

West Virginia Department of Health - Division of TB Elimination

TB Sputum Collection Instructions for Healthcare Workers

Sputum collection for TB is very important. It is the best way to determine if a person has active TB disease. If a patient has already started treatment for active TB, it is the best way to determine if the treatment is working or not. The following are things that the healthcare worker needs to make sure the patient understands so that we can collect a reliable, uncontaminated specimen for testing.

1. Make sure the patient knows we are going to collect 3 consecutive days' worth of sputum. Doing this allows for a greater chance to detect the bacteria to determine if they have active TB disease.
2. Explain the difference between sputum and saliva. Sputum is thick and sticky and comes from deep inside the lungs where as saliva is watery and thin and comes from the mouth.
3. Inform them that the best time to collect sputum is first thing in the morning upon awakening.
4. Ask the patient to rinse their mouth with water prior to collecting the specimen to reduce the risk of contamination by bacteria or food particles. Remind them not to brush their teeth or use mouth wash prior to collection. If the patient has dentures, have them remove them to reduce contamination as well.
5. Remind them that the specimen container is sterile and to keep it closed until they are ready to use it. Also remind them not to touch inside the specimen container.
6. Instruct the patient on how to do a deep breathing technique to produce sputum. Take a deep breath and fill the lungs with air. Hold it for 5 seconds then release, do this 3 times in a row and at the end of the 3rd breath cough deep from inside the lungs and spit the sputum directly into the specimen container.
7. Make sure they know to fill the container with sputum to at least the fill line. This is 5ml of sputum. They may have to take deep breaths and cough a few times to obtain this amount. Anything less than 5ml will give us unreliable results or be rejected by the lab for testing.
8. Instruct them to screw the specimen container on tight so that the specimen doesn't leak out.
9. After they have closed the specimen container, have them wash the outside with soap and water and then pat it dry.
10. Explain to them that they must write their name and the date of collection on the outside of the specimen container for the lab to process the specimen.
11. Once they have done that, instruct them on how to seal the biohazard bag closed and to place the specimen in the refrigerator.
12. You should instruct them to call each day after collection so that you can make sure all steps were followed, and the specimen was collected properly without any issues. The sputum specimens should be mailed daily. Discuss with the patient how the specimen will be obtained by you to be mailed to the lab. If the collection takes place over a weekend reiterate with the patient, the importance to keep the specimen refrigerated until they can be obtained by you to be mailed to the lab. Specimen lab slips should be filled out and placed with the sputum specimen by the local health department not the patient.
13. The specimen must be mailed out from the local health department's address. The specimen should be mailed with an ice pack to keep the specimen cold during transit in case there are any delays.
14. If you have questions as to when to mail a package out contact the Office of Laboratory Services (OLS) at (304) 558-3530 ext. 2621 for instructions (Examples: weekends or holidays).