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Kansas Department of Health and Environment

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Inside This Issue:

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Bureau of Epidemiology & Public Health Informatics

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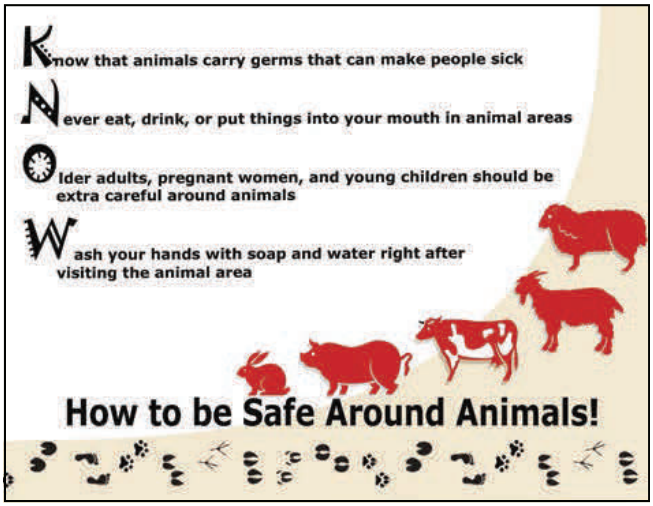
Disease Prevention for Fairs and Festivals

by Ingrid Garrison, DVM, MPH

Fairs and festivals are an important Kansas tradition. They provide an opportunity for people to explore new areas and connect with their heritage, as well as educate and entertain. Animal exhibits and animal contact areas are often part of fairs and festivals and give some people their only up close and personal look at a variety of different animals, especially those traditionally found on farms. This connection, or human-animal bond, is important especially for children. It is equally important to understand that animals can transmit diseases to people. There were approximately 200 human infectious disease outbreaks involving animals in public settings in the United States from 1996-2012. These outbreaks have substantial medical, public health, legal, and economic effects[1].



Available at: www.nasphv.org/documentsCompendiaAnimals. html.

The Kansas Department of Health and Environment has developed a "Disease Prevention for Fairs and Festivals" toolkit. It is designed for fair and festival managers and public health officials to understand the considerations that should be made when organizing and operating a fair or festival. It focuses on preventing zoonotic diseases, those diseases transmitted between animals and people, and is based on the *Compendium of Measures to Prevent Disease Associated with Animals in Public Settings*[1]. There is an additional section on food safety considerations.

This toolkit has been distributed to Local Health Departments, fair and festival operators, and Agricultural Extension Agents in Kansas. The toolkit is available online at http://www.kdheks.gov/epi/human_animal_health.htm.

For questions regarding the information in this toolkit contact Dr. Ingrid Garrison, State Public Health Veterinarian at 785-296-1059.

1. National Association of State Public Health Veterinarians. *Compendium of Measures to Prevention Disease Associated with Animals in Public Settings, 2013.* Journal of the American Veterinary Medical Association, Vol. 243, No. 9, November 1, 2013.

Kansas State Extension Offers Entomology Diagnostic Services

by Ingrid Garrison, DVM, MPH

Kansas State University's Insect Diagnostic Laboratory provides insect and non-insect arthropods (e.g. spiders, ticks, mites, centipedes, etc.) identification services to any Kansas resident. This free service is available through your local county Extension Agent. If the Extension Agent is unable to identify the insect, they will mail it to the Diagnostic Laboratory. Local Health Departments may find this service useful for clients with specific questions (e.g., What kind of tick do I have?). K-State does not test insects or non-insects for any infectious disease.

https://en.wikipedia.org/wiki/Wolf_spider

To submit a sample, complete the appropriate form, found at http://www.entomology.ksu.edu/p.aspx?tabid=375 and take the specimen to the local County Extension Office. The local Extension Office can be found at http://www.ksre.ksu.edu/p.aspx?tabid=39.

http://animals.nationalgeographic.com/animals/bugs/deer-tick/

Disease Reporting and Disease Control Performance Measures

by Daniel Neises, MPH

Public Health Emergency Preparedness Cooperative Agreement
Capability #13: Public Health Surveillance and Epidemiological Investigation
Budget Period 3 (July 2014 – June 2015), as of 5/7/15

Selected Diseases:

Disease	Case Classification Criteria
Hepatitis A	confirmed
Salmonellosis	confirmed, excluding typhoid fever
E. coli, STEC	confirmed
Shigellosis	confirmed
Tularemia	confirmed and probable
Varicella	confirmed and probable
Botulism	confirmed, excluding infant botulism
Measles	confirmed
Meningococcal disease	confirmed
Pertussis	confirmed, with laboratory results

