

For Diagnosis and Infectiousness



Purpose	Monitoring	Frequency	Number of specimens
To determine infectiousness and confirmation of TB disease	Initial contact with client	Collect 3 consecutive specimens	Minimum of 3 samples, with one collected in the early morning

For Diagnosis and Infectiousness

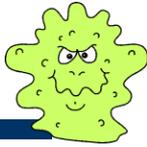
- 3 samples collected on different days
 - Different days = 8 hour minimum time period
- At least one specimen should be observed and coached by HD staff
- Try to obtain at least one early morning sample
- If diagnosis made from community samples, collect 3 additional specimens to confirm infectious status

Definitions



- Conversion – in the TB universe – a result change from positive to negative
 - Smear conversion – from positive for acid fast bacillus (AFB) to negative for AFB
 - Requires 3 samples collected on different days with no intervening positive results - + result – start over
 - Culture conversion – from positive for *M. tb* or *M. tb* complex
 - Requires 2 samples collected on different days with no intervening positive results - + result – start over
 - Requires 7 days since last + result

To remove from isolation



Purpose	Monitoring	Frequency	Number of specimens
To determine infectiousness and when removed from isolation	Initial monitoring for smear conversion & response to treatment	3+ to 4+ Every 2 weeks	One sample observed by HD staff
		Rare to 2+ weekly	

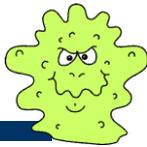
To remove from isolation

- Collect 1 sample until 1st negative result
- Number of samples will vary from client to client
- Early morning sample preferred
- Induce if needed

INDUCED SPUTUM



To remove from isolation



Purpose	Monitoring	Frequency	Number of specimens
To determine infectiousness and when to remove from isolation	Imminent smear conversion (1 st negative result or rare or +/- and response to treatment	Collect 1 sample weekly or every few days. Once 1 st smear negative, collect 2 more samples	Until 3 consecutive smears are negative

To remove from isolation



- Consecutive does not mean 3 consecutive days in a row.
 - Consecutive in the TB universe – all samples smear negative with no positive results in between
 - **Any positive result restarts the count from #1**
 - continue collecting until 3 negative smear results
- Early morning sample preferred
- HD staff observed, induce if needed

Response to treatment

- IF:
 - Smears do not convert to negative for AFB
or
 - At least show reducing bacterial load, i.e. downward trend - 4+ AFB → 1+ or +/- AFB
- Consider possible slow response
 - May need additional evaluation
 - Contact TB Control to discuss



Response to treatment and test of cure



Purpose	Monitoring	Frequency	Number of specimens
•To monitor response to treatment •Determine length of treatment •Test of cure	Culture conversion	•One sample every 7-10 days until conversion • Also, two samples 55-60 days after treatment initiation	Until 2 consecutive sputum cultures are negative

Response to treatment and test of cure

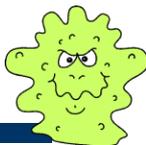
- Consecutive does not mean 2 consecutive days in a row.
 - Consecutive in the TB universe – all samples culture negative with no positive results in between
 - **Any positive result restarts the count from #1**
 - continue collecting until 2 negative culture results
- Early morning sample preferred
- HD staff observed, induce if needed

Response to treatment and test of cure

- If cultures do not convert to negative
- May need additional evaluation
- Contact TB Control to discuss
 - Consultation with one of clinical consultants likely



Test of Cure for selected clients



Purpose	Monitoring	Frequency	Number of specimens
To monitor ongoing response to treatment	Continued culture negativity for those with resistance to more than one drug or extensive disease	Collect 3 specimens monthly	Continue monthly collection until treatment completion

Test of Cure



- 3 samples collected on different days
 - Different days = 8 hour minimum time period
- One observed and coached by HD staff
- At least one early morning sample

Test of Cure



- If smear or culture reverts to positive:
 - Needs immediate evaluation and follow-up for treatment relapse
 - Chest x-ray or CT scan
 - Additional sputum – also to evaluate if reverted to infectious
- Contact TB Control immediately

“Back To The Future”
Bill, Christopher, Leonard and Michael Thank You!!!