

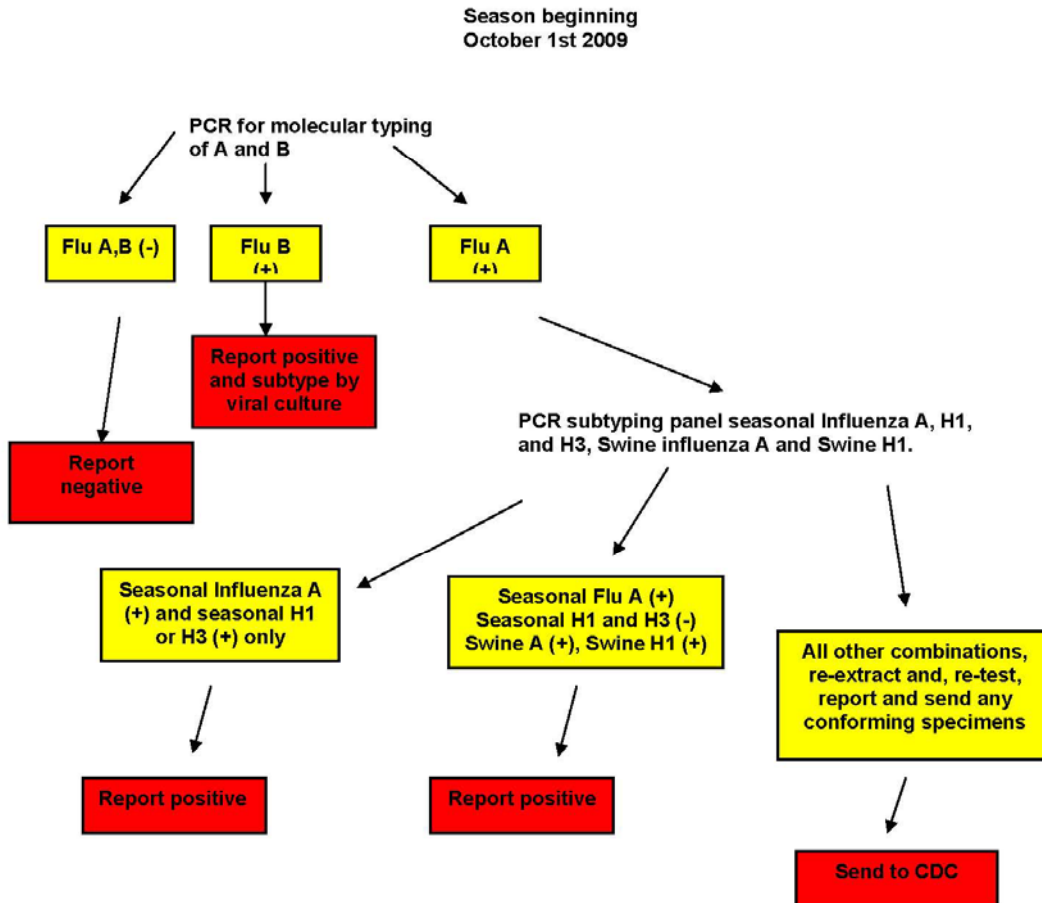
PREPARATIONS FOR THE 2009-2010 INFLUENZA SEASON

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As of July 22nd, DPHL tested 1,478 specimens using the swine influenza assay with 417 swine influenza positive results. In early September the DPHL will switch from the swine influenza assay to a testing algorithm that will detect both influenza A and B as well as the various subtypes. DPHL will be able to distinguish the common human strains of influenza virus (H1, H3) from uncommon strains (H5 and H7) and from the novel H1 (swine-like) strain. This algorithm, which is shown below, may be adapted to suit detection demands and the predominant influenza strain in circulation.

Routine Seasonal Respiratory Virus Algorithm 2009-2010
Delaware Public Health Laboratory

Situation for use: Testing for the routine influenza through the sentinel physicians, hospitals, or outbreaks.



The test uses the FDA-cleared Real Time Reverse Transcriptase Polymerase Chain Reaction (Real Time RT-PCR) method for detection of influenza virus nucleic acids and is available to health care

providers in Delaware at no charge. Results will be available within 48 to 72 hours depending on the number of specimens received.

The data generated by Real Time RT-PCR will help determine what influenza viral types are circulating in Delaware and will identify novel strains as soon as they appear in the state. Furthermore, it can help determine the most appropriate treatment for patients. RT-PCR has the ability to detect non-viable viral particles and provides optimal sensitivity and specificity for identification of influenza.

We encourage health care providers who submit influenza specimens to DPHL to be on the laboratory's information management system (LIMS). This system provides real time electronic access to test results. State clinics are already on LIMS. Interested providers will need to sign a Memorandum of Understanding and receive 1-2 hours of training. To initiate the process, please call the DPHL LIMS Administrator at 302/223-1520.

Laboratory couriers will pick up specimens daily from our regular pick-up locations. The laboratory will 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 of specimens 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 novel H1 (swine-like) strain earlier this year.

To receive a supply of collection kits please contact the laboratory kit room by calling 302/223-1520 or e-mailing labsupplies@state.de.us. Use the **influenza** virus detection kit for collection and transport of specimens for identification of influenza types A and B. Instructions are included in the kit and are printed below. If rapid testing has been performed, please provide the results on the requisition form.

INFLUENZA Virus Detection Kit - Instructions

*Use this kit for collection and transport of **nasopharyngeal** specimens. Collect specimens as soon as possible after onset of symptoms.*

Kit contains:

- 1 requisition form
- 1 screw-capped tube with 2ml of sterile transport media
- 1 flexible slender nasopharyngeal swab

- Fill in *patient name* and *date collected* on tube.
- Complete requisition form. Failure to fill out all the requested information may result in delayed testing or specimen rejection.
- For collection of nasopharyngeal specimen insert the swab into the posterior nasopharynx and rotate it gently. Contact time should be 10 seconds or at least until the patient coughs.
- Place the swab into the screw-capped tube containing transport medium.
- Place collected specimens along with requisition slip back into original biohazard specimen bag.

- **Immediately place in a refrigerator (2-8 C). DO NOT FREEZE.**
- Arrange for transportation of specimen at 4 C (on ice or in cool van) to Virus Diagnostic Laboratory within 24 hours after collection. Courier specimen pick up locations can be found at the following web address: <http://www.dhss.delaware.gov/dhss/dph/lab/courierroutes.html>.

Finally, we ask that you be prepared to reduce the number of specimens you send at the peak of the season, traditionally in mid to late February. If we exceed our capacity for testing we will send out an e-mail giving instructions on numbers and types of specimens to submit.

We look forward to your participation in the Division of Public Health's Surveillance Program for Influenza.

For the latest CDC guidance on the use of rapid antigen detection tests for influenza see http://www.cdc.gov/h1n1flu/guidance/rapid_testing.htm