

Outbreak Report, January – March, 2011, State of West Virginia

Outbreaks are immediately reportable in West Virginia. Between January and March 2011, there were 95 outbreaks reported in West Virginia. This represents a three-fold increase over the first three months of 2009 and 2010. Of the 95 outbreaks reported during this period, 86 (91%) were confirmed as outbreaks or clusters of disease and 4 (4%) are still under investigation. Of the 86 confirmed outbreaks, 55 (64%) were reported from healthcare facilities. Eighty-five outbreaks were reported from 31 counties. One outbreak was considered multi-county outbreak and involved 11 counties. Of the 86 confirmed outbreaks, 42 (48%) were respiratory disease outbreaks, 25 (29%) were enteric disease outbreaks, 14 (16%) were rash illness outbreaks, and 5 (6%) outbreaks were categorized as “other”.

This report summarizes the types and reporting sources of the confirmed outbreaks:

Respiratory Disease Outbreaks:

Forty-two respiratory disease outbreaks were reported from 22 counties. Of the 42 respiratory disease outbreaks 27 (64%) were confirmed by laboratory testing. Influenza outbreaks were the most common, accounting for 33 respiratory disease outbreaks. Of the 33 influenza outbreaks, 19 (58%) were reported from long-term care facilities (LTCFs)

Table I: Respiratory Disease Outbreaks, West Virginia, January - March 2011 (n=42)

Type of Outbreak	Number of outbreaks	Reporting Source	Laboratory Testing
Influenza	33	Multiple Sources	See below
RSV	2	2 LTCFs	2 Lab Confirmed
Upper Respiratory Illness (URI) (Undetermined etiology)	6	2 Schools 2 LTCF 2 Daycare	4 No testing done 2 Negative or non-contributory lab results
Pertussis	1	Community	Lab confirmed

Table II: Influenza Outbreaks, West Virginia, January - March 2011 (n=33)

Type of Outbreak	Number of outbreaks	Reporting Source	Laboratory Testing
Influenza A	27	19 LTCFs 8 Schools	21 Lab confirmed 6 Rapid test positive
Influenza B	3	Schools	2 Rapid test positive 1 Lab confirmed
Influenza A and B	2	Schools	1 Lab confirmed 1 Rapid test positive
Influenza (no typing)	1	Sports team	Rapid test positive

Enteric Disease Outbreaks

Twenty-five enteric disease outbreaks were reported from 15 counties. Of the 25 enteric disease outbreaks, 16 (62%) were confirmed by laboratory testing.

The following table describes enteric disease outbreaks

Table III: Enteric Disease Outbreaks, West Virginia, January - March 2011 (n=25)

Type of Outbreak	Number of Outbreaks	Reporting Source	Laboratory Testing
Norovirus	15	1 Rehabilitation facility 1 Hospital 12 LTCFs	Lab Confirmed
Norovirus /Rota virus	1	1 Hospital	Lab confirmed
Acute Gastroenteritis	9	LTCFs	5 No testing done 4 Negative or non-contributory lab results

Rash Illness Outbreaks

Fourteen rash illness outbreaks were reported from 23 counties, including multi-county outbreaks. Of the 14 rash illness outbreaks, 6 (43%) were confirmed by laboratory testing.

The following table describes rash illness outbreaks

Table IV: Rash Illness Outbreaks, West Virginia, January - March 2011 (n=14)

Type of Outbreak	Number of Outbreaks	Reporting Source	Laboratory Testing
Scabies	4	2 Hospitals 2 LTCF	No Lab done / clinical diagnosis
Ringworm	1	School	No lab done / clinical diagnosis
Varicella	7	Schools	3 Lab confirmed 4 No testing done
Herpes Gladiatorum	1	Sports teams	Lab confirmed
Fifth's Disease	1	School	No lab done / clinical diagnosis

Other Outbreaks

Of the 5 confirmed outbreaks characterized as "other", 4 were caused by multi-drug resistant organisms (MDROs) and one outbreak was clinically diagnosed as conjunctivitis.

