

Immunization Grant Surveillance Indicator End-of-Year Progress Report - 2011

The Centers for Disease Control and Prevention (CDC)-funded Immunization and Vaccines for Children Grant provides goals for vaccine-preventable disease (VPD) surveillance for the state of West Virginia. CDC requests a mid-year and end-of-year report on our progress on the surveillance indicators listed in the tables below. This document contains the results of the 2011 end-of-year progress report.

Overall, we did reasonably well with the individual surveillance indicator completeness for our 2011 reporting efforts. We met all of the listed individual surveillance indicator targets except for the two related to meningococcal disease. Only 9/11 meningococcal cases (82%) had complete vaccine history and 9/11 (82%) had complete serogroup information. One additional case had an isolate OLS was unable to serotype. CDC requests that 90% of meningococcal cases have complete vaccination history and known serogroup. Serogroup data were missing from two cases diagnosed out-of-state and missing vaccine history was attributed to inability to contact the case patient in one instance.

CDC also requests that we have complete surveillance indicator information for 90% of certain VPD cases. We did not meet this goal in 2011. Overall, only 114/145 (79%) of our VPDs had complete surveillance indicator information. In addition, ten pertussis cases were reported as having had pertussis vaccine before symptom onset, but vaccination dates were missing for these cases. Eight out of ten of these cases (80%) were in children who should have more readily accessible vaccination records than adults. If these cases were removed from the complete surveillance indicator calculation, only 72% of our 2011 VPD cases would be considered to have complete surveillance indicator information. Missing surveillance indicator information is summarized below, and tables outlining surveillance indicator completeness for each VPD reported in West Virginia in 2011 are attached at the end of this document.

Missing surveillance indicator data consists of missing race and/or ethnicity information for pertussis and invasive *Streptococcal pneumoniae* (n=12), missing address information for pertussis (n=1), missing symptom onset date for pertussis and *Haemophilus influenza* (n=2), missing date of report to public health for pertussis (n=1), missing vaccination history for pertussis, meningococcal disease, and invasive *Streptococcal pneumonia* (n=17), missing laboratory testing information (including antibiotic sensitivity testing) for pertussis, meningococcal disease, and invasive *Streptococcal pneumonia* (n=18), and missing epidemiologic data for pertussis (n=19 unknown responses to “part of an outbreak”; n= 22 unknown responses to “epi-linked to another case”; n=3 cases without evidence of contact tracing).

While no single surveillance indicator stands out as the cause of incomplete data, West Virginia has a relatively low incidence rate of VPDs and small numbers of missing surveillance indicators add up over time and lower our data completion rate. Some tips for increasing our surveillance indicator completion in the future include:

- Asking cases (or their parent/guardian) to identify race and ethnicity during the interview process. Most people will not be offended by these questions. However, if someone asks why you need that information, explain that CDC uses it to identify groups who are at higher risk for disease so appropriate prevention efforts can be made. It is better to ask and have a case refuse to answer than mark it “Unknown” because you did not want to offend

- someone. If you are concerned that asking for this information may jeopardize your ability to complete your interview, ask these questions last.
- If a case (or their parent/guardian) cannot identify another epi-linked case, do not mark “Unknown” to reflect the fact that one must exist somewhere. With the exception of tetanus and influenza, VPDs are human diseases and are contracted from another person in some manner. This question refers to known individuals from whom the case may have contracted their disease.
 - If there is no identified outbreak occurring in your county/region at the time, do not mark “Unknown” to reflect the fact that an outbreak may exist. If an outbreak situation evolves, it is very easy to go back in and change a “NO” response to a “YES”.
 - Use available resources to obtain vaccination records for cases. If the information is not available in WVSIS, these records may be obtained from a case’s physician and/or school records. The state VPD epidemiologist is happy to assist in the effort to find vaccination records for VPD cases and can be reached at 304-558-5358.
 - If you have problems obtaining records on laboratory testing performed in another state, the VPD epidemiologist may be able to help and can be reached at 304-558-5358.

