Updated Guidance on Novel Influenza Surveillance

North Carolina clinicians and laboratories play a critical role in detecting infections with novel or variant influenza viruses that could have pandemic potential.

Background
Novel influenza A viruses come from animal influenza viruses and are different from the current seasonal human influenza A viruses. Rapid detection and reporting of human infections with novel influenza A viruses will facilitate prompt detection and characterization of influenza A viruses with pandemic potential and accelerate the implementation of effective public health responses.

Clinical Presentation
The clinical presentation of human infection varies considerably, from mild illness, including fever, cough and/or conjunctivitis; to severe illness, including pneumonia and acute respiratory distress syndrome. In the human cases reported in the US, the majority have been mild and many only reported conjunctivitis, but severe illness and death have occurred.

When to Test
NC DPH is requesting your assistance with enhanced influenza surveillance and testing of individuals with compatible illness by following the algorithm below (page 2).

- Ask patients with flu-like illness, including conjunctivitis, about contact with sick or dead livestock, poultry, or wild animals, contact with an animal known or presumed to have an HPAI infection, or consumption of raw milk or dairy products within the 10 days before symptom onset.
- Contact your local health department or the state Communicable Disease Branch (919-733-3419; available 24/7) to discuss control measures, testing and treatment if you identify a symptomatic patient who reports one of these exposures within the 10 days before symptom onset.

Infection Prevention
Isolation precautions are recommended in healthcare settings for patients with suspected or confirmed novel influenza. Patients without laboratory evidence to rule out novel influenza with a clinical presentation and contact with sick or dead livestock, poultry, or wild animals, contact with an animal known or presumed to have an HPAI infection, or consumption of raw milk or dairy products within the 10 days before symptom onset should be considered a suspect case and isolation precautions should be implemented. The inability to subtype an influenza A specimen does not constitute a need for isolation precautions in the absence of an epidemiologic linkage to novel influenza.

Diagnostic vs Surveillance Testing
Two testing pathways are available at NCSLPH with different specimen requirements and reporting. Diagnostic testing is done when the suspicion for H5 infection is high, such as when an individual has consistent symptoms and exposure to a known infected animal. Enhanced surveillance testing is done under most other circumstances. Please follow the algorithm to determine the recommended testing pathway. Find specimen collection and shipment requirements for diagnostic testing here and for enhanced surveillance testing here.

Novel influenza detections will initiate a public health response including notification of the submitter by the NC DPH Communicable Disease Branch. NCSLPH will not return other individual results to the

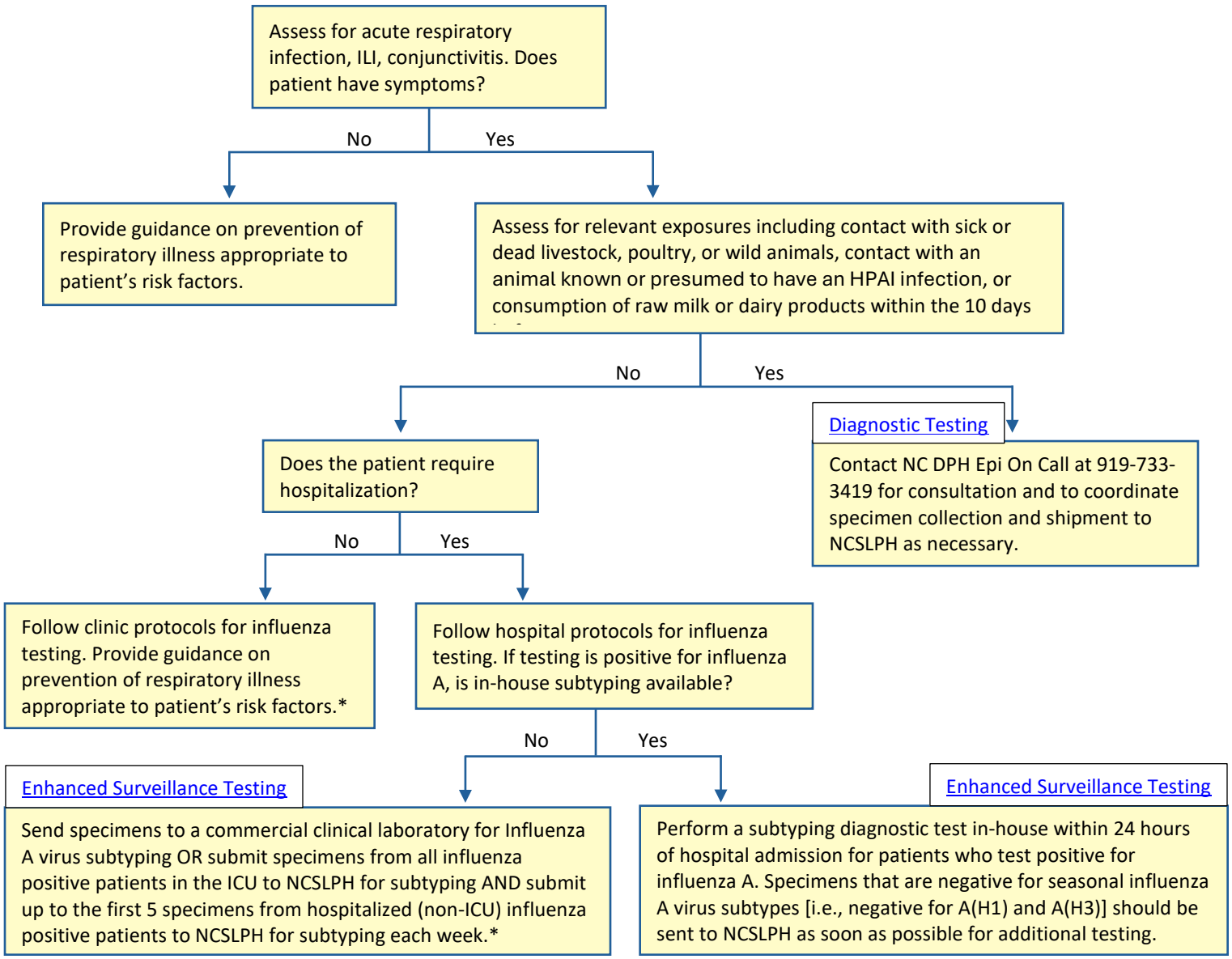
submitter. Weekly aggregate subtyping results can be found on the NC DHHS respiratory dashboard under "Influenza Positive Tests".

For questions contact the state Communicable Disease Branch (919-733-3419; available 24/7) or for non-urgent questions email RespiratorySurveillance@dhhs.nc.gov. Contact NCSLPH Customer Service (919-733-3937) with any questions about specimen submission.

Additional Resources

- H5N1 Bird Flu: Current Situation Summary
- Brief Summary for Clinicians: Evaluating and Managing Patients Exposed to Birds Infected with Avian Influenza A Viruses of Public Health Concern

Testing Algorithm



*ILINet and RESP-Net sites should continue to follow existing guidance for submitting surveillance specimens.