

NEW YORK STATE DEPARTMENT OF HEALTH CLINICAL LABORATORY EVALUATION PROGRAM

COMMENTS and RESPONSES to PROPOSED MYCOBACTERIOLOGY STANDARDS

The Proposed Standards in the area of Mycobacteriology were circulated for comment on March 13, 2018. The announcement was sent to NYS-permitted facilities that held or were in application for a permit (facilities). This distribution was by e-mail to the facility and laboratory contact person's e-mail address. The documents were posted to the CLEP website.

The comment period ended May 1, 2018. One comment was received.

The standards are considered to be accepted and will be adopted and effective as of July 15, 2018.

Proposed Standard	Proposed Guidance
<p>Mycobacteriology Sustaining Standard of Practice 18 (TB S18): First-Line Tuberculosis Drugs</p> <p>All initial isolates of <i>M. tuberculosis</i> complex shall, at a minimum, be tested for <u>susceptibility to the following first-line tuberculosis drugs: Rifampin, Isoniazid, Pyrazinamide, Ethambutol using culture or nucleic acid based methods.</u></p> <p><u>All isolates predicted to be resistant by nucleic acid based methods shall be confirmed by culture-based susceptibility testing.</u></p> <p><u>Isolates predicted to be susceptible by nucleic acid methods other than whole genome sequencing shall be confirmed by culture-based susceptibility testing.</u></p>	<p>For all isolates identified as <i>M. tuberculosis</i> complex: If the laboratory does not perform pyrazinamide susceptibility testing, the isolate should be submitted within 24 hours to a New York State permitted laboratory for pyrazinamide testing.</p>

Comment:

We suggest considering a separate standard for Pyrazinamide testing.

A separate standard for Pyrazinamide might say:

For isolates predicted to be resistant to Pyrazinamide by culture-based susceptibility testing, nucleic acid methods shall be used to confirm findings. For laboratories unable to perform nucleic acid methods, the isolate should be sent to a laboratory with that capability.

We would not suggest using culture-based susceptibility testing to confirm isolates predicted to be susceptible to Pyrazinamide by nucleic acid methods since the culture-based methods are prone to false-resistance.

See reference: Simons et al 2012 JCM 50_428 which suggests using a combination of pncA sequencing and phenotypic antimicrobial susceptibility testing (AST) to reduce false pyrazinamide resistance by phenotypic methods.

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RESPONSE:

Thank you for your thorough review of the proposed changes to the standards and your thoughtful comments. We are not going to create a new standard for Pyrazinamide at the current time because we do not feel that we have enough scientific evidence to support this change. We appreciate the comment and in the future we may modify TB S18 related to Pyrazinamide when there is sufficient understanding of the mechanisms of Pyrazinamide resistance. TB S23 was revised to align with current recommendations from CDC. We believe that the modification made allows sufficient time to report susceptibility testing in accordance with national guidelines.