A list of surveillance indicators for selected VPDs likely to be seen in West Virginia can be found on the Division of Infectious Disease Epidemiology’s Vaccine-Preventable Disease webpage at: http://www.dhhr.wv.gov/oeps/disease/IBD_VPD/VPD/Documents/Surveillance%20Indicators%20for%20Selected%20Vaccine-Preventable%20Diseases.pdf and in the CDC’s “Manual for the Surveillance of Vaccine-Preventable Diseases” at: <http://www.cdc.gov/vaccines/pubs/surv-manual/index.html>

In the future, VPD investigations submitted for state review with incomplete surveillance indicator information will be returned to the submitter(s) for completion. If there is a valid reason for missing data, please indicate the reason(s) in the notes section of the WVEDSS form.

Surveillance Indicators for Confirmed/Probable* Mumps Cases – 2011 (n=1)	Percent complete in 2011	Missing data
Demographics (Name, address, gender, race, ethnicity, date of birth)	100%	
Clinical Case Definition	100%	
Date of Symptom Onset	100%	
Date of Report to Public Health	100%	
Vaccination History	100%	
Hospitalization	100%	
Laboratory Testing	100%	
Transmission Setting	0%	Transmission setting was unknown
Epidemiologic Data – Outbreak Related	100%	
Epidemiologic Data – Epi-linked to Another Case	100%	
Epidemiologic Data – Contact Tracing Complete	100%	

*There were a few suspected cases, which should also include all above listed information

Surveillance Indicators for Confirmed/Probable H. flu Cases – 2011 (n=2 in children < 5 years of age*)	Percent complete in 2011	Missing data
Demographics (Name, address, gender, race, ethnicity, date of birth)	100%	
Clinical Case Definition	100%	
Date of Symptom Onset	50%	1 patient lost to follow-up due to inaccurate contact information
Date of Report to Public Health	100%	
Vaccination History	100%	
Serotype	100%	
Specimen Source	100%	
Type of Infection	100%	

*Even though CDC only monitors completeness of data for children < 5 years of age, this information should be complete for all cases, regardless of age

Surveillance Indicators for Confirmed/Probable Meningococcal Cases – 2011 (n=11)	Percent complete in 2011	Missing data
Demographics (Name, address, gender, race, ethnicity, date of birth)	100%	
Clinical Case Definition	100%	
Date of Symptom Onset	100%	
Date of Report to Public Health	100%	
Vaccination History	82%	1 patient never returned calls & the family member interviewed didn't know vaccination history
Serogroup	82%	We did not have serogroup data for patients diagnosed in FL and OH
Type of Infection	100%	

Surveillance Indicators for Confirmed Invasive <i>S. pneumonia</i> Cases – 2011 (n=28 in children < 5 years of age*)	Percent complete in 2011	Missing data
Demographics (Name, address, gender, race, ethnicity, date of birth)	82%	5 missing race and/or ethnicity
Clinical Case Definition	100%	
Date of Symptom Onset	100%	
Date of Report to Public Health	100%	
Vaccination History	96%	1 case was listed as Unknown
Type of Infection	100%	
Specimen Source	100%	
Underlying Medical Conditions	89%	3 missing: Note: None is an option
Antibiotic Sensitivity Profile	93%	2 missing
Capsular Type	93%	2 missing

*Even though CDC only monitors completeness of data for children < 5 years of age, this information should be complete for all cases, regardless of age

Surveillance Indicators for Confirmed/Probable Pertussis Cases – 2011 (n=103)	Percent complete in 2011	Missing data
Demographics (Name, address, gender, race, ethnicity, date of birth)	93%	7 missing race and/or ethnicity and/or address
Clinical Case Definition	100%	
Date of Symptom Onset	99%	1 missing
Date of Report to Public Health	99%	1 missing
Vaccination History	86%	14 missing all vaccination information, additional 10 missing dates of vaccination
Complications (including information on hospitalization, presence of whoop, post-tussive vomiting, and paroxysmal cough, apnea, chest x-rays for pneumonia, seizures and encephalopathy)	93%	7 missing at least one of the complications listed on left
Antibiotic Treatment	100%	
Laboratory Testing	99%	1 Unknown – you can ask the patient about testing if you don't have a lab report
Epidemiologic Data – Outbreak Related	82%	19 reported as Unknown
Epidemiologic Data – Epi-linked to Another Case	79%	22 listed as Unknown
Epidemiologic Data – Contact Tracing Complete	97%	3 have no evidence of contact tracing, if there are no contacts, please state this in the notes section