

Inside This Issue:

Acute Flaccid Myelitis Vigilance	1
Outbreak Summary	2
VPD Indicators	3
Data Quality Indicators	4-5

Kansas Department of Health & Environment

Bureau of Epidemiology & Public Health Informatics

D. Charles Hunt, MPH,
State Epidemiologist
& Director, BEPHILou Saadi, Ph.D., Deputy
Director & State RegistrarSheri Tubach, MPH, MS,
Director, IDERDaniel Neises, MPH
Senior EpidemiologistFarah Ahmed, MPH, PhD
Environmental Health OfficerIngrid Garrison, MPH, DVM,
DACVPM, State Public
Health VeterinarianBonnie Liscek, MPS,
Director, Surveillance Systems
& *Epi Updates* EditorCurtis State Office Building
1000 SW Jackson St.
Topeka, KS 66612Email: epihotline@kdehs.gov
Epi Hotline: 877-427-7317
Fax: 1-877-427-7318**Acute Flaccid Myelitis Vigilance**

by Mychal Davis, MPH

On September 12, 2014, physicians at the Children's Hospital in Colorado notified the Centers for Disease Control and Prevention (CDC) of nine cases where children had an onset of acute limb weakness. Their neurological illness onsets were from August 2014 to September 2014. The limb weakness was preceded by febrile illness or respiratory symptoms; these symptoms occurred 3-16 days before neurological illness. The cases of neurological illness coincided with the enterovirus D68 (EV-D68) outbreak. Shortly after being notified, the CDC distributed a health advisory requesting state and local health departments report cases and send specimens for testing.

Clinical Criteria

An illness with onset of acute focal limb weakness; AND

- a magnetic resonance image (MRI) showing a spinal cord lesion largely restricted to gray matter and spanning one or more spinal segments; OR
- cerebrospinal fluid (CSF) with pleocytosis (white blood cell count >5 cells/mm³ – may adjust for presence of red blood cells by subtracting one white blood cell for every 500 red blood cells present).

