Influenza Surveillance in West Virginia

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06-07 Sources of Data

Sentinel Laboratories
- Cabell-Huntington Hospital, Huntington
- Charleston Area Medical Center, Charleston
- Office of Laboratory Services, South Charleston
- St. Mary's Hospital, Huntington
- West Virginia University Hospital, Morgantown

Sources of Data (continued)
- Local Health Departments
  - Report the number of cases of influenza-like illness to IDEP weekly
  - Report influenza outbreaks immediately
- Influenza Sentinel Providers
  - Report the number of cases of influenza-like illness to the Centers for Disease Control & Prevention (CDC) weekly and submit specimens to OLS
Sources of Data (continued)

- Schools
  - Report absenteeism
- Hospitals
  - Report pneumonia and influenza cases

2006-2007 Vaccine Composition

- an A/New Caledonia/20/99 (H1N1)-like virus
- an A/Wisconsin/67/2005 (H3N2)-like virus
- a B/Malaysia/2506/2004-like virus (B/Malaysia/2506/2004 and B/OHio/1/2005 strains)


• Sentinel Laboratories’ Results

- Predominant strain in WV – Influenza A (H1)
  - United States – Influenza A (H1)
- First laboratory confirmed case
  - Influenza B, Week 40, ending 10/7/2006
- Last laboratory confirmed case
  - Influenza A, Week 19, ending 5/12/2007
  - Influenza B, Week 20, ending 5/19/2007
Sentinel Laboratories’ Results

- Laboratory Reporting Peak
  - Influenza A
    - Week 6, ending February 10, 2007
  - Influenza B
    - Week 12, ending March 24, 2007
- Laboratory Culture-Confirmed Cases
  - Total in 2006-2007 = 1,357
    - Influenza A = 987
    - Influenza B = 370

OLS 06-07 Flu Season Summary

- 139 Specimens received
  - 57 negative, 15 presumed negative*
  - 40 A H1N1
  - 13 B
  - 1 A & B
  - 1 Adenovirus
  - 5 Unsatisfactory for testing**
Office of Laboratory Services

- Presumptive Negative*
  - Sample is over 3 days old or the transport media is out of date. Sometimes these specimens are run and yield a viable virus.
- Unsatisfactory Specimen**
  - Excessive time in transport.

07-08 Vaccine Composition

- It is recommended by the World Health Organization (WHO) that vaccines to be used in the 2007-8 season (northern hemisphere winter) contain the following:
  - An A/Solomon Islands/3/2006 (H1N1)-like virus;
  - An A/Wisconsin/67/2005 (H3N2)-like virus*;
  - A B/Malaysia/2506/2004-like virus

Candidate vaccine viruses include:
* A/Wisconsin/67/2005 (H3N2) and A/Hiroshima/52/2005

Influenza Outbreak Surveillance

- 2006-2007 Season
  - One outbreak reported from a nursing home in Fayette County
    - Culture-confirmed Influenza B
Submission Requests for OLS Flu Kits

- [www.wvdhhr.org/labservices](http://www.wvdhhr.org/labservices)
  - Go to Labs, Virology, Influenza, Influenza Collection and Shipping Instructions
  - You may reach Will McIlvain, Virology Microbiologist, at (304) 558-3530, ext. 2403
  - WilliamMcIlvain@wvdhhr.org

Nasopharyngeal Swab Samples

- **Handling issues**
  - Transport time
    - Mail within 3 days to OLS
    - Free-of-charge UPS return labels in kits
  - Need to use cold packs with samples
    - Cold packs provided with kits
    - Greater chance of viral recovery

07-08 Flu Season Kit Distribution

- **Shipment in mid-October to Health Departments**
  - Please inquire if sentinel providers in your area are planning to submit any specimens.
  - Shipment of flu kits to regional epidemiologists as needed.
Local Health Department Reporting

- Weekly reporting of ILI throughout year
  - Faxed report to IDEP: 304-558-8736
  - Used to evaluate ILI activity in state
- Level of Flu Activity reported to CDC weekly
- Listed on IDEP website for public viewing
  - Graphs of ILI trends reported to WVBPH & CDC
  - Graph of Aggregate Count of isolates

