

## **1. Summary**

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Early and accurate detection of tuberculosis (TB) disease is a key component of TB control and prevention in the United States. Numerous studies have demonstrated that nucleic acid amplification tests (NAATs) display superior accuracy for the detection of pulmonary TB when compared to traditional acid-fast bacilli (AFB) smear microscopy. Mycobacterial culture, which remains the gold standard of diagnosis, has a turn-around time of several weeks, in contrast to the hours to days required for NAATs.

For patients with suspected active pulmonary TB disease, national guidelines still recommend at least three specimens, collected at least eight (8) hours apart, for AFB smear and culture. However, because of the advantages that NAATs confer, all patients undergoing evaluation for pulmonary TB disease should also have at least one respiratory specimen tested with a NAAT. To inform decisions regarding airborne infection isolation for patients with possible pulmonary TB, two NAATs may be necessary on respiratory specimens collected at least eight (8) hours apart.