Bureau of Epidemiology & Public Health Informatics

Kansas Department of Health and Environment

EPI UPDATES

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Kansas Department of Health & Environment

Bureau of Epidemiology & Public Health Informatics

Farah Ahmed, MPH, PhD
Environmental Health Officer & State Epidemiologist

Lou Saadi, Ph.D., Director, BEPHI & State Registrar

Sheri Tubach, MPH, MS, Director, IDER

Shannon Sandall
Director, Surveillance Systems & *Epi Updates* Editor

Daniel Neises, MPH
Senior Epidemiologist

Chelsea Raybern, MPH
Senior Epidemiologist

Ingrid Garrison, MPH, DVM, DACVPM, State Public Health Veterinarian

Curtis State Office Building
1000 SW Jackson St.
Topeka, KS 66612
Email: epihotline@kdheks.gov
Epi Hotline: 877-427-7317
Fax: 1-877-427-7318

Parotitis Associated with Influenza and Other Respiratory Viruses

by Amie Worthington, MPH

Between December 2016 and July 2017, the Kansas Department of Health and Environment (KDHE), in collaboration with local health departments, investigated 11 mumps outbreaks. During these outbreaks, 25% of persons tested negative for mumps but positive for another respiratory virus including influenza A, rhinovirus/ enterovirus, coronavirus, and influenza B. In addition, during the previous two influenza seasons, several hundred cases of confirmed influenza infection with parotitis were reported to the Centers for Disease Control and Prevention (CDC).

Polymerase chain reaction (PCR) testing is the preferred testing method for mumps. Mumps serologic tests are not as accurate in diagnosing mumps in a person with parotitis with no documented exposure as these tests can cross-react with other etiologic agents such as parainfluenza viruses 1, 2, and 3; Epstein-Barr virus; adenovirus; and human herpesvirus 6 resulting in false positive mumps results.

KDHE continues to receive reports of acute parotitis with suspicion of mumps. Kansas' mumps outbreaks were declared over July 29, 2017 and the last confirmed case reported in Kansas was in August 2017. Furthermore, influenza and other respiratory virus activity is currently high. For these reasons, KDHE recommends healthcare providers test patients with parotitis for influenza, other respiratory viruses, as well as mumps by PCR to ensure a correct diagnosis can be made and potentially prevent unnecessary isolation and contact tracing.

Patients with parotitis not caused by mumps may not always have respiratory symptoms at the time of parotitis or in the days leading up to parotitis. CDC suggests that influenza be included in the differential diagnoses for acute viral parotitis during the influenza season even in the absence of respiratory symptoms.

If mumps is highly suspected in a patient (recent travel to an area with reported cases of mumps or ill visitors diagnosed with mumps), contact the **KDHE epidemiology hotline within 4 hours at (877) 427-7317**.

Vaccine-Preventable Disease Surveillance Indicators

by Allison Zaldivar, MPH

Over the last few months the completeness and quality of surveillance indicators for vaccine-preventable diseases (VPDs) have consistently neared and surpassed the goal of 90% completion on all indicators. For that reason, dissemination of VPD indicator completeness will be monitored and published on a quarterly basis.

Please see the indicators for each disease reported from October 1 to December 31, 2017 in the chart below. As always, the bolded percentages represent the indicators that have less than 90% completion and the data presented in the chart is preliminary and subject to change.

Keep up the good work!

For questions, please contact Allison Zaldivar at (785) 368-8208 or Allison.Zaldivar@ks.gov.

