



EPI UPDATES

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Investigation into Potential Bloodborne Pathogen Transmission Following an Infection Prevention Breach

Elizabeth Lawlor, MS

Proper reprocessing (e.g., cleaning and disinfection) of medical equipment, including colonoscopes, is vital in preventing the spread of bloodborne and other microbial pathogens. On July 10, 2013, Neosho Memorial Regional Medical Center contacted the Kansas Department of Health and Environment (KDHE) to report an infection prevention breach in colonoscopy reprocessing. On January 3, 2013, the hospital introduced a new model of colonoscopy with an auxiliary water channel that was not present on previous models in use at the hospital. The manufacturer's protocol states to clean and disinfect this channel between patients; however, following the introduction of the new colonoscopy model, this channel was neither cleaned nor disinfected during reprocessing.

Two hundred and seventy-seven patients received colonoscopies between January 3 and July 18, 2013. These patients were notified via mail by the hospital and recommended to be tested for hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). The testing was provided through the Kansas Health and Environmental Laboratories and a contract reference laboratory.

Patients resided in nine Kansas counties and three other states. Their ages ranged from less than 18 to greater than 75 years (median age, 62 years), and 50% were male. Of the 277 patients, 248 (90%) completed testing, and there was no evidence of bloodborne pathogen (BBP) transmission.

Nationally, there have been numerous reports of lapses in the reprocessing of gastrointestinal endoscopes, including colonoscopes. These have resulted in the recommendation for thousands of patients to receive BBP testing. Adherence to the reprocessing guidelines is imperative to protect patients from BBPs as well as other microbial diseases.

The full report can be viewed here: http://www.kdheks.gov/epi/download/NMRMC_Summary_Report.pdf

Vaccine-Preventable Disease Surveillance Indicators

by Chelsea Raybern, 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 April 1 to April 30, 2014, can be found in the table below. The percentages in **bold** 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 indicators date of birth, gender, and race were completed for at least 91% of all VPDs reported from April 1 to April 30, 2014. More than half of the indicators (date of birth, gender, race, ethnicity, onset date, hospitalization, and death) were completed for at least 91% of pertussis cases. All but two indicators (transmission setting and completed investigations) were completed for at least 92% of varicella cases. In addition, all indicators were complete for *Haemophilus influenzae* cases, except for vaccination status and completed investigations.

Still room for improvement...Completeness of vaccination status was lower than 90% for *Haemophilus influenzae*, pertussis, and *Streptococcus pneumoniae* cases and percent of completed investigations was much lower than 90% for *Haemophilus influenzae*, pertussis, and varicella cases. For the indicators applicable to *Streptococcus pneumoniae* cases, more than half (ethnicity, onset date, hospitalization, death, and vaccination status) were less than 90% complete. The median number of days for local health departments to accept all VPDs reported in April was between one and five with a range from zero to as many as 12 days (for *Streptococcus pneumoniae* cases).

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 Chelsea Raybern at (785) 296-0339 or craybern@kdheks.gov.

VPD Indicators Reported from April 1 to April 30, 2014, Kansas

Indicators	<i>Haemophilus influenzae</i> , invasive	Pertussis	<i>Streptococcus pneumoniae</i> , invasive	Varicella
Number of reported cases	3	35	19	24
% of cases with date of birth	100%	100%	100%	100%
% of cases with gender	100%	100%	100%	100%
% of cases with race	100%	91%	95%	100%
% of cases with ethnicity	100%	94%	84%	100%
% of cases with onset date [‡]	100%	91%	79%	100%
% of cases with hospitalized noted	100%	97%	89%	100%
% of cases with died noted	100%	97%	89%	100%
% of cases with vaccination status*	33%	83%	84% [§]	92%
% of cases with transmission setting [¶]	N/A**	83%	N/A**	79%
% of investigations completed by local health departments ^{§§}	67%	77%	95%	71%
Median # of days from report to case acceptance (range) ^{¶¶}	5 (0-5)	2 (0-5)	3 (0-12)	1 (0-3)

[‡]Data is pulled from onset date field within the clinical tab, not investigation tab.

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

[§]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.

^{§§}Status includes when local health department completes investigation, approves the case, or when the case is closed by state.

^{¶¶}This is the time from public health report date to when local health department accepts case.

