

URGENT APHL All Lab Director Call: Highly Pathogenic Avian Influenza A(H5N1)

April 26, 2024

Call Summary

Contacts :

CDC Influenza Technical Assistance: flusupport@cdc.gov

APHL Influenza Contact: fluquestions@aphl.org

On April 26, 2024, the CDC issued a letter describing a manufacturing issue involving a recently distributed lot of the Human Influenza Real-Time RT-PCR Diagnostic Panel: Influenza A/H5 Subtyping Kit. CDC detected decreased performance of the H5b target included in lot 220307 through ongoing quality control processes. At this time, the issue only impacts lot 220307 and only the H5b target.

CDC Comments

The CDC letter includes instructions requiring labs to discontinue use of the H5b target and testing with InfA, H5a and RP targets. If a specimen is positive for InfA and H5a treat as a presumptive positive and send to CDC for confirmatory testing.

CDC does not believe there will be a public health impact and no testing needs to be repeated. The assay will continue to be used in combination with other tests in the influenza testing algorithm. This assay can continue to be used and will still detect Influenza A/H5N1 with this recommended modification.

The CDC Influenza A/H5 Subtyping Kit is typically used in the third step of a three-step algorithm which includes influenza A/B typing, then seasonal subtyping, then H5 testing. There is a single lot (220307) in which the H5b component is demonstrating decreased performance.

Important Steps to Take

1. Public health laboratories MUST acknowledge the letter that went to the Lab Directors and IRR contacts.
2. Current recommendation: Use the assay without the H5b target. Any specimen that tests positive with the H5a primer is considered presumptive positive.
3. Any presumptive positive test must be immediately reported to CDC at flusupport@cdc.gov and sent to CDC for confirmatory testing.

FDA Comments

FDA is working with CDC and Public Health Contributors to increase the availability of tests that are needed. A representative was present on the call to address questions to the FDA.

Comments from APHL's Board of Directors

APHL leadership is treating this as they would a manufacturing issue in any other commercially available diagnostic test kit, which is following the manufacturer's (in this case CDC) revised instructions.

Laboratories should plan to share this information with key partners including epidemiology, influenza testing coordinators and clinical laboratory directors. This transparency enables us to share a strong message that we have high confidence in the test and public health's ability to detect Influenza A(H5N1).

Questions and Answers (Q&A)

Q: How was the issue identified/what was the cause?

A: CDC received input on loss of sensitivity in this target, as part of due diligence they tried to reproduce the issue. During that study they found the intermittent inhibition issue described on today's call.

Q: Would you want data from PHLs testing their own primer/probe?

A: No, the preference would be to rely on the interim solution of relying on H5a component along with InfA while CDC addresses the issue with the H5b component. If you have information to share, you can email CDC at flusupport@cdc.gov.

Q: Does either the H5a or H5b primer set target the polybasic cleavage site

A: No, they are in the HA2 domain and designed to address the diversity in the HA segment.

Q: Is there a timeline for a new lot?

A: CDC is working on a timeline. They are working to extend current lots and produce new kit components, but specific dates have not been identified.

Q: Any concern about missing an H5 case while using a single primer set?

A: CDC does not have concerns about missing H5 cases and continues to monitor this issue. To date they haven't seen any issue with the H5a primer set.

Q: Are there any talking points from CDC for any potential state or other inquiries?

A: CDC is not putting anything else out further but will be working with APHL to provide talking points for consistent messaging.