VERMONT
DEPARTMENT OF HEALTH

Health Advisory
August 26, 2009

Interim Guidance for Detection of Novel Influenza H1N1 Using Rapid Influenza Test Kits

To: Vermont Healthcare Providers, Hospital Emergency Departments, and Clinical Laboratories
From: Wendy Davis, MD, Commissioner of Health

– Please Distribute Widely –

Rapid influenza tests are antigen detection tests that can provide results within 30 minutes or less, and can assist in a relevant time period to inform clinical decisions. For detection of seasonal influenza A viruses in respiratory specimens, rapid tests have low to moderate sensitivity compared to viral culture or RT-PCR. While some commercially available influenza test kits can distinguish between influenza A and influenza B viruses, none of the currently approved rapid test kits can distinguish between influenza A virus subtypes (e.g., seasonal influenza A [H3N2], seasonal influenza A [H1N1], or novel influenza A [H1N1]).

An understanding of rapid test limitations is important to appropriately interpret results for clinical management. When influenza viruses are circulating in a community:

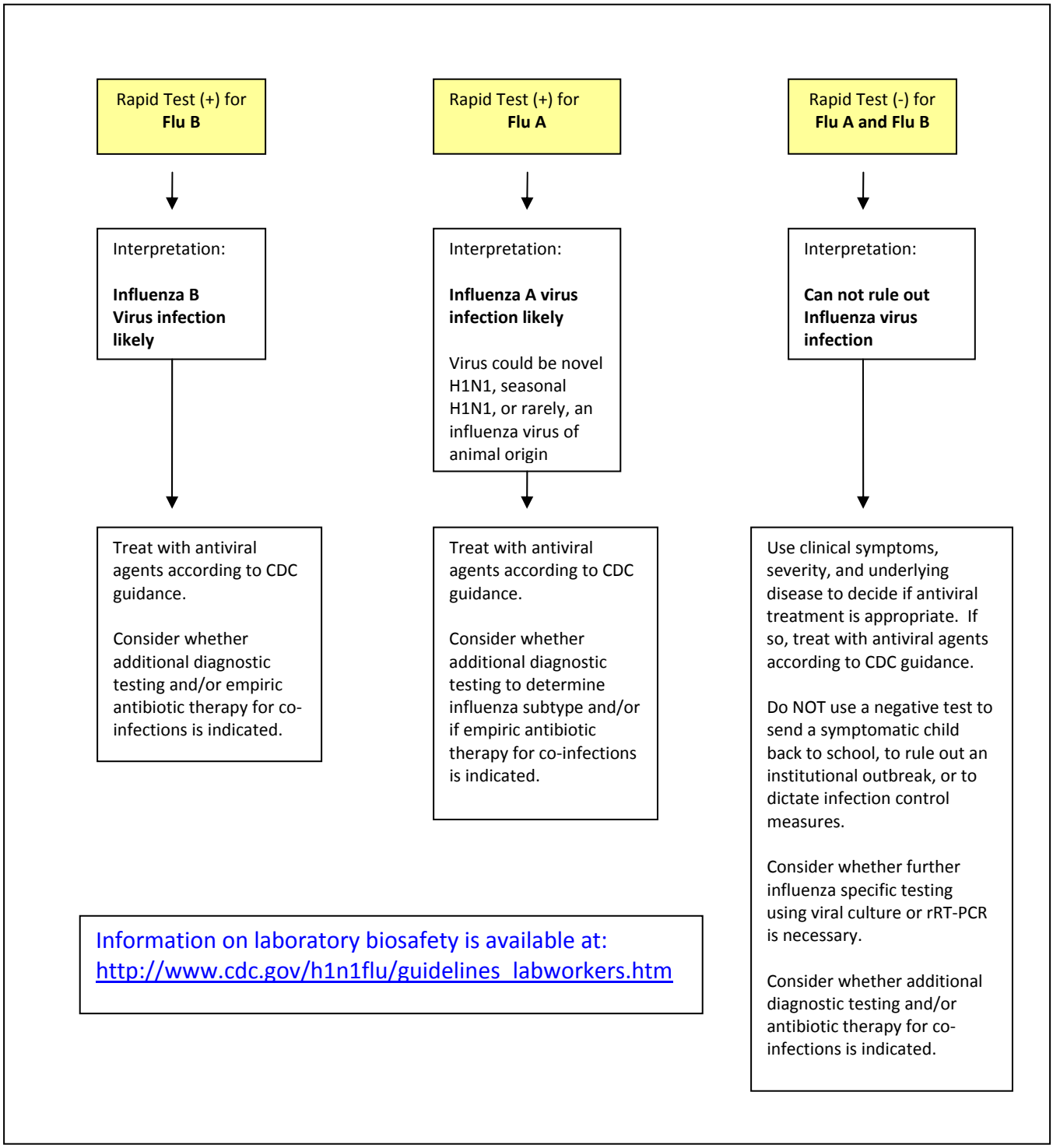
- A positive test result indicates that influenza virus infection is likely present in the specimen.
- A negative rapid test result does not rule out influenza virus infection. Since false negative results can occur, if clinical suspicion of influenza is high in a patient who tests negative with a rapid test, empiric antiviral therapy should be administered according to current Centers for Disease Control (CDC) guidance, and infection control measures implemented.
- In settings where policies indicate exclusion of individuals who may have influenza, a negative rapid test, performed on a patient with clinically compatible illness should not be used as justification for early return to that setting.
- A negative rapid test result can not exclude influenza as a cause of an outbreak in a facility with ill residents or patients with clinically compatible illness.

The specificity of rapid influenza tests is generally high, but during periods of low influenza activity (e.g., the very beginning of the season), false positive results can occur.

Laboratories performing rapid flu tests should add a statement about the limitations of the test in the report so that providers can decide how to best use the test for patient management.

Attached is an algorithm to assist in the interpretation of rapid influenza tests during periods when influenza viruses are circulating in the community.

Interpretation of Rapid Influenza Test Results when Influenza is Circulating in a Community



For questions about influenza-specific testing using rRT-PCR, contact the Vermont Department of Health Laboratory at (802) 863 - 7336.