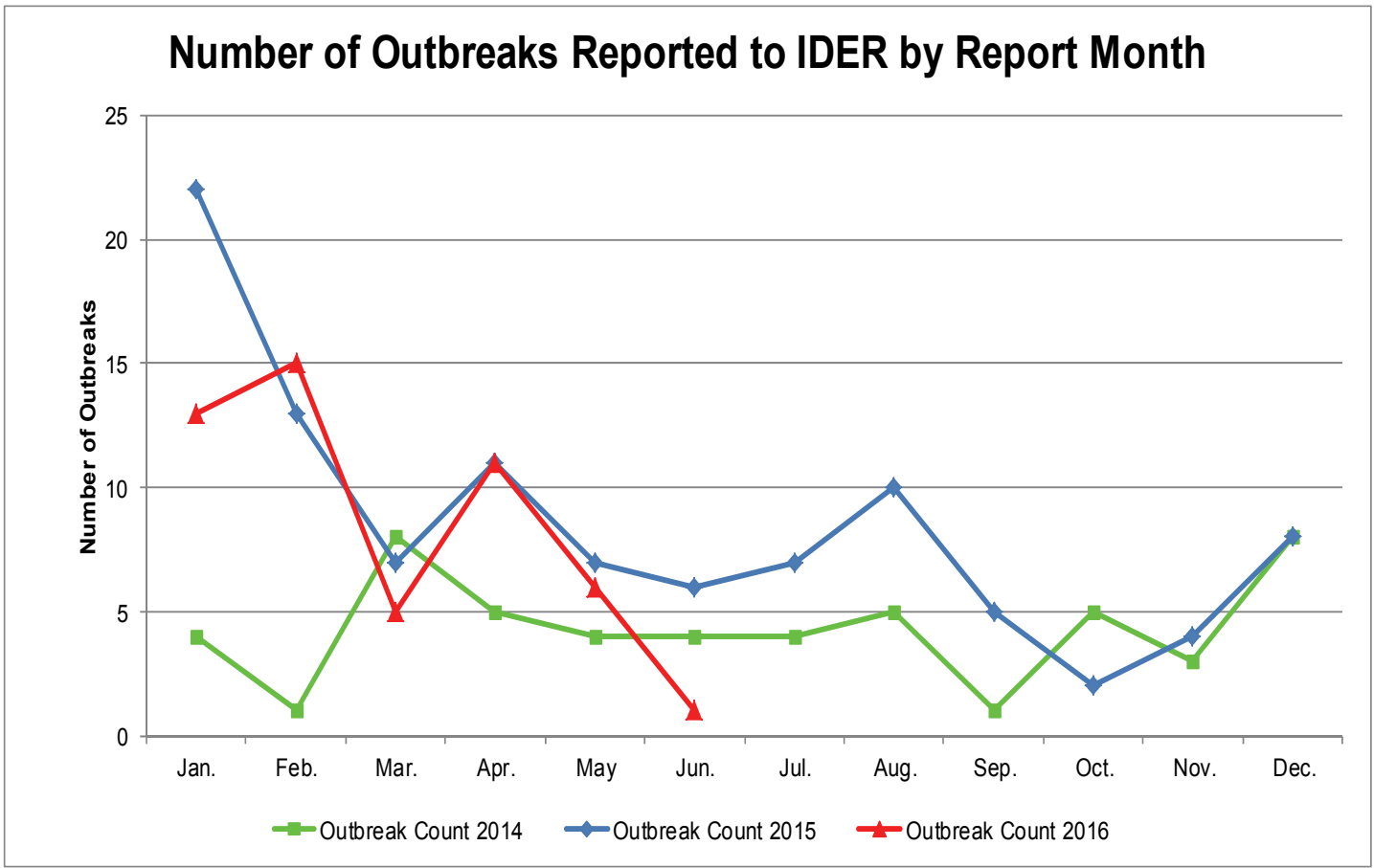
Specimen Collection

Collect specimens on cases as close as possible to the onset of limb weakness. The following specimens should be collected:

- Nasopharynx, throat, and nasal swabs or endotracheal aspirates (in viral transport media),
- CSF (2-3 cc, if available, in sterile collection tube),
- Serum: acute and convalescent, called prior to treatment with IVIG, (2-3 cc in red or tiger-top tube),
- Two stools (two quarter-sized amounts in sterile wide-mouth container) or two rectal swabs (in viral transport media) collected 24 hours apart.

In total, 120 cases from 34 states were identified in 2014. One hundred eighteen patients were hospitalized. The median age was seven years, and 92 patients had antecedent respiratory or febrile illness. Laboratory specimens did not identify a consistent pathogen for the cause of Acute Flaccid Myelitis (AFM). Of the fifty-five respiratory samples collected from the 120 patients, 18% identified EV-D68. Enterovirus D68 was not identified in any serum or stool specimens.

In 2015, 20 people from 12 states were reported to have AFM. Two of the reported cases were from Kansas. Their onset of symptoms happened in July and September, and both were positive for coxsackievirus in CSF. There is one Kansan that was confirmed for AFM in 2016. This citizen was positive for rhinovirus by throat swab. If there is any suspicion of cases that resemble AFM, please report this to the EpiHotline within four hours so that we may assess.



Date Reported	Exposure Setting	Transmission	Disease	County
6/30/2016	Restaurant	Food	Salmonellosis	Shawnee

IT'S HOT OUTSIDE! *STAY COOL. STAY HYDRATED. STAY INFORMED.*

Vaccine-Preventable Disease Surveillance Indicators

by Mychal Davis, MPH

The completeness and quality of specific surveillance indicators for vaccine-preventable diseases (VPDs) reported to the Kansas Department of Health and Environment (KDHE) from June 1 to June 30, 2016 can be found in the table below. The bolded percentages represent the indicators that have less than 90% completion. The case counts presented in this report are preliminary numbers and are subject to change.

Keep up the good work! All of the vaccine preventable disease reported this month met the benchmark for date of birth and gender.

Still room for improvement... Pertussis cases had six indicators, the mumps case had five indicators, and the varicella cases had four indicators fall below the 90% benchmark. *Haemophilus influenzae* cases had three indicators fall below the benchmark. *Streptococcus pneumoniae* had two; while the meningococcal case had one indicator fall below the benchmark.

Please continue to focus on completing these fields in EpiTrax for all VPDs as the goal is to reach 90% or higher completion on all indicators. For questions regarding this data, please contact Mychal Davis at (785) 368-8208 or mda-vis@kdheks.gov.

VPD Indicators Reported from June 1 to June 30, 2016 in Kansas

Indicators	<i>Haemophilus influenzae</i> , invasive	Meningococcal disease	Mumps	Pertussis	<i>Streptococcus pneumoniae</i> , invasive	Varicella
Number of reported cases	9	1	1	15	15	15
% of cases with date of birth	100%	100%	100%	100%	100%	100%
% of cases with gender	100%	100%	100%	100%	100%	100%
% of cases with race	100%	100%	0%	100%	100%	100%
% of cases with ethnicity	100%	0%	0%	100%	93%	100%
% of cases with onset date [‡]	89%	100%	0%	73%	93%	80%
% of cases with hospitalized noted	100%	100%	100%	87%	87%	93%
% of cases with died noted	89%	100%	100%	87%	87%	93%
% of cases with vaccination status*	89%	100%	0%	73%	93%§	80%
% of cases with transmission setting [¶]	N/A**	N/A**	0%	73%	N/A**	13%
% of cases with completed symptom profiles	N/A**	N/A**	N/A**	53%	N/A**	53%

*Excludes cases with a State Case Status of "Out of State" or "Not a Case."

‡Data are pulled from onset date field within the clinical tab, not the investigation tab.

*Unknown is considered a valid response if patient is older than 18 years of age.

**Indicator field is not included in supplemental disease form; *S. pneumoniae* and *H. influenzae* do not have clinical case definitions.

§Indicator considered complete if either polysaccharide or conjugate pneumococcal vaccine history is documented.

¶Unknown is considered a valid response for this indicator.

