



EPI UPDATES

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Zika Virus Update

by Sheri Tubach, MPH, MS

Zika virus is an emerging mosquito-borne virus that was first identified in Uganda in 1947 in rhesus monkeys. Five years later Zika virus was identified in humans in Uganda and the United Republic of Tanzania. Outbreaks of Zika virus disease have been recorded in Africa, the Americas, Asia, and the Pacific. The current Zika virus outbreak, which began in May 2015, has affected many countries in the Americas. Zika virus is an arboviral disease required to be reported in Kansas and is nationally notifiable. As of February 10, 2016, there have been 52 travel associated cases of Zika virus in the United States. There have been no locally acquired infections reported. Puerto Rico and the U.S. Virgin Islands have reported one travel associated infection and nine locally acquired infections.

The incubation period (the time from exposure to symptoms) of Zika virus disease is not clear but is likely to be a few days. The symptoms are similar to other arbovirus infections, such as dengue, and include fever, skin rashes, conjunctivitis, muscle and joint pain, malaise, and headache. These symptoms are usually mild and last for 2-7 days.

Local health authorities in Brazil have observed an increase in Guillain-Barré syndrome which coincided with Zika virus infections in the general public, as well as an increase in babies born with microcephaly (a condition in which a baby's head is smaller than expected when compared to babies of the same sex and age) and other poor pregnancy outcomes in babies of mothers who were infected with Zika virus while pregnant. More investigation is occurring to better understand the relationship between microcephaly, other poor pregnancy outcomes, and Guillain-Barré syndrome after infection with the Zika virus.

Zika virus is transmitted to people mainly through the bite of an infected mosquito from the *Aedes* genus, mainly *Aedes aegypti*. This is the same mosquito that transmits dengue, chikungunya and yellow fever. A mother infected with Zika virus near time of delivery can pass on the virus to her newborn, but this is not common. There have also been reports of transmission by sexual contact and blood transfusion.

Testing is recommended for persons meeting the following criteria:

Persons with travel to or resided in an area with ongoing Zika virus transmission

AND

That developed symptoms consistent with Zika virus infection within two weeks

OR

Pregnant women within 2 to 12 weeks

OR

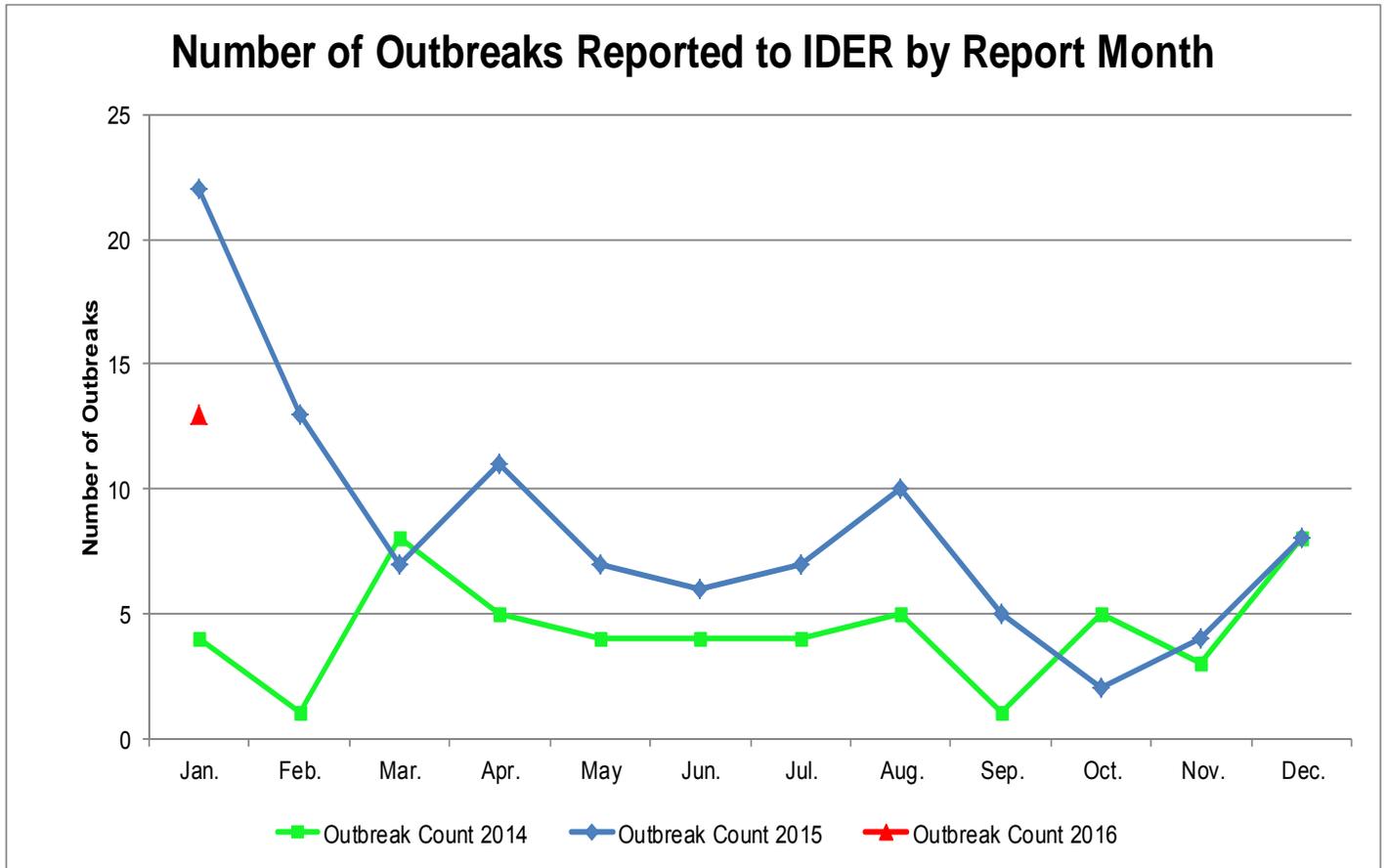
Persons diagnosed with Guillain-Barré syndrome without other apparent cause