Disease Reporting: Proportion of selected disease reports received by a public health agency within the awardee-required timeframe. Calculated by using EpiTrax fields:

(Lab Test Date or Date Diagnosed – Presumptive) – (Date Reported to Public Health)
≤ KDHE-required disease reporting timeframe

Disease Control: Proportion of reports of selected disease for which initial control measures were initiated within an appropriate timeframe. Calculated by using EpiTrax fields:

(Date LHD Investigation Started) – (Date Reported to Public Health)
≤ CDC-required timeframe

Continued on Page 3

Continued from Page 2

Disease Reporting

Disease	KDHE Required Timeframe	Statewide Received	Statewide Received On Time	%	% Change From Previous Month
Hepatitis A	7 days	8	8	100	-
Salmonellosis	7 days	408	402	99	+1
E. coli, STEC	7 days	63	63	100	-
Shigellosis	7 days	49	48	98	+1
Tularemia	7 days	18	17	94	-8
Varicella	7 days	262	241	92	+1
Botulism	4 hours*	-	-	-	-
Measles	4 hours*	10	9	90	-
Meningococcal disease	4 hours*	**2**	**2**	100	-
Pertussis	4 hours*	207	186	90	+1

**Because EpiTrax does not capture time reported to public health, KDHE is allowed to "consider cases as immediately reported if the selected case event date and date of first report to a health department occur on the same date."*

Disease Control

Disease	CDC Required Timeframe	Statewide Received	Statewide Investigated On Time	%	% Change From Previous Month
Hepatitis A	7 days	8	8	100	-
Salmonellosis	3 days	408	303	74	-
E. coli, STEC	3 days	63	49	78	-1
Shigellosis	3 days*	49	38	78	+3
Tularemia	2 days	18	14	78	+3
Varicella	1 day*	262	230	88	-
Botulism	1 day	-	-	-	-
Measles	1 day	10	10	100	-
Meningococcal disease	1 day	**2**	**2**	100	-
Pertussis	1 day*	207	169	82	+1

**Collecting data for these diseases is optional. KDHE has defined these timeframes, not CDC.*

Vaccine-Preventable Disease Surveillance Indicators

by Anne Straily, DVM, 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 May 1 to May 31, 2015, 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! Almost all indicators were at least 90% complete for all pertussis cases reported, except for timeliness and symptom profile information. Similarly, almost all indicators were 90% complete for *Haemophilus influenzae* and *Streptococcus pneumoniae* cases, with the exception of vaccination status and timeliness. The indicators date of birth, gender, race, and ethnicity were 100% completed for varicella cases.