EpiTrax Data Quality Indicators

by Sheri Tubach, MPH, MS

The Bureau of Epidemiology and Public Health Informatics has implemented a set of monthly quality indicators and performance measures to encourage data quality improvement in EpiTrax and timeliness of investigations. The first column is the EpiTrax field. The second column represents the number of cases with data in the field, and the third column, Percent Completed, represents the frequency of completion of the data field in EpiTrax. In order to align with preparedness targets for initiation of disease control measures and to set goals for case investigation completeness, targets for these measures are shown in the table below. We hope that these targets will help local health departments prioritize case investigations. County level indicators are now emailed to each local health department monthly. Percentages noted in red indicate a decrease in completeness compared to May 2016. Many of the surveillance indicators and performance measures are below 90% and have decreased from May 2016.

Starting in January 2016 an additional performance measure has been added, timeliness of disease reporting. This performance measure is reflective of how timely health care providers and laboratories are reporting diseases according to KAR 28-1-2 (http://www.kdheks.gov/epi/download/KAR_28.1.2.pdf). The performance measure, timeliness of disease control measure, for cases of Salmonellosis and cases of Shiga-toxin *Escherichia coli* (STEC) are now calculated using the date for "Call Attempt 1" in the "Interview Information" tab in EpiTrax. For questions, contact Sheri Tubach at stuebach@kdheks.gov.

June 2016		State's Total Number of Cases* = 293	
EpiTrax Indicators			
EpiTrax Field	Number of Cases with Field Completed	Percent Completed	
Address City	288	98	
Address County	293	100	
Address Zip	286	98	
Date of Birth	291	99	
Died	256	87	
Ethnicity†	240	82	
Hospitalized	250	85	
Occupation	152	52	
Onset Date	208	71	
Pregnancy††	126	82	
Race †	256	87	
Sex †	293	100	
Date LHD Investigation Started	213	73	
Date LHD Investigation Completed	192	66	
Persons Interviewed	187	65	
Persons Lost to Follow-Up	16	6	
Persons Refused Interview	1	0	
Persons Not Interviewed	85	29	
Performance Measures			
	Number of Cases	Percent of Cases	
Diseases were reported on time according to disease reporting regulations ***	269	92	
Disease control measures began within the target for each disease ^	171	58	
Case investigations were completed within the target for each disease ^	106	36	

* Calculations do not include Hepatitis B - chronic, Hepatitis C – chronic, or Rabies.

** Out-of-state, discarded, deleted, or those deemed to be not a case are not included in this calculation.

† Unknown considered incomplete.

†† Pregnancy completeness calculated on females only.

Continued on Page 5

Disease Targets

Diseases	Disease Control (Days)*	Completed Case Investigation (Days)**
Anthrax; Botulism; Brucellosis; Cholera; Diphtheria; Hantavirus Pulmonary Syndrome; Hepatitis A; Influenza deaths in children <18 years of age; Measles; Meningitis, bacterial; Meningococemia; Mumps; Plague; Poliomyelitis; Q Fever; Rabies, human; Rubella; Severe acute respiratory syndrome (SARS); Smallpox; Tetanus; Tularemia; Viral hemorrhagic fever; Yellow fever	1	3
Varicella	1	5
Pertussis	1	14
Campylobacter infections; Cryptosporidiosis; Cyclospora infection; Giardiasis; Hemolytic uremic syndrome, postdiarrheal; Hepatitis B, acute; Legionellosis; Listeriosis; Salmonellosis, including typhoid fever; Shigellosis; Shiga-toxin <i>Escherichia coli</i> (STEC); Trichinosis; Vibriosis (not cholera)	3	5
Arboviral disease (including West Nile virus, Chikungunya, and Dengue); <i>Haemophilus influenzae</i> , invasive disease; <i>Streptococcus pneumoniae</i> , invasive	3	7
Ehrlichiosis / Anaplasmosis; Lyme disease; Malaria; Spotted Fever Rickettsiosis	3	14
Hepatitis B, chronic; Hepatitis C, chronic; Hepatitis C, acute; Leprosy (Hansen disease); Psittacosis; Streptococcal invasive, drug-resistant disease from Group A Streptococcus; Toxic shock syndrome, streptococcal and staphylococcal; Transmissible spongiform encephalopathy (TSE) or prion disease	N/A	N/A

***Disease Control:** Calculated by using EpiTrax fields: (Date LHD Investigation Started) – (Date Reported to Public Health)

****Completed Case Investigation:** Calculated by using EpiTrax fields: (Date LHD Investigation Completed) – (Date Reported to Public Health)

*****Disease Reporting:** Calculated by using EpiTrax fields: (Lab Test Date, Date Diagnosed – Presumptive, or Date Diagnosed whichever date is earlier) – (Date Reported to Public Health) ≤ KDHE-required disease reporting timeframe

Monthly Disease Counts

The Monthly Disease Counts Report will no longer be part of *Epi Updates*. Please refer to the Cumulative Case Reports of Disease (http://www.kdheks.gov/epi/case_reports_by_county.htm) for current case count information.