

MLS Laboratory Update: *Blastomyces*, *Histoplasma*, and *Coccidioides* Identification Testing and Reporting updates at MDH-PHL

MAY 3, 2022

Purpose of this Message:

To inform MLS laboratories about updates in testing practices at the MDH-PHL regarding methods and reporting for identification of *Blastomyces*, *Histoplasma*, and *Coccidioides* on submitted isolates. These changes will be implemented immediately.

Action Item:

Please forward this information to Laboratory staff and Infection Prevention and Control partners, as applicable.

Background - Changes:

MDH-PHL has validated two new real-time polymerase chain reaction (PCR) assays that will replace the current DNA probe method for identification of *Blastomyces*, *Histoplasma*, and *Coccidioides* on submitted isolates.

1. The *Blastomyces* & *Histoplasma* PCR will identify *Blastomyces* and *Histoplasma capsulatum* and differentiate between *Blastomyces dermatitidis* and *Blastomyces gilchristii*.
 - a. **Negative result:**
 - i. *Blastomyces dermatitidis* negative
 - ii. *Blastomyces gilchristii* negative
 - iii. *Histoplasma capsulatum* negative
 - iv. "A negative *Histoplasma capsulatum* result may indicate the targeted gene is absent or altered. Fungal identification in progress. Final report to follow."
 - b. **Positive result** (one example):
 - i. *Blastomyces dermatitidis* POSITIVE
 - ii. *Blastomyces gilchristii* negative
 - iii. *Histoplasma capsulatum* negative
2. The *Coccidioides* PCR will identify *Coccidioides immitis/posadasii*.
 - a. **Negative result:**
 - i. *Coccidioides immitis/posadasii* negative
 - ii. "Fungal identification in progress. Final report to follow."
 - b. **Positive result:**
 - i. *Coccidioides immitis/posadasii* POSITIVE

FDA disclaimer: “This test was developed and its performance characteristics determined by the MDH public health laboratory. It has not been cleared or approved by the U.S. food and drug administration 21cfr 809.30(e). The FDA has determined that such clearance is not necessary.”

Additional Information:

Culture confirmation of positives will no longer be performed unless specifically requested. Isolates that are negative for all targets tested will have further identification performed with results to follow.

For isolates suspicious for *Blastomyces* or *Histoplasma*, order Blastomyces & Histoplasma PCR – Isolate (BLASTOHISTOPCR).

For isolates suspicious for *Coccidioides*, order Coccidioides PCR – Isolate (COCCIPCR).

If you request both, we will run both assays. Continue to request Fungal Identification for all other isolates referred to MDH-PHL.

Questions: Please contact: Paula Vagnone 651-201-5581 or paula.snippes@state.mn.us

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To obtain this information in a different format, call: 651-201-5200.