VPD Indicators Reported during Quarter 4 (October 1 to December 31, 2017) in Kansas

Indicators	*Haemophilus influenzae,* invasive	Meningococcal disease	Mumps	Pertussis	*Streptococcus pneumoniae,* invasive	Varicella
Number of reported cases	11	1	1	40	44	26
% 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%	100%	100%	100%	100%
% of cases with ethnicity	100%	100%	100%	98%	97%	100%
% of cases with onset date‡	100%	100%	100%	100%	98%	100%
% of cases with hospitalized noted	100%	100%	100%	100%	100%	100%
% of cases with died noted	100%	100%	100%	100%	100%	100%
% of cases with vaccination status*	**82%**	100%	100%	100%	100%§	100%
% of cases with transmission setting¶	N/A**	N/A**	100%	98%	N/A**	100%
% of cases with completed symptom profiles	N/A**	100%	100%	100%	N/A**	100%

*Excludes cases with a State Case Status of "Suspect", "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. influenza* 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

BEPHI has implemented a set of monthly quality indicators and performance measures to encourage data quality improvement in EpiTrax and timeliness of investigations. Quality indicators are not available for the month of December due to changes in EpiTrax forms and the AVR reporting system. EpiTrax Data Quality Indicators will return next month. For questions, contact Sheri Tubach at sheri.tubach@ks.gov.

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; Meningococcemia; 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, post diarrheal; Hepatitis B, acute; Legionellosis; Listeriosis; Salmonellosis, including typhoid fever; Shigellosis; Shiga-toxin *Escherichia coli* (STEC); Trichinosis; Vibriosis (not cholera)	3	5
Arboviral disease (including West Nile virus, Chikungunya, and Dengue); *Haemophilus influenzae*, invasive disease; *Streptococcus pneumoniae*, 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 spongioform encephalopathy (TSE) or prion disease	N/A	N/A

***Disease Control:** Calculated by using EpiTrax Fields: **(Date LHD Investigation Started) OR (Call Attempt 1 date for Salmonellosis and STEC) - (Date Reported to Public Health) OR (Date Reported to KDHE)**

****Completed Case Investigation:** Calculated by using EpiTrax fields: **(Date LHD Investigation Completed) - (Date Reported to Public Heath) OR (Date Reported to KDHE)**

Monthly Disease Counts

Please refer to the Cumulative Case Reports of Diseases (http://www.kdheks.gov/epi/case_reports_by_county.htm) for current case count information.

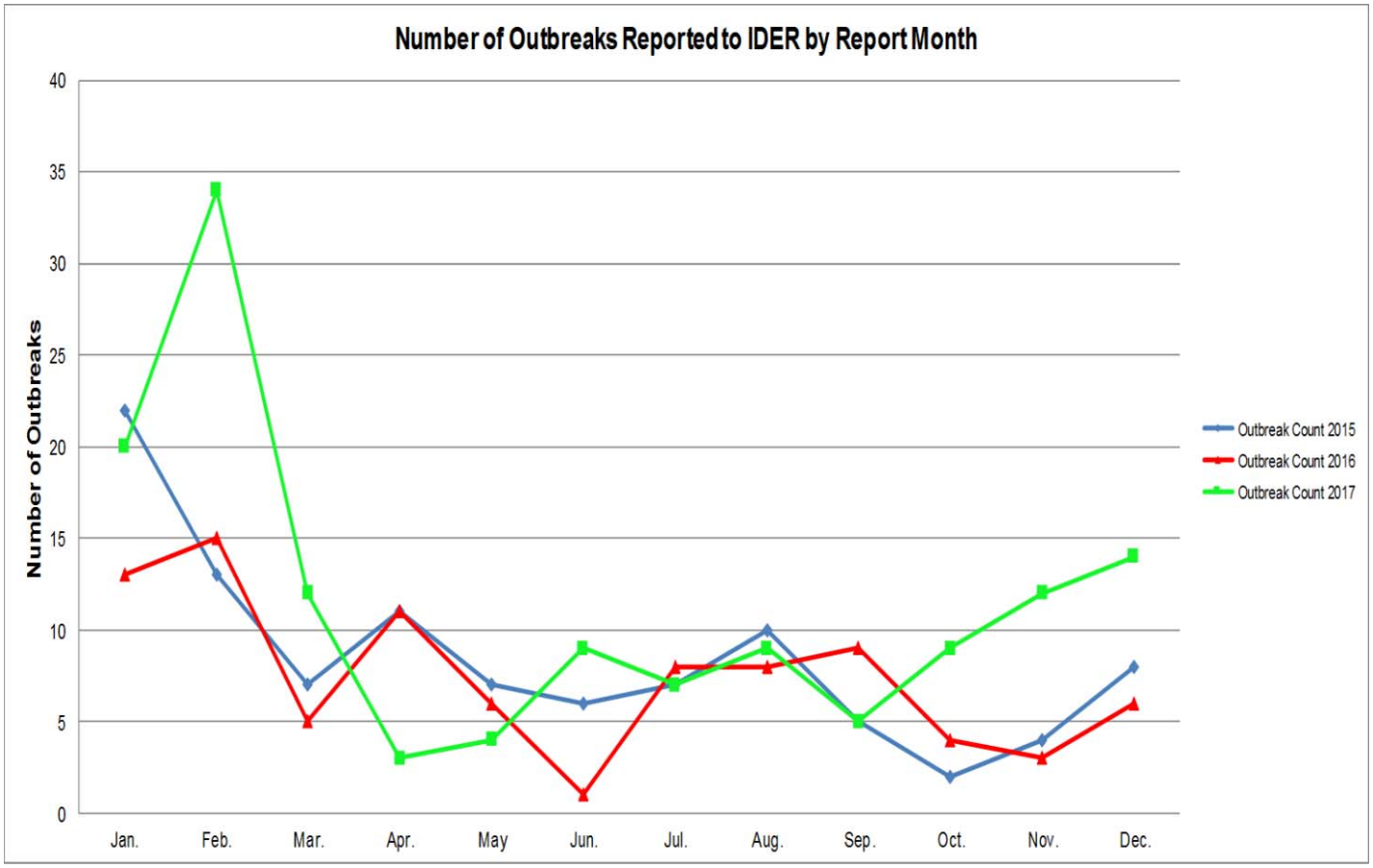
2018 Kansas Infectious Disease Conference

