

H1N1 Influenza Virus BioSafety Guidelines for Laboratory Workers - CDC

On August 14, 2009, the Centers for Disease Control and Prevention (CDC) issued updated [Interim Recommendations for Facemask and Respirator Use to Reduce Novel Influenza A \(H1N1\) Virus Transmission](#). This new guidance should be considered the most up-to-date and supersede previously issued guidance.

Interim BioSafety Guidance for All Individuals Working with Clinical Specimens or Isolates from Patients with Suspected Novel Influenza A (H1N1) Virus Infection

These interim recommendations are subject to change as more information becomes available. This guidance is for all individuals who may perform diagnostic and research activities including rapid diagnostic testing at the point of care with 2009-H1N1 influenza A virus (Novel H1N1), including vaccine strains. This guidance document was updated to reflect the following:

1. *For those performing rapid immunoassay tests for influenza, splash protection is required.*
2. *For those performing more complex procedures (e.g. direct or indirect fluorescent antibody tests [DFA, IFA], culture, molecular assays), a Class II biosafety cabinet (BSC) in a biosafety level-2 (BSL-2) laboratory is required. Biosafety level-3 (BSL-3) practices are no longer required for viral isolation.*
3. *Updated nomenclature for the virus, now referred to as 2009-H1N1 Influenza A Virus (Novel H1N1), is incorporated throughout the guidance.*

Rapid Tests (performed in a variety of laboratory and non-laboratory settings)

Many FDA-cleared rapid tests for seasonal influenza are available, involving different methods and processing steps and each requiring assessment of the risks for generation of aerosols or contact with infectious material. Most rapid test methods only involve simple steps such as inserting a swab into medium or pipetting specimens and reagents. The appropriate personal protective equipment (PPE) for these types of rapid tests include:

- Laboratory Coat, Gloves, Eye Protection, and [facemask \(surgical, dental, medical procedure, isolation, or laser masks\)](#)

For other rapid tests involving more complex test methods that might include steps (e.g., vortexing) that could generate aerosols, additional respiratory protection such as an [N95 respirator](#) is needed.

Clinical Laboratory Testing (Laboratory Diagnostic Work)

Diagnostic laboratory work on clinical samples from patients who are suspected cases of novel influenza A (H1N1) virus infection should be conducted in a BSL2 laboratory. All sample manipulations with the potential for creating an aerosol should be done inside a biosafety cabinet (BSC) that is certified annually. Personal protective equipment should include:

- Gloves, Laboratory Coat, and Eye Protection

This information is a truncated version of the guidance document. The complete guidance document can be found at: www.cdc.gov/h1n1flu/guidelines_labworkers.htm.