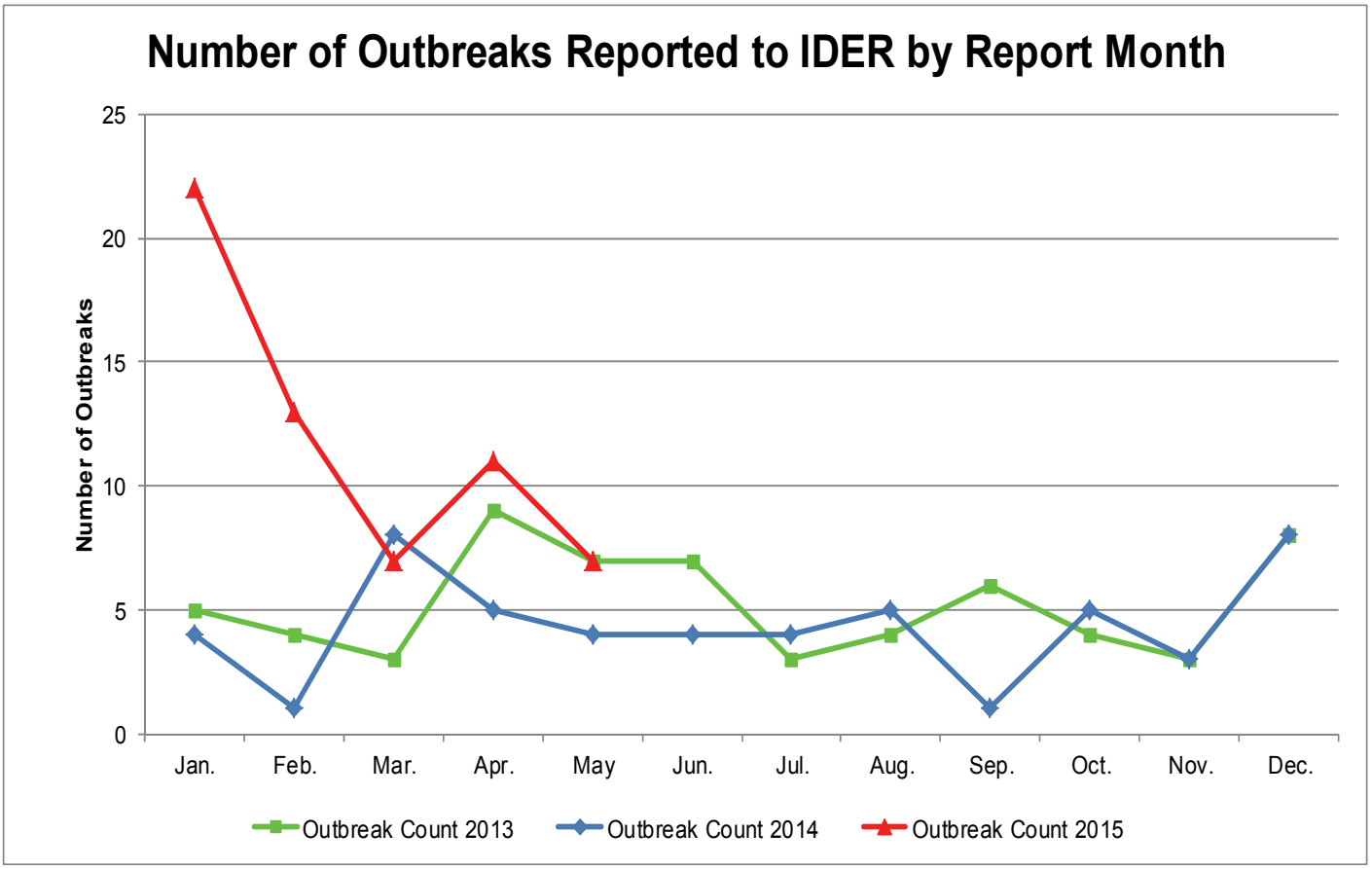
Still room for improvement…The indicators onset date, hospitalized, mortality status, vaccination status, and transmission setting were less than 90% completed for varicella cases. Less than 90% of all *Haemophilus influenzae*, *Streptococcus pneumoniae*, pertussis, and varicella cases were accepted within three days and completed within 14 days. Neither pertussis nor varicella cases reached the 90% benchmark for completed symptom profile information.

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 Anne Straily at (785) 296-5588 or astraily@kdheks.gov.

VPD Indicators Reported from May 1 to May 31, 2015 in Kansas

Indicators	*Haemophilus influenzae,* invasive	Pertussis	*Streptococcus pneumoniae,* invasive	Varicella
Number of reported cases	4	31	20	16
% of cases with date of birth	100%	100%	100%	100%
% of cases with gender	100%	100%	100%	100%
% of cases with race	100%	100%	100%	100%
% of cases with ethnicity	100%	100%	95%	100%
% of cases with onset date‡	100%	97%	90%	**88%**
% of cases with hospitalized noted	100%	100%	100%	**88%**
% of cases with died noted	100%	100%	90%	**88%**
% of cases with vaccination status*	**75%**	97%	**75%**§	**88%**
% of cases with transmission setting¶	N/A**	94%	N/A**	**75%**
% of investigations completed by local health departments within 14 days§§	**75%**	**74%**	**70%**	**69%**
% of cases accepted within 3 days of report to LHD¶¶	**50%**	**74%**	**75%**	**81%**
Median # of days from report to case acceptance (range)¶¶	2 (0-6)	0 (0-16)	2 (0-12)	0 (0-10)
% of cases with completed symptom profiles	N/A**	**81%**	N/A**	**44%**

*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 considered complete if either polysaccharide or conjugate pneumococcal vaccine history is documented.
¶Unknown is considered a valid response for this indicator.
**Indicator field is not included in supplemental disease form; *S. pneumoniae* and *H. influenzae* do not have clinical case definitions.
§§Status is calculated based on when local health department completes investigation.
¶¶Time is from public health report date to when local health department accepts case.



Date Reported	Facility Type	Transmission	Disease
5/4/2015	Travel	Food	Salmonellosis
5/5/2015	Private Home	Food	Salmonellosis
5/13/2015	School or college	Person-to-Person	Pertussis
5/15/2015	Restaurant	Food	Unknown Etiology
5/18/2015	Restaurant	Food	Salmonellosis
5/19/2015	Travel	Food	Salmonellosis
5/28/2015	Unknown	Food	Salmonellosis

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. The indicators in red text represent a decrease in the percent complete since last month or an increase in the number of cases not interviewed and lost to follow-up. For questions, contact Sheri Tubach at stubach@kdheks.gov.

