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by Chelsea Raybern, MPH

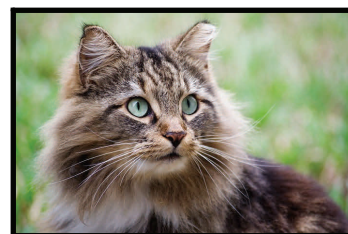
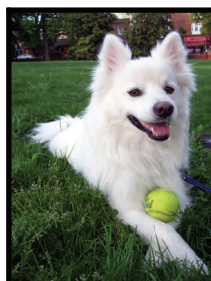
The National Association of State Public Health Veterinarians author the *Compendium of Animal Rabies Prevention and Control*. This document details recommendations for animal rabies prevention and control programs throughout the United States. The Kansas Department of Health and Environment (KDHE) used the recommendations in this Compendium to develop the Kansas Administration Regulation (K.A.R.) 28-1-13, on Rabies Control. The new *Compendium of Animal Rabies Prevention and Control* was published on March 1, 2016 and included substantial changes to the management of animals exposed to rabies based on the most current scientific evidence available. K.A.R. 28-1-13 is being updated to match the recommendations of the *2016 Compendium of Animal Rabies Prevention and Control*; however, the process to adopt the updated regulation will take several months. Therefore, KDHE developed guidelines to incorporate the new recommendations for animals that have been exposed to rabies until the K.A.R. has been updated.

Recommendations that remain the same:

1. Dogs, cats, ferrets, horses, cattle, and sheep that are up-to-date on rabies vaccination:
 - a. Immediately booster with rabies vaccine and observe for 45 days.
2. Ferrets, horses, cattle, and sheep that have never been vaccinated against rabies:
 - a. Euthanasia or undergo 6-month quarantine.

Changed recommendations:

1. Dogs and cats overdue for a rabies vaccination with appropriate documentation of at least one rabies vaccine:
 - a. **Old recommendation:** Euthanasia or undergo 6-month quarantine and receive rabies vaccination 30 days prior to release from quarantine.
 - b. **New recommendation:** Immediately booster with rabies vaccine and observe for 45 days.
2. Dogs and cats overdue for a rabies vaccination without appropriate documentation of receiving a rabies vaccine:
 - a. **Old recommendation:** Euthanasia or undergo 6-month quarantine and receive rabies vaccination 30 days prior to release from quarantine.



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b. New recommendation:

- i. Euthanasia *or*
- ii. 4-month quarantine and receive rabies vaccination within 96 hours after exposure *or*
- ii. Prospective serologic monitoring*, which entails collection of paired blood samples:
 1. First serum should be collected as soon as possible following rabies exposure by a veterinarian and done PRIOR to rabies booster vaccine
 2. Dog or cat should then be boosted with rabies vaccine and must be within 96 hours following exposure
 3. Second serum should be collect five days after first serum.

*Serologic monitoring must be approved by KDHE. Dog or cat must be in quarantine until results are available. If results show an adequate anamnestic response, dog or cat can be treated as an up-to-date animal and just observed for 45 days. If results show an inadequate anamnestic response, dog or cat must be treated as unvaccinated animal and either be quarantined for 4 months *or* euthanized.

3. Dogs and cats that have never been vaccinated against rabies:

- a. **Old recommendation:** Euthanasia *or* undergo 6-month quarantine and receive rabies vaccination 30 days prior to release from quarantine.
- b. **New recommendation:** Euthanasia *or* undergo 4-month quarantine and receive rabies vaccination within 96 hours after exposure.

4. Ferrets, horses, cattle, and sheep overdue for a rabies vaccination:

- a. **Old recommendation:** Euthanasia *or* undergo 6-month quarantine and ferrets receive rabies vaccination 30 days prior to release from quarantine.
- b. **New recommendation:** Treated on case-by-case basis with consultation with KDHE. Outcomes could be 6-month quarantine *or* euthanasia *or* receive rabies booster vaccine and observed for 45 days.

KDHE has distributed the guidelines (official recommendation can be found at: http://www.kdheks.gov/epi/download/Animal_quarantine_guidelines_update_memo.pdf) to the Kansas Association of Chiefs of Police, Kansas Sheriff's Association, Kansas Animal Control Association, and the Kansas Veterinary Board of Examiners (to all licensed veterinarians in Kansas). Please distribute to your appropriate local health partners that might not have received these updated recommendations. These are the most significant changes to the Compendium, and K.A.R. 28-1-13 in the last 20 years. We hope these changes will reduce the number of animals that are euthanized after exposure to rabies while still protecting public health. For any questions regarding these new recommended changes or rabies investigation in general, please call the Epidemiology Hotline at 1-877-427-7317.

