Monitoring sputum for culture conversion. Just as the patient with hypertension should have blood pressure monitored during routine visits, so too should the patient with active pulmonary TB be monitored for sputum culture conversion.

- Sputum culture conversion from positive to negative is the most important and only objective measure of response to treatment. Conversion is documented by at least two, and preferably three, consecutive negative cultures.
- By examining sputum on a regular basis, the physician can detect failure to respond to therapy or early warning signs of relapse.
- Sputum of patients with multidrug-resistant tuberculosis must be monitored monthly to establish culture conversion and to ensure that the patient remains culture-negative.
- Length of treatment is determined by how much time is required for the patient’s culture to convert to negative.
- A negative sputum culture at the end of treatment is the only conclusive documentation that the patient has been cured.

Obtaining and processing a sputum specimen. The best time to obtain a sputum specimen is in the morning, before the patient has eaten. After treatment has started, many patients are unable to naturally produce sputum; however, most patients will produce sputum upon induction. Patients should be monitored during sputum induction to ensure that an adequate specimen is collected. Infection control procedures should always be followed when collecting sputum specimens.

For more information about monitoring sputum conversion and laboratory processing, contact the TB Program at (608) 266-9692.