Disease	Reported Disease Counts - April 2014					Grand Total	3 Year Avg. 2011-2013
	Not Available	Confirmed	Not a Case	Probable	Suspect		
	Count	Count	Count	Count	Count	Count	Count
Amebiasis (<i>Entamoeba histolytica</i>)	0	1	0	0	0	1	0
Brucellosis	1	0	0	0	0	1	1
Campylobacteriosis	10	4	2	0	8	24	44
Carbapenem-resistant Enterobacteriaceae	1	0	0	0	1	2	0
<i>Clostridium perfringens</i> food intoxication	0	0	0	0	1	1	0
Cryptosporidiosis	2	1	1	6	0	10	10
Dengue	0	0	1	0	0	1	0
Ehrlichiosis, <i>Ehrlichia chaffeensis</i> (f. HME)	2	0	1	0	0	3	2
Giardiasis	2	5	0	0	1	8	7
<i>Haemophilus influenzae</i> , invasive disease (Including Hib)	1	2	0	0	0	3	4
Hepatitis A	0	0	2	1	0	3	21
Hepatitis B virus infection, chronic	3	0	71	18	0	92	43
Hepatitis B, acute	0	0	7	3	0	10	6
Hepatitis C virus, past or present	109	34	69	1	8	221	169
Hepatitis C, acute	1	1	0	0	0	2	1
Hepatitis E, acute	1	0	0	0	0	1	0
Influenza	0	2	3	0	0	5	0
Legionellosis	1	2	0	0	0	3	1
Lyme Disease (<i>Borrelia burgdorferi</i>)	9	1	8	0	1	19	23
Malaria (<i>Plasmodium spp.</i>)	0	1	0	0	0	1	0
Meningitis, Bacterial Other	2	0	0	0	0	2	2
Methicillin- or oxacillin- resistant <i>Staphylococcus aureus</i> coagulase-positive (MRSA a.k.a. ORSA)	0	0	0	0	1	1	0
Non-Reportable Condition	1	0	0	0	0	1	0
Norovirus	0	4	0	0	0	4	16
Pertussis	22	4	0	8	1	35	37
Q Fever (<i>Coxiella burnetii</i>), Acute	0	0	1	0	0	1	1
Rabies, animal	13	2	5	0	1	21	17
Rubella	1	0	88	0	0	89	0
Salmonellosis	0	21	0	0	0	21	35
Shiga toxin-producing <i>Escherichia coli</i> (STEC)	3	5	0	0	3	11	9
Shigellosis	1	0	1	0	0	2	7
Spotted Fever Rickettsiosis (RMSF)	9	0	2	3	0	14	16
Streptococcal disease, invasive, Group A	0	3	2	0	0	5	3
<i>Streptococcus pneumoniae</i> , invasive disease	0	19	1	0	0	20	12
Transmissible Spongiform Enceph (TSE / CJD)	1	0	2	0	0	3	1
Tularemia (<i>Francisella tularensis</i>)	1	0	0	0	0	1	1
Typhoid Fever (<i>Salmonella typhi</i>)	1	1	0	0	0	2	1
Varicella (Chickenpox)	21	5	10	4	0	40	46
West Nile virus non-neuroinvasive disease	0	0	3	0	1	4	2
Yersiniosis	0	1	0	0	0	1	0
Grand Total	219	119	280	44	27	689	538

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

Selected diseases:

Disease	Case Classification Criteria
Hepatitis A	confirmed
Salmonellosis	confirmed, excluding typhoid fever
<i>E. coli</i> , 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:

$$\frac{(\text{Lab Test Date or Date Diagnosed} - \text{Presumptive}) - (\text{Date Reported to Public Health})}{\text{KDHE-required disease reporting timeframe}} \leq$$

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

$$(\text{Date LHD Investigation Started}) - (\text{Date Reported to Public Health}) \leq \text{CDC-required timeframe}$$

Disease Reporting

Disease	KDHE Required Timeframe	Statewide Received	Statewide Received On Time	%	% change from previous month
Hepatitis A	7 days	11	11	100	0
Salmonellosis	7 days	298	292	98	0
<i>E. coli</i> , STEC	7 days	56	54	96	0
Shigellosis	7 days	27	26	96	-4
Tularemia	7 days	14	13	93	0
Varicella	7 days	246	234	95	0
Botulism	4 hours*	-	-	-	-
Measles	4 hours*	-	-	-	-
Meningococcal disease	4 hours*	1	1	100	0
Pertussis	4 hours*	155	111	72	+2

