Memo

To: Participants in the Influenza-Like Illness Network (ILINet)

From: Rebecca S. Pelc, Ph.D. Virology/Serology Unit Manager

CC: Regional Lab Consultants

Date: October 11, 2019

Re: 2019-2020 Influenza Laboratory Surveillance

Purpose: The North Carolina State Laboratory of Public Health (NCSLPH) is one of approximately 85 World Health Organization (WHO) Collaborating Laboratories located throughout the United States that participate in virologic surveillance for influenza. The most important source of specimens is the Influenza-Like Illness Network (ILINet), a network of volunteer providers from across the state. Testing of specimens submitted by ILINet providers assists North Carolina and the CDC in identifying the types of influenza circulating in your area. This data, in combination with other with other influenza surveillance data, provide a national picture of influenza virus and ILI activity in the US.

Sample Collection: Participating ILINet providers should collect up to a maximum of 5 (there is no minimum) representative samples each week from patients who present with flu-like illness and are less than 72 hours post onset. Specimens should be submitted regardless of whether rapid testing was performed or what results were obtained (positive or negative). Acceptable clinical specimens include upper and lower respiratory tract specimens, though NP swabs are preferred. Please be vigorous when swabbing the patient since only samples containing infected cells are likely to yield the virus. Patient swabs must be refrigerated and shipped to the NCSLPH in Styrofoam boxes with cold packs within 24 hours of collection. While each kit can accommodate two to four patient swabs, do not delay shipping beyond 24 hours of collecting the first specimen. A good way to do this is to swab the first four patients that come into the office with flu-like symptoms one day a week each week (Monday, Tuesday, or Wednesday are preferred to ensure the samples reach the lab before the weekend). Each patient sample must have a complete laboratory submission form. Incomplete forms may lead to delayed or no testing of your sample.
Sample Submission and Kits: The NCSLPH will send you collection kits for influenza surveillance at no charge with free return shipping at the beginning of the season, usually sometime during the month of October. **Please use these kits for collecting samples from patients with influenza symptoms only.** Laboratory submission forms (DHHS #3431) are included in these kits. **To order additional kits free of charge, please call the Laboratory Mailroom at (919) 733-7656 or send an email to william.mcdowell@dhhs.nc.gov.**

Laboratory Testing: NCSLPH will be performing RT-PCR and culture testing on samples this year, however, RT-PCR will be the primary test. Samples positive for influenza by RT-PCR will not be placed into culture unless a culture is specifically requested. Once influenza is established in the community most samples will be tested for influenza using the RT-PCR assay only. A sub-set of RT-PCR negative influenza samples will be placed into culture for further screening and virus characterization. All samples positive for influenza by RT-PCR will be subtyped (Influenza A) and/or genotyped (Influenza B).

Reporting: Final reports will be mailed to the participant at the end of testing, possibly up to 14 days if sample is placed in culture. All influenza results are available online by going to the NCSLPH website at [http://slph.ncpublichealth.com](http://slph.ncpublichealth.com) and selecting the link for “Look Up Submitted Lab Test Results”. If you do not have an account, select the link for “Request New User Account”, complete the new user sign up form and call 919-733-7837 to activate. **NCSLPH staff do not routinely telephone influenza results** but will gladly call results upon request. Please indicate clearly on the completed test request form that results should be phoned, along with the name and phone number of the individual wishing to receive the results.

It is important that specimens from patients with influenza-like illnesses be submitted for testing year-round. The influenza strain variants that occur near or at the end of the traditional flu season and during the summer months are often the harbingers of the strain that will predominate during next year’s flu season. Early detection of these strains aids the World Health Organization in influenza vaccine formulation decisions for the following year. For questions of a technical nature, please contact the Virology Laboratory at 919-733-7544.