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Local Health Department Reporting

REPORTED INFLUENZA-LIKE ILLNESS

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Map of Sentinel Providers
Counties without sentinel providers

- Brooke
- Calhoun
- Hardy
- Lincoln
- Logan
- Morgan
- Pendleton
- Pleasants
- Putnam
- Wetzel
- Wyoming

Sentinel Provider Reporting

**100%**
- Bennett Orvik, MD
- Monroe Health Center
- Raleigh County Health Department
- The Myers Clinic

SP reporters: 90–99%

- Camden-on-Gauley FQHC
- Frank Cuda, FNP
- Preston Memorial Hospital ED
- Richwood Area Community Hosp RHC
- Roane General Hospital ED
- Robert C. Byrd Clinic
- Shenandoah Community Health Center
SP Reporters: 80-89%

- David Avery, MD
- Doddridge Family Medicine
- Fairmont General Hospital
- St. Mary’s Hospital ED

SP Reporters: 60-79%

- Denmar Correctional Facility
- Marshall Long, DO
- Medical Center of Taylor County
- Shepherd Univ Student Health Services
- William Douglas Given, MD
- William Mercer, MD
- Upper Kanawha Valley Association

SP Reporters: 50-59%

- Deborah Mowe, MD
- Hampshire Memorial Hospital
- Mercer County Health Department
- Pennsboro Medical Center
SP Reporters: 40-49%
- Joseph Schreiber, DO
- Zubaer Dawlah, MD

Top four SP submitting specimens
- **Upper Kanawha Med Ctr** - 28 specimens
  - 71% reporter
- **Monroe Health Center** – 23 specimens
  - 100% reporter
- **Lenore Medical Clinic** – 21 specimens
  - 0% reporter
- **William Mercer, MD** - 15 specimens
  - 68% reporter

06-07 Season Synopsis
- Influenza activity in the United States peaked in mid-February.
- The percent of deaths due to pneumonia and influenza remained below baseline levels for the entire influenza season.
2007-2008 Season

- Objectives
  - Sentinel provider enrollment
  - ILI reporting
  - Enhanced ILI reporting
  - Outbreak response
  - Laboratory reporting

Sentinel Provider Surveillance

- Any primary health care provider can participate in this program
  - Physicians
  - Clinics
  - Physicians Assistants
  - Nurse Practitioners

Sentinel Providers

- Conduct surveillance for influenza-like illness (ILI) in collaboration with the state health department and the Centers for Disease Control and Prevention (CDC).
Influenza-like illness

- Fever (≥100°F[37.8°C], oral or equivalent) AND
- Cough or sore throat
  - In the absence of a KNOWN cause other than influenza

Sentinel Providers

- Report to CDC by
  - Internet
  - Fax

Certificates of Appreciation

- Each summer, the CDC sends certificates of Appreciation to SP, which are also signed by the State Epidemiologist, Loretta E. Haddy, PhD.

- Included are postage paid envelopes for sentinel providers to return their work folders to the CDC.
Recruitment of Flu SP

- If possible, make a personal recruiting visit to providers to explain the importance of ILI surveillance and their participation.
- Work with your regional epidemiologist and state flu coordinator to recruit and retain sentinel providers.

http://www.wvdhhr.org/idep/a-z/a-z-influenza.asp

- Recruitment memorandum
- Checklist for Recruiting Sentinel Providers
- Sample memo from Local Health Departments to recruits
- Sentinel provider enrollment form
- Sentinel Provider FAQ sheet

CDC Sentinel Provider Surveillance System

- Family practice residents can complete their research requirement by participating in the system.
  - DFM WVU Health Sciences Center-Chas
  - Clarksburg Family Practice-Clarksburg
  - WVU Rural Fam Med Res Prog-Harpers Ferry
  - Marshall Family Practice-Huntington
  - WVU Family Practice-Morgantown
  - Wheeling Hospital Family Health Center-Wheeling
Contact Information

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- Thank you !!!