Plans are underway for the 2018 Kansas Infectious Disease Symposium to be held May 10-11, 2018 at the Embassy Suites by Hilton Kansas City/Olathe Hotel & Conference Center in Olathe, Kan.

Nearly 300 public health leaders, first responders, law enforcement and health care providers from around the region are expected to attend and learn how infectious diseases are contained and managed in the state of Kansas and the Midwest. The Kansas Department of Health and Environment will offer pre-conference surveillance training on May 9.

If you're interested in exhibiting or being a sponsor at next year's conference, contact Tiffany Wallin at 913-826-1252 or send an email to Tiffany.Wallin@jocogov.org. Registration for this event has begun on Kansas TRAIN.

Outbreaks Report



Date Reported	Facility Type	Transmission/Exposure	Disease/Condition	County
12/1/2017	School or college	Person-to-Person	Norovirus	Johnson
12/4/2017	Adult care facility	Person-to-Person	Influenza	Sedgwick
12/5/2017	Child care center	Person-to-Person	Shiga toxin-producing Escherichia coli (STEC)	Miami
12/5/2017	Adult care facility	Person-to-Person	Influenza	Sedgwick
12/6/2017	Adult care facility	Person-to-Person	Influenza	Sedgwick
12/8/2017	Other	Person-to-Person	Unknown Etiology	Sedgwick
12/13/2017	Adult care facility	Person-to-Person	Influenza	Douglas
12/13/2017	Adult care facility	Person-to-Person	Respiratory Syncytial Virus(RSV)	Harvey
12/15/2017	Community-wide	Person-to-Person	Rubella	Johnson
12/18/2017	Adult care facility	Person-to-Person	Influenza	Cowley
12/20/2017	School or college	Person-to-Person	Influenza	Douglas
12/20/2017	Adult care facility	Person-to-Person	Influenza	Harper
12/21/2017	Other	Person-to-Person	Pertussis	Barton
12/29/2017	Adult care facility	Person-to-Person	Influenza	Sedgwick