DELAWARE HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH

DELAWARE PUBLIC HEALTH LABORATORY

MEMORANDUM

To: Health Care Providers

From: Sergio Huerta, MD, Laboratory Director 8-22-14

Subject: Influenza Testing

Date: September 2, 2014

During the upcoming influenza season, the Delaware Public Health Laboratory (DPHL) will again be offering a Real-Time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR) method for detection and characterization of influenza virus. This service is available to health care providers in Delaware at no charge.

The data generated by rRT-PCR will help determine what influenza viral types are circulating in Delaware, and the most appropriate vaccine formulation for future production. Results will be available within 72 hours depending on the number of specimens received. rRT-PCR has the ability to detect non-viable viral RNA and provides optimal sensitivity and specificity for the identification of influenza. Furthermore, DPHL will be able to use PCR to distinguish the common human strains of influenza virus (H1N1, H3N2) from uncommon strains (H5N1 and H7N9), and from the Influenza 2009 A/H1N1 pandemic strain, as well as presumptively identify A/H3N2v and A/H7N9. This season, DPHL will also be performing influenza B lineage genotyping, which will differentiate between B/Yamagata and B/Victoria genotypes.

For the 2014-15 influenza season DPHL will be participating in CDC's Influenza Virologic Surveillance "Right Size" Project to systematically define the rationale, vital capabilities, and optimal amount of influenza virologic surveillance. Flu specimens sent to DPHL should be selected at random and **only 3 per day**. Providers should continue to screen symptomatic patients for flu and send to their (non-DPHL) diagnostic labs per their usual protocol. The purpose of this random selection is to develop a statistical approach to influenza testing and to avoid selection bias.

Laboratory couriers will pick up specimens daily from our regular pick-up locations. For pick-up sites see the DPHL web site http://www.dhss.delaware.gov/dhss/dph/lab/courierroutes.html. The Laboratory may also make special arrangements for specimen pick-up for those practices that agree to be sentinel physician sites for influenza surveillance. An added benefit for sentinel sites is that the mechanism for receipt of specimen collection materials, and pick up and delivery to the DPHL will already be in place should a new strain of influenza appear and only state public health laboratories have the ability to test for it as happened with the 2009 A/H1N1 pandemic. If you would like to become a sentinel site, please contact the Office of Infectious Disease Epidemiology at 302-744-1033 to begin the process.

To receive a supply of collection kits, please contact the Laboratory at 302-223-1520 or e-mail **labsupplies@state.de.us**. Use the virus isolation collection kit, which is necessary for the collection and transport of specimens for identification of influenza types A and B. Instructions are included in the kit. If rapid testing has been performed, please **do not** indicate results on the DPHL requisition form.

DPHL will be performing pyrosequencing for antiviral resistance on a subset of isolates. Results will not be routinely reported. Certain resistant strains that are identified are subject to further epidemiological investigation.

For more information regarding influenza see DPHL web site http://www.dhss.delaware.gov/dhss/dph/lab/flu.html.

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