

West Virginia Influenza-like Illness Surveillance Network (ILINet) Sentinel Provider Program

Instructions for Influenza Surveillance Specimen Submission to the Office of Laboratory Services



Background

The viruses that cause influenza very rapidly acquire mutations, some of which change what the viruses look like to the immune system. For this reason, the composition of the seasonal influenza vaccine is updated annually to protect against the three or four influenza viruses most likely to circulate in the upcoming season. In order to make the best decision as to what influenza viruses to include in the annual influenza vaccine, the World Health Organization (WHO), the U.S. Centers for Disease Control and Prevention (CDC), and four additional collaborating centers worldwide review a variety of studies that include laboratory surveillance from the previous year. As one of the WHO's collaborating centers, the CDC receives and characterizes thousands of influenza viruses that are identified in state and local public health laboratories each year. In turn, West Virginia's state public health laboratory, the Office of Laboratory Services (OLS) within the West Virginia Department of Health and Human Resources, Bureau for Public Health must test respiratory specimens and forward a predetermined number of those that are positive for influenza to the CDC annually for further studies.

In other words, respiratory specimens collected across West Virginia are needed for a surveillance system that ultimately informs what influenza viruses go into the seasonal vaccine every year. Additional critical functions to this surveillance are:

- Identification of antiviral resistant influenza viruses
- Identification of novel influenza viruses (some of which may have pandemic potential)
- An understanding of which specific influenza viruses are circulating in West Virginia, as OLS and CDC's characterizations are more in-depth than commercial assays

Read more:

[//www.cdc.gov/flu/prevent/vaccine-selection.htm](http://www.cdc.gov/flu/prevent/vaccine-selection.htm)

[//www.cdc.gov/flu/weekly/who-collaboration.htm](http://www.cdc.gov/flu/weekly/who-collaboration.htm)

[//www.cdc.gov/flu/resource-center/freeresources/graphics/infographic-lab-work.htm](http://www.cdc.gov/flu/resource-center/freeresources/graphics/infographic-lab-work.htm)

Specimens Acceptable for Surveillance Testing at OLS During the 2020-21 Season

- ILINet sentinel providers and hospital laboratories are eligible to submit specimens and can receive free specimen collection kits and shipping labels pending supply.
- Specimens must be from patients with influenza-like illness (ILI), which is defined as:
 - **Fever ($\geq 100^{\circ}\text{F}$, oral or equivalent); AND**
 - **Cough AND/OR sore throat; AND**
 - **No known cause other than influenza (e.g., negative by rapid strep throat or COVID-19 tests)**
- Specimens of particular interest include:
 - Those that have tested positive for both SARS-CoV-2 and influenza (any test type, regardless of whether the influenza test was done separately or included in a multiplex)

Division of Infectious Disease Epidemiology

350 Capitol Street, Room 125, Charleston, WV 25301-3715

Phone: 304.558.5358, opt. 2

[//oeps.wv.gov/flu/pages/default.aspx](http://oeps.wv.gov/flu/pages/default.aspx)

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- Those that were positive by an influenza antigen test (e.g., BD Veritor, Quidel Sofia, Alere BinaxNOW)
- OLS will run every received surveillance sample on a SARS-CoV-2/influenza multiplex. This will ensure OLS staff safety and appropriate forwarding of specimens to the CDC.
- OLS may also find suitable influenza specimens to characterize through other testing efforts at its facility, i.e., respiratory panel testing for outbreaks of unknown etiology.

Obtaining Specimen Collection and Shipping Materials from OLS

- ILINet sentinel providers and hospital laboratories may request free specimen collection kits and Fedex shipping labels by completing the [Specimen Requisition Form](#) and faxing it to 304-558-6210.
- If collection kits are needed more timely, eligible entities can see if their local health department has any kits in inventory.
- COVID-19 pandemic response efforts may affect the availability of these supplies. OLS will issue communication to eligible parties if supply runs out or is temporarily limited.
- Please call 304-558-3530 if you do not receive your requested free specimen collection kits or do not receive a response to your request.
- **Do not use requested supplies to send out to a commercial entity.** These supplies are funded by federal grants. Failure to comply will result in your facility's suspension from receiving further supplies.

Completing the OLS Test Submission Form

- Each specimen must have a completed [Microbiology Laboratory Specimen Submission Form](#) accompanying it in order for it to be accepted.
- Each specimen must have unique identification on its container matching information on the submission form (e.g., name and date of birth) in order for it to be accepted.
- Complete and correct contact information provided on the form is crucial to ensure that diagnostic results from the SARS-CoV-2 multiplex are communicated in a timely manner.
- In the section entitled "Molecular," check "Influenza RT-PCR" and "Surveillance."
- Completion of the optional respiratory information is encouraged and appreciated.

Specimen Collection and Shipment

Please read and become familiar with OLS's [specimen collection instructions for influenza and respiratory testing](#).

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- Use all recommended biosafety precautions when collecting and handling respiratory specimens.
- Specimens in solutions other than viral transport media (VTM) will not be accepted.
- The optimal specimen volume is 3 milliliters (mL), with the absolute minimum required volume being 1 mL.
- As all surveillance specimens must be screened by SARS-CoV-2/influenza multiplex, only nasopharyngeal samples are accepted.
- Ensure that specimen shipments will not be delivered to OLS or held in a shipping facility over the weekend. It is best to ship next day on Sundays through Thursdays.
- Specimens must be kept refrigerated (2-8°C) and transported on ice packs. If the specimen can not arrive at OLS within 72 hours of collection, then the specimen must be frozen (-70°C) and shipped on dry ice. **OLS does not provide dry ice or courier service.**
- Batched shipments of specimens are encouraged. Eligible providers may submit up to five specimens collected weekly for this effort.

Receiving Test Results

- Results from running specimens on the SARS-CoV-2/influenza multiplex will be communicated in a timely manner to the provider by fax. Submitters may also call 304-558-3530 to obtain results.
- OLS's influenza testing is a surveillance effort and, therefore, not intended to serve as diagnostic testing. Results of this testing will be communicated to the submitter by fax as they become available, which can be up to several weeks after specimen submission.