2022-2023 Influenza Season: Preparation for the Coming Influenza Season

West Virginia Immunization Network Webinar



Jillian Jeffrey, MPH Respiratory Disease Epidemiologist September 7, 2022



Objectives



- Describe the importance of influenza surveillance
- Discuss influenza surveillance activities in West Virginia
- Summarize viral respiratory pathogen trends for the 2021-2022 influenza season

Importance of Influenza Surveillance



From the U.S. Centers for Disease Control and Prevention's (CDC) Manual for the Surveillance of Vaccine-Preventable Diseases:

- Identifies new influenza viruses
- Informs annual vaccine component selection
- Assists healthcare providers in making treatment decisions
- Identifies high-risk persons
- Determines effectiveness of prevention strategies
- Helps in refining annual vaccine and antiviral recommendations

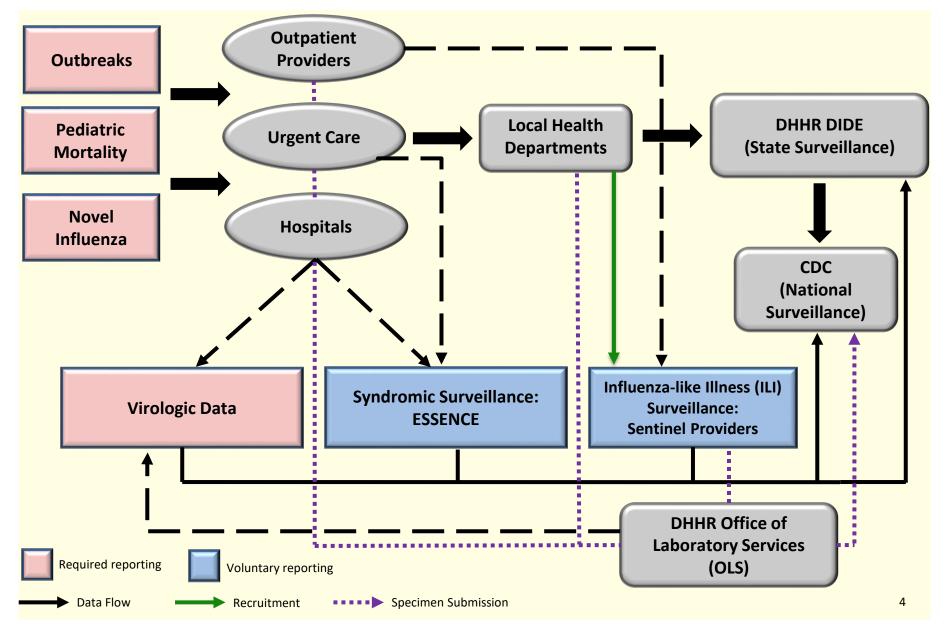
Influenza Surveillance in West Virginia



- A collaborative effort between the West Virginia Department of Health and Human Resources (DHHR), Division of Infectious Disease Epidemiology (DIDE), and many partners including local health departments, outpatient providers, hospitals, emergency departments, clinical laboratories, vital statistics offices, schools, and other facilities
- Is ongoing year-round
- Utilizes multiple data sources
- Identifies cases of public health importance for immediate public health action
- <u>Estimates</u> burden of disease and severity of the influenza season
- Provides timely and informative feedback from surveillance to partners

Influenza Surveillance in West Virginia





Reporting Requirements



Facilities and providers report the following to local health departments:

Condition	Timeline
Influenza-associated pediatric mortality	One week
Novel influenza	Immediately
Influenza outbreaks	Immediately
RSV-associated pediatric mortality	One week

Reporting Requirements



Laboratories report to local health departments in the following manner:

Condition	Timeline
Novel influenza	Immediately
Influenza outbreaks	Immediately
Positive influenza tests*	Weekly (in aggregate)

^{*} Reported by completing Influenza Laboratory Reporting Form. Tests may include PCR, immunofluorescence, and culture and DO NOT include serology and rapid antigen detection tests.

