

**Virginia Department of Health, Division of Tuberculosis and Newcomer Health**  
**Recommended Sputum Sample Collection Schedule for Monitoring Smear and Culture Conversion in Pulmonary Cases**

Purpose	Monitoring	Frequency	Number of specimens	Comments
Determine infectiousness <b>and</b> Confirmation of TB disease	Initial contact with client	Collect 3 consecutive specimens	Minimum of 3 samples, with one collected in the early morning.  If diagnosis was <b>confirmed</b> before the client is reported, collect 3 additional specimens to determine if infectious.	At least one specimen collection should be observed / coached by HD staff.  At minimum, samples should be at least 8 hours apart.
Establish the <u>earliest date</u> a client can be considered non-infectious and can be removed from isolation	Smear conversion or smear improvement	Collect one sputum specimen every 7–10 days; with maximum of 3/month  One specimen should be collected 55-60 days after treatment initiation  If it is urgent to remove from isolation, upon the first negative smear follow with collecting one every other day. If any have a positive smear resume 7-10 day frequency	Total number of specimens will vary from client to client.  When there is evidence of increasing difficulty with spontaneous sputum production collect a specimen every 7 days, not every 10 days	Single specimens should be observed by HD staff.  Collecting a specimen 55 – 60 days after treatment initiation provides valuable information about treatment response  <b>Additional criteria to release from isolation</b> "Controlling Tuberculosis in the United States,"11/4/2005, Vol. 54, No. RR-12, Page 9, Box 3
Monitor for response to treatment <b>and</b> Determine the need for extension of treatment <b>and</b> For Test of Cure	Culture conversion	Continue to collect one sample every 7-10 days with maximum of 3/month	Until 2 consecutive sputum <u>cultures</u> are negative with no positive culture results thereafter. For most clients no further collection will be necessary.	Single specimens should be observed by HD staff.  If unable to produce sputa spontaneously. Several 30 minute induction attempts on different days, including early AM, should be undertaken before deciding that a client can no longer produce sputum.
	Test of Cure	One sample every 7 – 10 days until 2 consecutive sputum <u>cultures</u> are negative with no positive culture results thereafter.  <b>Continue monthly collection until treatment completion for MDR-TB; resistance to more than 1 anti-TB drug (do not count SM); extensive disease; HIV+.</b>	Total number of specimens will vary dependent on the client.  If client is unable to produce sputum, sputum induction should be attempted.	Single specimens should be observed by HD staff.  Several 30 minute induction attempts on different days should be undertaken before deciding that a client can no longer produce sputum.