, there are points in the algorithm that lead to “presumptive” positive test results, which need to be reported to surveillance programs so that there is not a delay in reporting or non-reporting of a substantial number of cases due to loss to follow-up. A potential case of HIV infection must be reported when a positive/reactive HIV test result is obtained. Even if the positive/reactive result is the initial or screening test it must reported.

CSTE summarizes what is expected to be reported in the following:

- A positive (reactive) result on an HIV antibody test (e.g., conventional immunoassay, “rapid” immunoassay, chemiluminescent immunoassay, Western blot, other immunoblot, line immunoassay, immunofluorescence assay)
- A positive result on an HIV antigen (e.g., p24) test
- A positive result on a combination HIV antigen/antibody test (in which it may not be possible to know whether the positive component was the antibody or the antigen without performing separate antibody and antigen tests)
- A positive or detectable result on a qualitative nucleic acid (RNA or DNA) test (NAT) (e.g., polymerase chain reaction [PCR] test)
- A quantitative HIV NAT (viral load), regardless of the result (including undetectable results)
- A positive result on an HIV isolation test (viral culture)
- A nucleotide sequence from an HIV genotype test
CONCLUSION

Besides the positive/reactive HIV result, negative/nonreactive results on HIV antibody tests should be reported if they were on the same date, within 30 days after, or 180 days before a positive result of one of the above tests. The reason is that the results may indicate a case of early or Stage-0 HIV infection. Reviewing this information from CSTE with your epidemiologist will determine what action your state needs to take.