Influenza Laboratory Tests



Serology and rapid influenza diagnostic tests (RIDT antigen) results do NOT need to be reported. Specimens may be sent to OLS for confirmatory testing.

Method	Acceptable Specimens	Test Time
Rapid Molecular Assay [influenza viral RNA or nucleic acid detection]	NP swab, nasal swab	15-30 minutes
Immunofluorescence, Direct (DFA) or Indirect (IFA) Florescent Antibody Staining [antigen detection]	NP swab or wash, bronchial wash, nasal or endotracheal aspirate	1-4 hours
RT-PCR (singleplex and multiplex; real-time and other RNA-based) and other molecular assays [influenza viral RNA or nucleic acid detection]	NP swab, throat swab, NP or bronchial wash, nasal or endotracheal aspirate, sputum	Varies (1-8 hours, varies by the assay)
Rapid cell culture (shell vials; cell mixtures; yields live virus)	NP swab, throat swab, NP or bronchial wash, nasal or endotracheal aspirate, sputum; (specimens placed in VTM)	1-3 days
Viral tissue cell culture (conventional; yields live virus)	NP swab, throat swab, NP or bronchial wash, nasal or endotracheal aspirate, sputum (specimens placed in VTM)	3-10 days

Influenza Laboratory Results



Clinical laboratories are required to report influenza testing in aggregate on a weekly basis.

- Report counts occurring Sunday –
 Saturday by following Tuesday
- Report regardless of whether you report electronically to West Virginia Electronic Disease Surveillance System (WVEDSS)
- Consider joining the National Respiratory and Enteric Virus Surveillance System (NREVSS) – report testing on many viruses directly to CDC



Influenza Laboratory Reporting

West Virginia Office of Epidemiology and Prevention Services Division of Infectious Disease Epidemiology Phone: (304) 558-5358, ext. 2

Instructions

- Fill in counts for each category in table below weekly Sunday-Saturday.
- Include RT-PCR, immunofluorescence, or culture tests only.
- Fax completed form to (304) 558-8736 or email it to Jillian.L.Jeffrey@wv.gov by 12pm the following Tuesday.
- If you receive a result in a starred(*) category, please contact Jillian by e-mail or phone ASAP to arrange for further specimen testing.

MMWR Week#:	MWR Week#: Week Ending (Saturday):	
Tota	I# A(2009 H1N1)	
	Total # A(H3N2)	
(Subtypin	Total # A g Not Performed)	
(0 or >1 S	Total # A abtype Detected)*	
	Total # B	
	Total # Tested	

Laboratory/Hospital:	
Contact Person:	
Phone, Fax, or E-mail:	

Reporting Requirements



Local Health Departments report to DHHR's Office of Epidemiology and Prevention Services (OEPS) in the following manner:

Condition	Timeline
Novel influenza	Immediately
Influenza outbreaks	Immediately
Positive influenza tests*	Weekly (in aggregate)

^{*} Faxed to DIDE by close of business every Tuesday for previous week; to include reports of ILI.

Optional Reporting



Influenza Sentinel Providers voluntarily participate in influenza surveillance by reporting the number of visits for ILI directly to the CDC via the ILINet website on a weekly basis.

Eligibility Criteria:

- Primary healthcare provider of any specialty
- Ability to log onto ILINet and make report every week
- Separate reporting stream than clinical laboratories' weekly reports

Incentives:

- Free doses of influenza vaccine (max 100 doses)
- Free shipping and confirmatory testing for respiratory specimens submitted to OLS
- Weekly reports on state and regional flu activity