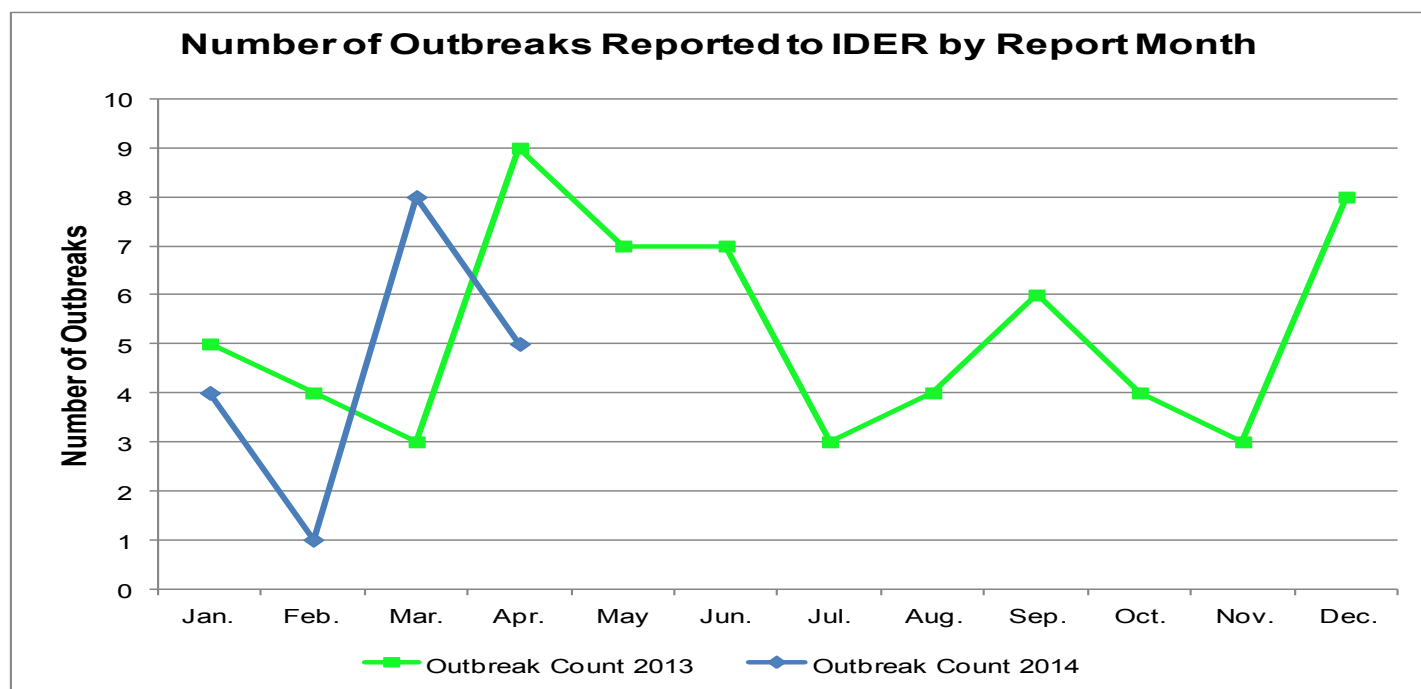
*Because EpiTrax does not capture time reported to public health, KDHE is allowed to "consider cases as immediately reported if the selected case event date and date of first report to a health department occur on the same date."

Disease Control

Disease	CDC Required Timeframe	Statewide Received	Statewide Investigated On Time	%	% change from previous month
Hepatitis A	7 days	11	11	100	0
Salmonellosis	3 days	298	233	78	+1
<i>E. coli</i> , STEC	3 days	56	39	70	+1
Shigellosis	3 days*	27	20	74	+1
Tularemia	2 days	14	13	93	0
Varicella	1 day*	246	215	87	-1
Botulism	1 day	-	-	-	-
Measles	1 day	-	-	-	-
Meningococcal disease	1 day	1	1	100	0
Pertussis	1 day*	155	135	87	-1

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

Monthly Outbreak Summaries



Facility Type	Organism	Transmission	County	Date Reported
Restaurant	Norovirus	Indeterminate / Other / Unknown	Scott	4/9/2014
Adult Care Facility	Norovirus	Person-to-Person	Shawnee	4/14/2014
Other	Pertussis	Person-to-Person	Montgomery	4/14/2014
Other	Salmonellosis	Animal Contact	Multi-State	4/16/2014
Hospital	Outbreak Case - Unknown Etiology	Person-to-Person	Franklin	4/17/2014



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EpiTrax Help and Hints

by Jodie Smith

Please remember to conduct a search before entering provider or diagnostic facility information. This will **save you time** and help to **reduce our searching speed** in the system.

Instructions on conducting searches may be found on page 15 of the EpiTrax User Manual (http://www.kdheks.gov/epi/download/EpiTrax_User_Guide.pdf). This information is copied below for your convenience.

Clinicians:

This section allows you to enter information regarding the patient's doctor(s). You **must** first search for the clinician using the search field provided.

If the clinician is found by performing a search, you will click on the red "Add" link located next to the doctor's telephone number to add that clinician to the case record.

If you need to add more than one clinician, you may use the red "Add a clinician" link to search for and add more doctor's associated with the case.

Diagnostic Facilities:

Here you may list any facilities that assist with the diagnosis of the disease. These facilities may be hospitals, doctor's offices, schools, correctional facilities, or any other facility where the patient is receiving care. You **must** first search for the diagnostic facility using the search field provided. Search using the first word in the name of the facility.

Note: If the first word could be abbreviated (i.e. St or Saint) search both ways before creating a new facility.

You will want to follow the same rules for entering the diagnostic facilities address information as you would for the patient address information (see page 12).

If you need to enter more than one diagnostic facility, you may use the red "Add a diagnostic facility" link to insert more fields for reporting purposes.

If you have further questions about searches or any other EpiTrax technical questions, please contact me at 785-296-7732 or jbsmith@kdheks.gov.