

Identification of Acid-Fast Bacilli

Utah



UTAH DEPARTMENT OF
HEALTH

UNIFIED STATE LAB: Public Health

Annual Report - 2009

Number of clinical samples processed	1224
Number of clinical samples with TB	92
Number of clinical patients tested	656
Number of clinical patients with TB	17
Number of referred (isolates) for identification	81
Number of referred (isolates) with TB	13
Number of referred (patients) for identification	65
Number of referred (patients) with TB	11

Number of clinical samples with TB	92
Number of clinical patients with TB	17
Number of clinical samples with NTM	26
Number of clinical patients with NTM	14
Number of referred (isolates) with TB	13
Number of referred (patients) with TB	11
Number of referred (isolates) with NTM	68
Number of referred (patients) with NTM	54

Initial Growth in MGIT[®] broth or on 7H11 selective slant

- Screen for *M. tuberculosis* complex with AccuProbe[®] *M. tuberculosis* complex Culture Identification Test

If AccuProbe[®] *M. tuberculosis* complex Culture Identification Test is positive

- Preliminary Report as
“*M. tuberculosis* complex, drug
susceptibility testing to follow”.
- Set up drug susceptibility tests

**When Susceptibility testing complete, report as
“*M. tuberculosis* complex”, Include drug
susceptibility results.**

1. If a patient is still producing positive cultures after two months treatment, the isolate will be tested using Accuprobe[®] *M. tuberculosis* complex test.

Prior to this time, if the isolate is morphologically compatible with MTBC it will be reported as “Mycobacterium still present, previously reported as *M. tuberculosis* complex”.

2. After two months, patients with positive cultures will be tested monthly for the presence of *M. tuberculosis*.

NOTE: When a patient continues to produce positive specimens, a new isolate will have susceptibility testing performed every two months.

If AccuProbe® *M. tuberculosis* complex Culture Identification Test is negative

- Preliminary report as “Acid-Fast organism not *M. tuberculosis* complex, identification to follow”.
- Identify by DNA sequencing

ABI 3130xl Genetic Analyzer

MicroSEQ® 500 16s rRNA Sequencing Kit

Other Resources

- HPLC
- Phenotypical traits, eg. pigment production, colony morphology, growth rate.

Reporting

- If part of a group or complex, we report at that level.
- The method used to make the final identification is reported (DNA Probe, DNA Sequencing or HPLC).
- If it is a new or unusual organism we make sure we have literature available for the provider.

AFB Isolates 2009

■ <i>M. tuberculosis</i> complex	105
■ <i>M. avium-intracellulare</i> complex	64
■ <i>M. gordonae</i>	16
■ <i>M. chelonae-abscessus</i> group	9
■ <i>M. fortuitum</i> complex	2
■ <i>M. kansasii</i>	1
■ <i>M. marinum</i>	1
■ <i>M. simiae</i>	1

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