The following table describes outbreaks caused by MDROs:

Table V: MDROs Outbreaks, West Virginia, January - March 2011 (n=4)

Type of Outbreak	Number of Outbreaks	Reporting Source	Laboratory Testing
Methicillin-resistant <i>Staphylococcus aureus</i> (MRSA)	2	1 Hospital 1 Day care	Lab confirmed
<i>Acinetobacter baumannii</i>	1	Hospital	Lab confirmed
Carbapenem-Resistant <i>Klebsiella pneumoniae</i> (CRKP)	1	Hospital & LTCF	Lab confirmed

Healthcare-Associated Outbreaks (HAOs)

Fifty-five of the 86 confirmed outbreaks were reported from healthcare facilities and were classified as health-care associated outbreaks. Of the 55 HAOs, 49 (89%) outbreaks were reported from LTCFs and 6 (11%) from hospitals.

The following table summarizes the types of HAOs

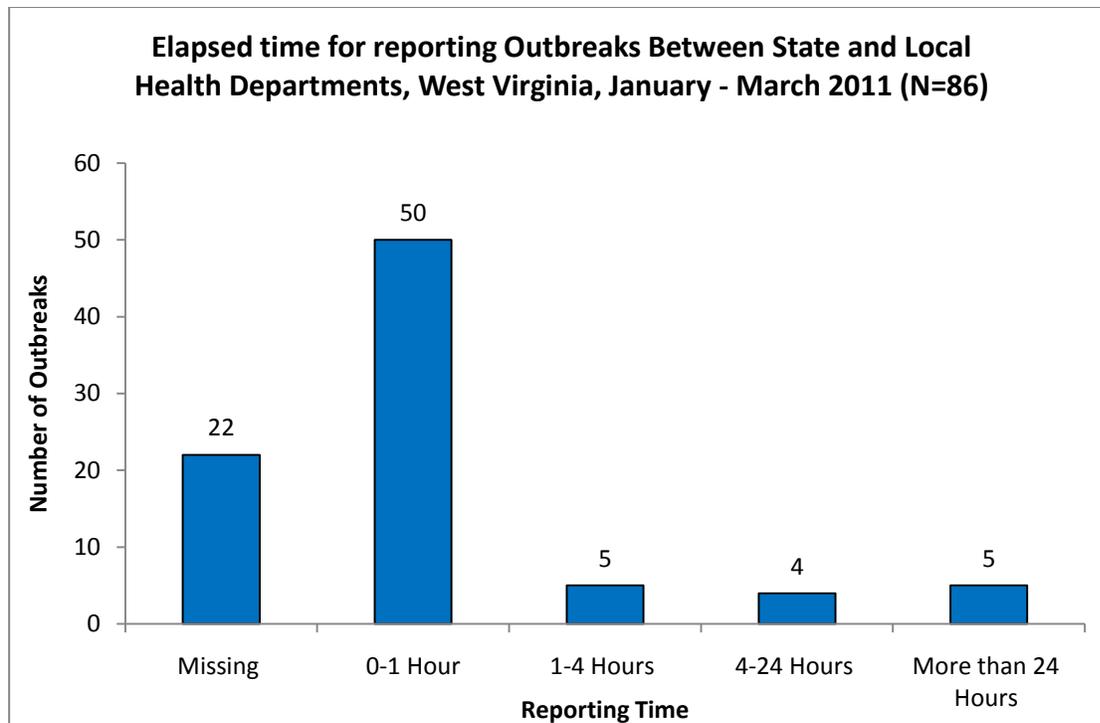
Healthcare-Associated Outbreaks, West Virginia, January - March 2011

Type of Outbreak	Number of outbreaks	Percent
Enteric	25	45.5%
Respiratory	23	42.0%
Rash	4	7.0%
MDROs	3	5.5%
Total	55	100%

Reporting Time

In West Virginia, outbreaks should be reported immediately to the local health departments (LHDs). According to infectious disease rules and regulations, LHDs should report outbreaks within 60 minutes to the Bureau for Public Health (BPH). There has been marked improvement in outbreak recognition and reporting during this reporting period. Of 86 confirmed outbreaks, 50 (58%) were reported to BPH within one hour; however the data was missing in 22 (25.5%) outbreaks.

The following graph illustrates the time elapsed for reporting outbreaks between the state and local health departments.



Outbreak toolkits to assist in investigating the most commonly encountered outbreaks can be found at:

<http://www.wvdep.org/AZIndexofInfectiousDiseases/OutbreaksorClustersofAnyIllness/tabid/1535/Default.aspx>