AND

Children with microcephaly whose mother traveled to or resided in an area with ongoing Zika virus transmission during pregnancy.

All testing must be approved by the Kansas Department of Health and Environment (KDHE). At this time the Kansas Health and Environmental Laboratories does not perform Zika virus testing, and all testing that is approved will be sent to the Centers for Disease Control and Prevention. For more information, please visit the KDHE Zika virus website at the following url: <http://www.kdheks.gov/zika/index.htm>. This website will be updated as more information becomes available.

For questions about Zika virus or to report a suspect case of Zika virus disease, contact the KDHE Epidemiology hotline by phone: 877-427-7317 or by Email: epihotline@kdheks.gov.



Date Reported	Transmission	Disease	County
1/4/2016	Person-to-Person	Influenza	Ellsworth
1/8/2016	Person-to-Person	Norovirus	Johnson
1/8/2016	Food	Norovirus	Sedgwick
1/13/2016	Person-to-Person	Norovirus	Johnson
1/13/2016	Other	Unknown Etiology	Saline
1/14/2016	Water	Cryptosporidiosis	Wyandotte
1/19/2016	Person-to-Person	Norovirus	Johnson
1/19/2016	Food	Salmonellosis	Multi-State
1/22/2016	Food	Unknown Etiology	Riley
1/27/2016	Food	Campylobacteriosis	Wyandotte
1/28/2016	Person-to-Person	Unknown Etiology	Johnson
1/29/2016	Food	Norovirus	Johnson
1/29/2016	Other	Unknown Etiology	Franklin



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 January 1 to January 31, 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! The date of birth and gender indicators were over 90% for all vaccine preventable diseases reported in the month of December. All of the *Haemophilus influenzae* indicators met the 90% benchmark. Mumps had all but one indicator meet the 90% benchmark.

Still room for improvement... Six of the ten indicators for pertussis fell below the 90% benchmark. *Streptococcus pneumoniae* had two of the eight indicators fall below the 90% 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 January 1 to January 31, 2016 in Kansas

Indicators	<i>Haemophilus influenzae</i> , invasive	Pertussis	<i>Streptococcus pneumoniae</i> , invasive	Varicella	Mumps
Number of reported cases	2	23	21	30	2
% of cases with date of birth	100%	100%	100%	100%	100%
% of cases with gender	100%	100%	100%	100%	100%
% of cases with race	100%	100%	100%	97%	100%
% of cases with ethnicity	100%	87%	100%	100%	100%
% of cases with onset date [‡]	100%	65%	81%	90%	100%
% of cases with hospitalized noted	100%	87%	95%	100%	100%
% of cases with died noted	100%	83%	95%	97%	100%
% of cases with vaccination status*	100%	91%	76% [§]	97%	100%
% of cases with transmission setting [¶]	N/A**	83%	N/A**	7%	100%
% of cases with completed symptom profiles	N/A**	43%	N/A**	43%	0%

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

‡Data is 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.