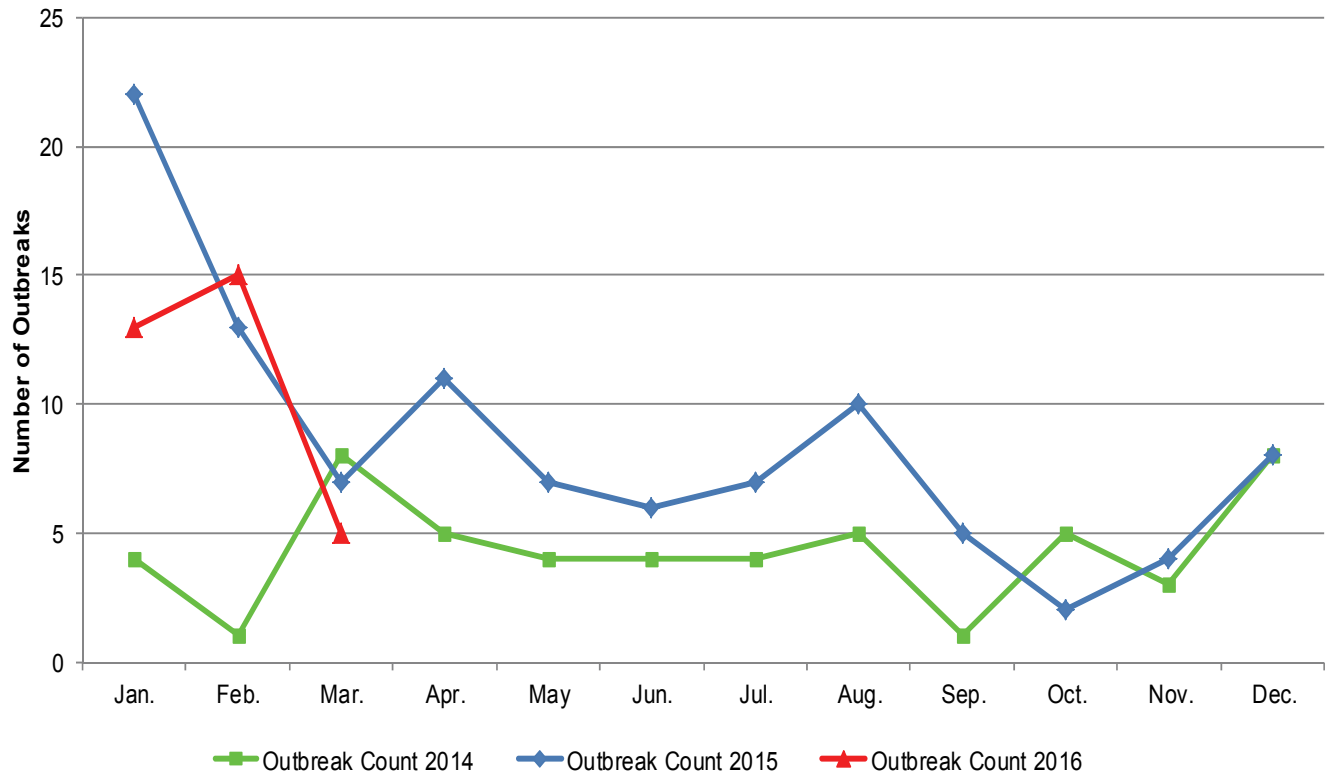


Source: <http://kids.sandiegozoo.org>



Source: <http://commons.wikimedia.org>

Number of Outbreaks Reported to IDER by Report Month



Date Reported	Facility Type	Transmission	Disease	County
3/7/2016	Child Care Center	Person-to-Person	Shigellosis	Wyandotte
3/7/2016	School or College	Person-to-Person	Norovirus	Douglas
3/10/2016	Child Care Center	Person-to-Person	Shigellosis	Douglas
3/14/2016	Adult Care Facility	Person-to-Person	Norovirus	Johnson
3/29/2016	Hotel or Motel	Waterborne	Pontiac Fever	Montgomery



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 March 1 to March 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! *Haemophilus influenzae* cases had 100% completion for all indicators.

Still room for improvement... Varicella cases had two indicators fall below the 90% benchmark, and *Streptococcus pneumoniae* cases had three indicators fall below the benchmark. All but two pertussis indicators fell 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 mdavis@kdheks.gov.

VPD Indicators Reported from March 1 to March 31, 2016 in Kansas

Indicators	<i>Haemophilus influenzae</i> , invasive	Pertussis	<i>Streptococcus pneumoniae</i> , invasive	Varicella
Number of reported cases	4	18	22	26
% of cases with date of birth	100%	100%	100%	100%
% of cases with gender	100%	100%	100%	100%
% of cases with race	100%	83%	100%	92%
% of cases with ethnicity	100%	83%	86%	92%
% of cases with onset date [‡]	100%	67%	86%	92%
% of cases with hospitalized noted	100%	83%	95%	92%
% of cases with died noted	100%	83%	86%	92%
% of cases with vaccination status*	100%	67%	95%§	92%
% of cases with transmission setting [¶]	N/A**	67%	N/A**	12%
% of cases with completed symptom profiles	N/A**	56%	N/A**	50%

*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.