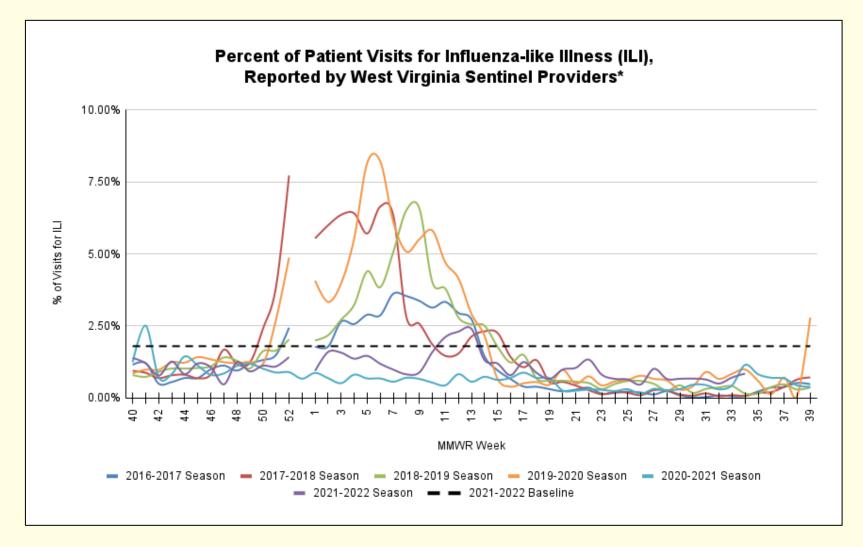
2021-2022 Influenza Season



- Influenza A was the most commonly identified virus type this season, specifically A(H3N2)
- One influenza-associated pediatric death was reported during MMWR week 14
- Three cases of a novel influenza A(H3N2)v were identified after attendance at the Jackson County Junior Fair, in Jackson County, West Virginia
- Influenza activity surpassed the state baseline of 1.8% from MMWR week 11 through 13 and peaked in week 13 at 2.40%
- A total of 28 influenza outbreaks occurred for the 2021-2022 influenza season

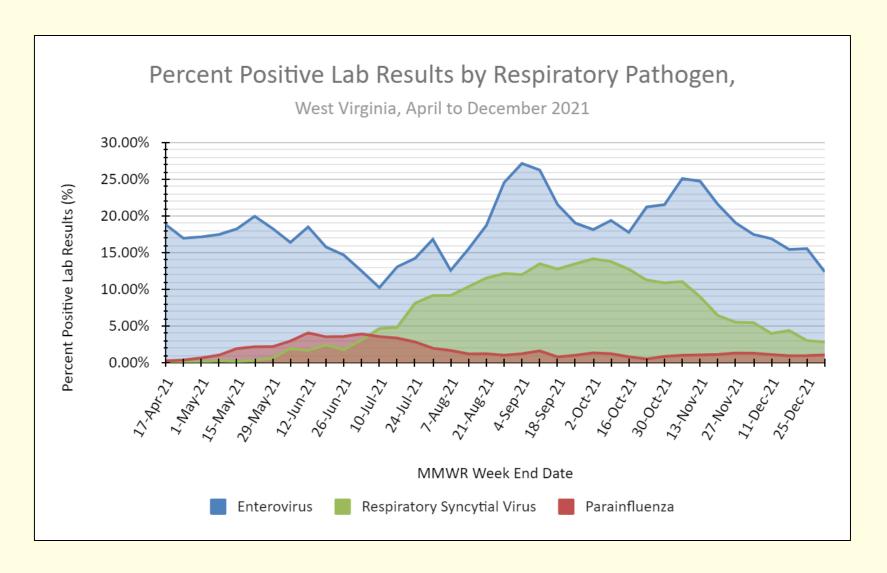
2021-2022 Influenza Season





Trends in Viral Respiratory Pathogens





Influenza Surveillance Report 2022-2023



Coming updates:

- A summarization page highlighting key facts will be added
- Data on viral respiratory pathogens other than influenza will be added

Accessing the report:

- The report will be distributed by email on weekly basis from October through May and monthly from June through September
- The report will be available on the OEPS Influenza Data webpage, <u>oeps.wv.gov/flu/pages/flu_data.aspx</u>

Additional Resources



OEPS Website: oeps.wv.gov/flu/pages/flu_lhd.aspx

- Weekly Lab Reporting Form
- Pediatric Death Reporting Form
- Novel Influenza Case Report Form
- Outbreak Toolkit
- Surveillance Protocol
- Most Current Influenza Surveillance Report

CDC Influenza Page: www.cdc.gov/flu/about/index.html

Contact Information



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