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 January 2016 there were slight decreases in the completion of the "Died" and "Onset Date" fields. The percent interviewed decreased by 6%. For questions, contact Sheri Tubach at stubach@kdheks.gov

January 2016		State's Total Number of Cases* = 217	
EpiTrax Indicators			
EpiTrax Field	Number of Cases with Field Completed	Percent Completed	
Address City	217	100	
Address County	217	100	
Date of Birth	217	100	
Died	189	87	
Ethnicity†	197	91	
Hospitalized	194	89	
Occupation	125	58	
Onset Date	171	79	
Pregnancy††	101	88	
Race †	200	92	
Sex †	216	99	
Date LHD Investigation Started	186	86	
Date LHD Investigation Completed	166	77	
Persons Interviewed	127	61	
Persons Lost to Follow-Up	14	7	
Persons Refused Interview	2	1	
Persons Not Interviewed	64	31	
Performance Measures			
	Number of Cases	Percent of Cases	
Diseases were reported on time according to disease reporting regulations***	189	87	
Disease control measures began within the target for each disease^	150	69	
Case investigations were completed within the target for each disease^	75	35	

* 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.

^ See the table on the following page for disease control and case investigation targets.

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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

EpiTrax Password Resets

If you are locked out of EpiTrax or need a password reset, please contact Bekah Gonzales at (785) 296-7732 or epitraxadmin@kdheks.gov.

KS Train Webinars

The following webinars have recently been posted to KS-Train:

[KDHE: Influenza Outbreak Update \(1062000\)](#)

[KDHE: Shigellosis Case Investigations \(1061999\)](#)

Coming Soon:

Tularemia and Meningococcal Form Updates - 2016



	Reported Disease Counts - January 2016							3 Year Avg. 2013-2015
	Not Available	Confirmed	Not a Case	Probable	Suspect	Unknown	Grand Total	
Disease	Count	Count	Count	Count	Count	Count	Count	Count
Botulism, foodborne	1	0	0	0	0	0	1	0
Brucellosis	1	0	0	1	0	0	2	0
Campylobacteriosis	34	4	2	3	0	0	43	44
Carbapenem-resistant Enterobacteriaceae	0	0	0	0	2	2	4	4
Chagas Disease	1	0	0	0	0	0	1	0
Chikungunya Fever	0	0	1	0	0	0	1	0
Coronavirus	1	0	0	0	0	0	1	0
Cryptosporidiosis	0	6	0	0	0	0	6	5
Dengue	0	0	1	0	0	0	1	1
Ebola Active Monitoring	2	0	0	0	0	0	2	4
Giardiasis	8	8	0	0	0	0	16	7
<i>Haemophilus influenzae, invasive disease (Including Hib)</i>	0	2	1	0	0	0	3	7
Hepatitis A	1	0	4	0	0	0	5	3
Hepatitis B virus infection, chronic	6	4	188	21	0	0	219	190
Hepatitis B, acute	0	0	3	4	0	0	7	6
Hepatitis C, Chronic	15	59	219	97	0	0	390	217
Hepatitis E, acute	1	0	0	0	0	0	1	0
Influenza	5	4	3	0	0	0	12	15
Legionellosis	2	0	0	0	0	0	2	3
Lyme Disease (<i>Borrelia burgdorferi</i>)	3	1	3	0	1	0	8	10
Meningitis, Bacterial Other	4	0	0	0	0	0	4	1
Meningococcal disease (<i>Neisseria meningitidis</i>)	0	0	1	0	0	0	1	0
Mumps	2	0	1	0	0	0	3	3
Norovirus	2	10	2	0	0	0	14	15
Outbreak Case - Unknown Etiology	3	2	0	1	2	0	8	1
Parainfluenza	0	1	0	0	0	0	1	1
Pertussis	18	0	7	3	1	0	29	64
Q Fever (<i>Coxiella burnetii</i>), Acute	1	0	0	0	0	0	1	1
Rabies, animal	1	3	2	0	0	0	6	9
Rubella	0	0	26	0	0	0	26	41
Salmonellosis	0	21	0	0	0	1	22	30
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	0	0	3	0	6	0	9	15
Shigellosis	6	21	0	4	1	0	32	11
Spotted Fever Rickettsiosis (RMSF)	5	0	2	0	0	0	7	8
Streptococcal disease, invasive, Group A	6	2	0	0	0	0	8	5
<i>Streptococcus pneumoniae, invasive disease</i>	10	10	1	0	1	0	22	17
Transmissible Spongiform Enceph (TSE / CJD)	2	0	0	0	0	0	2	1
Tularemia (<i>Francisella tularensis</i>)	1	0	0	0	0	0	1	2
Typhoid Fever (<i>Salmonella typhi</i>)	1	0	0	0	0	0	1	0
Varicella (Chickenpox)	24	2	14	12	0	0	52	48
West Nile virus non-neuroinvasive disease	0	0	1	0	0	0	1	5
Yersiniosis	1	0	0	0	0	0	1	1
Grand Total	168	160	485	146	14	3	976	796