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.

March 2016		State's Total Number of Cases* = 252	
EpiTrax Indicators			
EpiTrax Field	Number of Cases with Field Completed	Percent Completed	
Address City	247	98	
Address County	252	100	
Address Zip	246	98	
Date of Birth	252	100	
Died	217	86	
Ethnicity†	210	83	
Hospitalized	223	88	
Occupation	129	51	
Onset Date	192	76	
Pregnancy††	110	80	
Race †	219	87	
Sex †	252	100	
Date LHD Investigation Started	197	78	
Date LHD Investigation Completed	186	74	
Persons Interviewed	133	56	
Persons Lost to Follow-Up	11	5	
Persons Refused Interview	1	0	
Persons Not Interviewed	92	39	
Performance Measures			
	Number of Cases	Percent of Cases	
Diseases were reported on time according to disease reporting regulations***	212	84	
Disease control measures began within the target for each disease^	159	63	
Case investigations were completed within the target for each disease^	104	41	

* 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.

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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



Disease	Reported Disease Counts - March 2016							3 Year Avg. 2013-2015
	Not Available	Confirmed	Not a Case	Probable	Suspect	Unknown	Grand Total	
	Count	Count	Count	Count	Count	Count	Count	
Brucellosis	1	0	0	0	0	0	1	0
Campylobacteriosis	29	6	21	5	0	0	61	34
Carbapenem-resistant Enterobacteriaceae	0	0	0	0	2	0	2	3
Chagas Disease	1	0	0	0	0	0	1	0
Coccidioidomycosis	1	0	0	0	0	0	1	0
Cryptosporidiosis	3	1	1	3	0	0	8	3
Dengue	0	0	1	0	0	0	1	0
Ehrlichiosis, <i>Ehrlichia chaffeensis</i> (f. HME)	5	0	1	0	0	0	6	1
Giardiasis	2	6	1	1	0	0	10	8
<i>Haemophilus influenzae</i> , invasive disease	1	3	2	0	0	0	6	4
Hepatitis A	3	0	7	0	0	0	10	12
Hepatitis B virus infection, chronic	1	3	294	36	0	0	334	127
Hepatitis B virus infection, perinatal	0	1	0	0	0	0	1	0
Hepatitis B, acute	0	1	0	5	0	0	6	3
Hepatitis C, Chronic	2	83	211	107	0	0	403	208
Hepatitis E, acute	0	0	1	0	0	0	1	1
Influenza	1	63	11	0	0	0	75	14
Legionellosis	2	1	0	0	0	0	3	1
Lyme Disease (<i>Borrelia burgdorferi</i>)	8	0	11	0	0	0	19	14
Measles (rubeola)	1	0	2	0	0	0	3	5
Meningitis, Bacterial Other	2	0	1	0	0	0	3	1
Methicillin- or oxacillin- resistant <i>Staphylococcus aureus</i> coagulase-positive (MRSA a.k.a. ORSA)	0	2	0	0	0	0	2	0
Mumps	0	0	2	0	0	0	2	3
Norovirus	8	5	1	0	1	0	15	19
Outbreak Case - Unknown Etiology	0	0	2	0	0	0	2	3
Pertussis	10	1	4	5	3	0	23	58
Rabies, animal	7	7	1	1	0	0	16	7
Rubella	0	0	25	0	0	0	25	50
Salmonellosis	11	31	0	0	1	0	43	20
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	1	3	7	0	2	0	13	9
Shigellosis	2	25	2	10	3	0	42	3
Spotted Fever Rickettsiosis (RMSF)	7	0	3	1	0	0	11	4
Streptococcal disease, invasive, Group A	5	9	1	0	0	0	15	7
Streptococcal disease, invasive, Group B	1	0	0	0	0	0	1	0
Streptococcal disease, invasive, Groups C & G	1	0	0	0	0	0	1	0
<i>Streptococcus pneumoniae</i> , invasive disease	11	11	0	0	1	0	23	17
Transmissible Spongiform Enceph (TSE / CJD)	1	0	0	0	0	0	1	1
Tularemia (<i>Francisella tularensis</i>)	3	0	1	0	0	0	4	0
Varicella (Chickenpox)	11	2	10	15	0	0	38	37
West Nile virus non-neuroinvasive disease	0	0	10	0	0	0	10	2
Zika Virus	24	0	9	0	0	0	33	0
Grand Total	166	264	643	189	13	0	1,275	679