May 2015	State's Total Number of Cases* = 278

EpiTrax Indicators

EpiTrax Field	Number of Cases with Field Completed	Percent Completed
Address City	268	96
Address County	277	99
Address Zip	264	95
Date of Birth	276	99
Died	232	83
Ethnicity†	226	81
Hospitalized	239	86
Occupation	117	42
Onset Date	210	76
Pregnancy††	81	65
Race †	234	84
Sex †	278	100
Date LHD Investigation Started	267	96
Date LHD Investigation Completed	210	76
Persons Interviewed	186	67
Persons Lost to Follow-Up	16	6
Persons Refused Interview	2	1
Persons Not Interviewed	74	27

Performance Measures

	Number of Cases	Percent of Cases
Cases accepted by LHDs for case investigation within three days of report to public health	219	79
Cases that had investigations completed by LHDs within 14 days of report to public health	229	82

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

	Reported Disease Counts - May 2015							
	Not Available	Confirmed	Not a Case	Probable	Suspect	Unknown	Grand Total	3 Year Avg. 2012-2014
Disease	Count	Count	Count	Count	Count	Count	Count	Count
Anaplasma phagocytophilum	4	0	2	2	0	0	**8**	**3**
Anthrax	1	0	0	0	0	0	**1**	**0**
Campylobacteriosis	28	14	0	13	0	0	**55**	**53**
Carbapenem-resistant Enterobacteriaceae	0	0	0	0	0	1	**1**	**1**
Chikungunya Fever	0	0	0	1	0	0	**1**	**0**
Cryptosporidiosis	1	3	0	5	1	0	**10**	**8**
Ebola Active Monitoring	8	0	1	0	0	0	**9**	**0**
Ehrlichiosis, *Ehrlichia chaffeensis (f.HME)*	8	5	3	0	0	0	**16**	**11**
Ehrlichiosis/Anaplasmosis, undetermined	1	0	1	0	0	0	**2**	**0**
Giardiasis	3	3	0	0	0	0	**6**	**9**
Haemophilus influenzae, invasive disease	1	3	0	0	0	0	**4**	**4**
Hansen disease (Leprosy)	1	0	0	0	0	0	**1**	**0**
Hepatitis A	0	1	0	1	0	0	**2**	**24**
Hepatitis B virus infection, chronic	6	1	160	12	0	0	**179**	**60**
Hepatitis B, acute	1	0	3	0	0	0	**4**	**9**
Hepatitis C virus, past or present	96	54	81	2	1	0	**234**	**174**
Influenza	0	0	2	0	0	0	**2**	**1**
Legionellosis	3	0	0	0	0	0	**3**	**3**
Lyme Disease (*Borrelia burgdorferi)*	11	0	5	0	1	0	**17**	**33**
Malaria *(Plasmodium* spp.)	1	2	0	0	0	0	**3**	**2**
Measles (rubeola)	0	0	3	0	0	0	**3**	**2**
Meningitis, Bacterial Other	1	0	0	0	0	0	**1**	**1**
Mumps	1	0	1	0	2	0	**4**	**3**
Norovirus	0	3	1	0	0	0	**4**	**3**
Pertussis	24	4	11	1	2	0	**42**	**81**
Q Fever **(***Coxiella burnetti), Acute*	1	0	0	0	0	0	**1**	**2**
Rabies, animal	51	9	3	0	2	0	**65**	**22**
Rubella	0	0	14	0	0	0	**14**	**32**
Salmonellosis	11	30	0	4	0	0	**45**	**45**
Shiga toxin-producing *Escherichia coli (STEC)*	5	3	0	0	1	0	**9**	**14**
Shigellosis	2	2	0	0	0	0	**4**	**9**
Spotted Fever Rickettsiosis (RMSF)	24	0	19	10	1	0	**54**	**54**
Streptococcal disease, invasive, Group A	0	6	0	0	0	0	**6**	**2**
Streptococcus pneumoniae, invasive disease	4	15	0	0	0	0	**19**	**11**
Transmissible Spongioform Enceph (TSE/CJD)	2	0	0	0	0	0	**2**	**1**
Tularemia (*Francisella tularensis)*	0	2	0	2	1	0	**5**	**4**
Typhoid Fever (*Salmonella typhi)*	0	0	0	0	1	0	**1**	**0**
Varicella (Chickenpox)	9	1	20	8	0	0	**38**	**73**
Viral hemorrhagic fever	0	0	3	0	0	0	**3**	**0**
West Nile virus non-neuroinvasive disease	0	0	5	0	0	0	**5**	**5**
Grand Total	**309**	**161**	**338**	**61**	**13**	**1**	**883**	**759**