Frequently Asked Questions for Public Health Laboratories

in response to bioMérieux Client Letter dated Nov 2022

On November 15, 2022, bioMérieux, manufacturer of BioFire products, notified customers of a rare, non-specific amplification product generated by the Crypt2 assay in the BioFire GI panel. Some customers have reported an increased number of unconfirmed *Cryptosporidium* results (i.e., "false positive" results) when using the BioFire GI Panel. bioMérieux is developing a software update to mitigate the erroneous interpretation of the non-specific Crypt2 amplification product. However, the timeline for implementing the software update will be contingent upon regulatory agency review.

Public health laboratories should prepare to communicate with clinical laboratory partners as they address patient testing needs as they seek alternative testing options for cases that meet bioMérieux's guidance for confirmatory testing. If your public health laboratory (PHL) currently runs a test for *Cryptosporidium* that meets the CSTE case definition, other than BioFire, you might want to offer this service to your clinical partners. If your PHL does not run an alternative test to BioFire, you could suggest other reference laboratories in your state or elsewhere that offer such testing, keeping specimen transport media requirements in mind. APHL's Public Health Laboratory Systems Database (PHLSD) includes information on methods used for *Cryptosporidium* testing in many state and local PHLs.

What is the expected impact of this response on public health laboratories?

Historical surveillance data indicate a low projected incidence for cryptosporidiosis in the months ahead while bioMérieux develops and submits a software update for regulatory agency review. Your public health laboratory might be asked by clinical laboratory partners to confirm cryptosporidiosis diagnoses, identify alternative testing options, and answer questions about the concerns. bioMérieux has not released a timeline for when the situation will be resolved.

Are targets for other pathogens in the BioFire GI Panels impacted by this non-specific amplification product?

There is no evidence that this rare, non-specific amplification product is generated by other targets on the BioFire panel.

What tests are recommended as confirmatory tests?

Laboratories should use tests that meet the laboratory criteria for diagnosis in the CSTE cryptosporidiosis case definition. This includes detection of the organisms or DNA by direct fluorescent antibody [DFA] test, polymerase chain reaction [PCR], enzyme immunoassay [EIA], or light microscopy of stained specimen. Immunochromatographic card or rapid card tests are not confirmatory test methods.

Should epidemiologists review previous records and re-classify cryptosporidiosis cases from confirmed to probable when tested by BioFire GI panel?

PHL's should communicate with epidemiologists on the best approach to such public health-focused efforts. Where resources permit, jurisdictions can choose to review and update case classifications where false positives are suspected. Refer to the November 2022 customer letter from bioMérieux for information on the circumstances under which positive *Cryptosporidium* results might require additional confirmation.

Who can PHL's contact for more information?

Customers with suspect discordant results with *Cryptosporidium* or any other target should contact bioMerieux's Customer Technical Support team (biofiresupport@biomerieux.com) or (+1.801.736.6354, select option 5 for product technical support)

The APHL contacts are Shari Shea (shari.shea@aphl.org) and Rhodel Bradshaw (rhodel.bradshaw@aphl.org)

The CDC contacts are Dawn Roellig (iyd4@cdc.gov) and the CryptoNet inbox (CryptoNet@cdc.gov)