

• • • • Los Angeles County Department of Public Health
• • • • Frequently Asked Questions About Influenza A Subtyping &
• • • • Accelerated Subtyping In Hospitalized Patients

Q: What exactly is Public Health requesting of healthcare providers in the [January 17, 2025 CDC / LAC DPH Health Advisory](#)?

A: Public Health is asking that all patients with suspected influenza are tested within 24 hours of hospital admission and that laboratories expedite seasonal influenza subtyping for all influenza A positive patients, especially ICU patients.

Q: Why is public health asking providers to expedite influenza A subtyping in hospitalized patients? Has the risk of H5 bird flu to the general population changed?

A: This request builds on our existing surveillance system and enhances our ability to rapidly detect influenza A (H5) infections and ensure timely treatment, case investigation, and implementation of infection control measures. The overall risk to the general public remains low.

Q. What is influenza subtyping?

A. Influenza A viruses can be divided into subtypes based on two proteins on the surface of the virus: hemagglutinin (H) and neuraminidase (N). Influenza A subtyping identifies which version of hemagglutinin is present in a specimen. Many commercially available assays can identify two or three Influenza A subtypes: H1, H1pdm09, and H3.

Q: Is influenza subtyping the same as testing for influenza A (H5)?

No. While influenza A (H5) is a subtype of influenza A, only public health laboratories and certain commercial laboratories currently can specifically test for H5 bird flu.

Q. What does it mean if my patient's influenza A result is "nontypable?"

A. If a test result is positive for influenza A virus but negative for seasonal influenza A virus subtypes [i.e., A(H1) and A(H3)], the virus detected might be a novel influenza A virus, such as influenza A(H5). Sometimes, a result may be "nontypable" because a patient has too little virus to perform subtyping on that specimen.

Q: When should patients be tested for influenza A (H5)?

A: All patients with symptoms consistent with influenza (e.g., fever, cough, sore throat, conjunctivitis, difficulty breathing) and a concerning exposure history should be tested for influenza A (H5). Exposures include recent contact with infected birds, poultry, dairy cattle, or consuming raw milk or meat. All patients with a nontypable or unsubtypable influenza A specimen should also be tested for influenza A (H5).

Q. Which patients should have influenza A subtyping performed?

A. Testing is especially critical for those hospitalized or in intensive care, and all patients in these settings who test positive for influenza A should be prioritized for expedited subtyping to ensure rapid identification and appropriate response. Many H5 confirmed cases have reported conjunctivitis as their first or only symptom.

• • • • Los Angeles County Department of Public Health
• • • • Frequently Asked Questions About Influenza A Subtyping &
• • • • Accelerated Subtyping In Hospitalized Patients

Q. My facility only has access to rapid influenza testing; how can I get subtyping?

A: Many commercial laboratories can provide influenza A subtyping. You can request influenza A subtyping from PHL on patients diagnosed with influenza A in the ICU.

Q: I am unsure if my laboratory can perform influenza A subtyping. Is there a list of tests that can identify seasonal influenza A subtypes?

A: The FDA has posted a list of commercially available influenza diagnostic tests that can identify influenza A subtypes. <https://www.fda.gov/medical-devices/in-vitro-diagnostics/influenza-diagnostic-tests> Check with your lab to find out what's available at your facility.

Q: My influenza A positive patient was tested in the emergency room with a rapid test that does not provide subtyping results and was subsequently admitted to the hospital. Do I need to collect another specimen?

A: Most likely, yes. Subtyping can only be performed on certain specimen types (see below) and tested using molecular methods. If the original specimen is still available, your laboratory may be able to retest using a method that identifies influenza A subtypes. If the specimen is no longer available, providers should order testing using a method that can identify seasonal influenza A subtypes.

Q: My laboratory has several options for diagnosing influenza; where can I find more information about influenza testing?

A: Additional information about influenza and testing methods can be found on the [CDC's website](https://www.cdc.gov/flu/hcp/testing-methods/index.html). This resource provides an overview of the different types of influenza tests available and guidance for their appropriate use. <https://www.cdc.gov/flu/hcp/testing-methods/index.html>

Q: My patient's test came back positive with "novel influenza pdm09," or "influenza A(pdm09)", or "Influenza H1N1 2009 strain (novel influenza)" after being tested by our laboratory. Is this bird flu?

A: No. Influenza A H1(pdm09) is the name of the seasonal influenza A H1N1 virus that emerged during the 2009 influenza pandemic. Some systems may still be calling this pandemic or novel influenza. When in doubt, check with your laboratory or call DPH. As of January 16th, 2025, only laboratories using the CDC novel influenza PCR assay can detect influenza A H5.

Q: How do I request subtyping at the Public Health Laboratory? What specimens are needed for subtyping?

A: Call DPH at (213) 240-7941 to coordinate with the public health laboratory (PHL) and confirm that the specimen meets the required criteria, including being tested by molecular methods and meeting appropriate quality control requirements. Eligible specimens for influenza A subtyping at PHL include:

- Non-Swab Specimens:
 - Sputum, bronchoalveolar lavage, bronchial wash, tracheal aspirate, nasal aspirate, nasal wash, lung tissue
- Swab Specimens in VTM/UTM:
 - Nasopharyngeal (NP) swab, nasal swab, throat swab, combined nasal/throat swab

• • • • Los Angeles County Department of Public Health
• • • • Frequently Asked Questions About Influenza A Subtyping &
• • • • Accelerated Subtyping In Hospitalized Patients

Additional criteria include:

- Specimens must be stored refrigerated and sent to PHL as soon as possible on a cold pack.
- If the specimen is >72 hours post-collection, it must be frozen and sent on dry ice.
- Each specimen must be accompanied by a completed test request form and a copy of the previous testing result documenting Influenza A positivity.

For more information on influenza testing through the PHL, visit:

<http://publichealth.lacounty.gov/acd/docs/LaboratoryAlertNotificationInfluenza.pdf>

Q: This HAN requests that specimens be submitted for subtyping within 24 hours. Does the Public Health Laboratory accept specimens for subtyping over the weekend?

A: Specimens from influenza A positive patients *without* known risk factors for H5 bird flu may be frozen over the weekend and sent to PHL the next working day. For patients with risk factors for H5 bird flu, testing may be expedited over the weekend.

Q: When will I receive the results of the specimens sent to PHL for testing?

A: Test results may take 1-3 days. You will be notified immediately if the patient tests positive for H5 bird flu. Results indicating seasonal influenza A (H1, H1pdm09, H3) infection may not be reported to you but are available upon request.

Q: What precautions should be implemented for these patients?

A: If your patient has known exposures to H5 bird flu, such as exposure to cows, poultry, raw milk or meat, or another person with H5 bird flu, the patient should be placed on [airborne precautions](#). Otherwise, follow standard hospital protocols for seasonal influenza.

Q: Do I need to submit a case report form or confidential morbidity report for patients who test positive for influenza A?

A: No, individual cases of influenza A infection are not reportable to Public Health. Positive test results, including subtyping results, are laboratory reportable through electronic methods only. Test results indicating infection with H5 bird flu or another novel influenza are immediately reportable to DPH by telephone.

For the most current local information, visit the LAC DPH [Avian Influenza A \(H5N1\) in Humans](#) website: ph.lacounty.gov/acd/diseases/h5n1.htm.