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**Staph Infections Among Student Athletes**

by Kelly Gillespie, MPH



The start of the fall season means the start of school sports. However, contact sports such as football and wrestling can increase the transmission of staphylococcal skin infections (SSI or Staph). This season, multiple outbreaks of SSI among student athletes have been reported to the Kansas Department of Health and Environment (KDHE). *Staphylococcus aureus*, commonly referred to as "staph," are opportunistic bacteria found in the environment and on the skin of most people. Infection occurs when this bacterium comes in contact with a break in the skin from a scrap or open wound. Skin infections appear as rashes or boils with early infections having the appearance of a spider bite. These symptoms of Staph can first appear four to 10 days following exposure but can vary. A person is considered contagious for as long as weeping lesions persist; the time is highly variable and situation-dependent. Staph infections can easily be spread person-to-person or from contact with contaminated objects such as razors, gym equipment, clothing, or towels.

**Staph infections can be prevented by:**

- Washing hands with soap and water and showering immediately after playing team sports or using shared gym equipment
- Keeping breaks in skin clean and covered with bandage until healed
- Avoiding sharing personal items such as towels and razors
- Maintaining clean high touch surfaces
- Cleaning personal sports equipment regularly

Students with suspected SSIs need to see a physician for treatment, which may include antibiotics. Ill persons do not generally need to be excluded from school or sports activities; however, any and all open or weeping wounds need to be covered with an impermeable bandage to prevent transmission to other students. Athletes should not use whirlpools or swimming pools until lesions are healed.

To assist local health departments and schools, KDHE has created an online toolkit that addresses transmission among student athletes and is available at

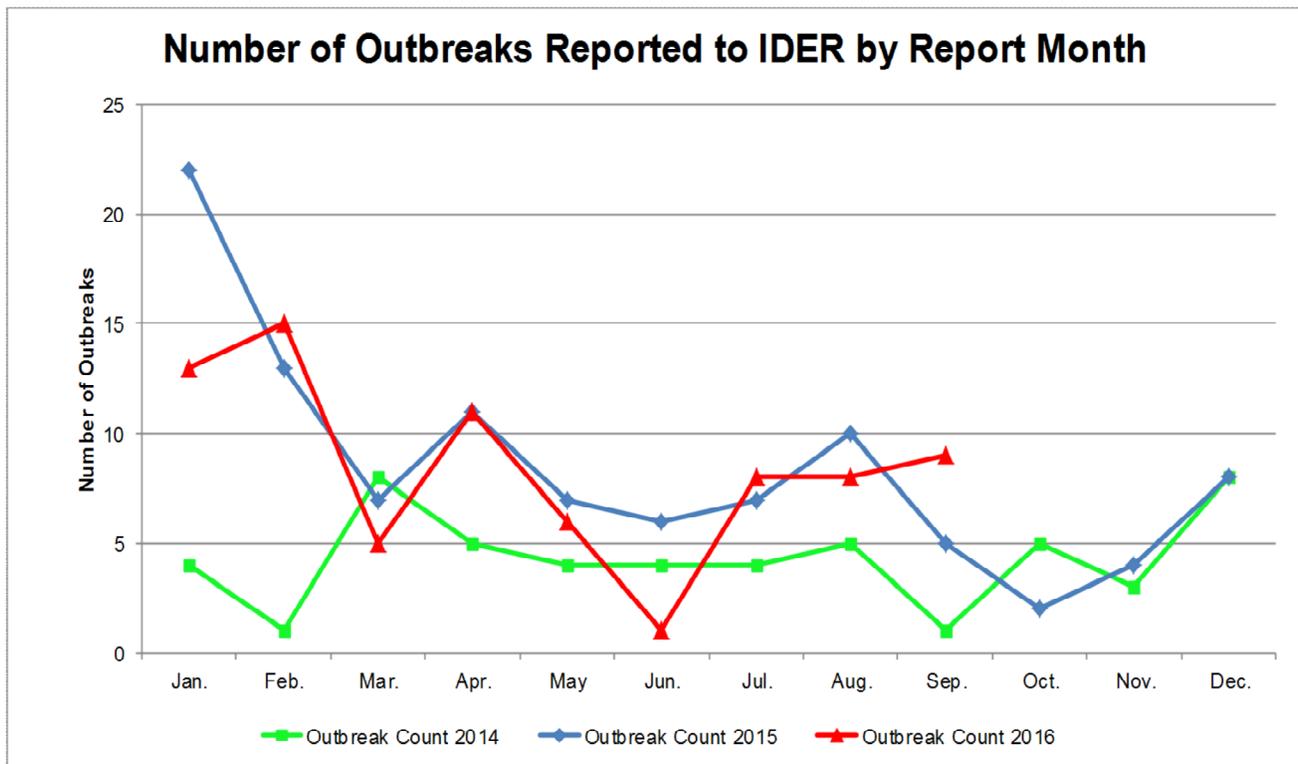
[http://www.kdheks.gov/epi/download/KS\\_MRSA\\_in\\_Sports\\_Toolkit.doc](http://www.kdheks.gov/epi/download/KS_MRSA_in_Sports_Toolkit.doc).

The toolkit includes information about staph infections, letters you can use for schools and parents, cleaning methods for prevention, and educational materials such as the one pictured here from the Centers for Disease Control and Prevention. Additionally, the Kansas Classroom Handbook of Communicable Diseases includes information for school nurses as well as links to additional resources in English and Spanish; this handbook is also on the [KDHE website](#).

While staph infections are not reportable in Kansas, outbreaks should be reported to KDHE. To report an outbreak or if you have any questions, please call the Epidemiology Hotline at 877-427-7317.



Source: NCAA &amp; CDC



Date Reported	Exposure Setting	Transmission	Disease	County
9/1/2016	Restaurant	Person-to-Person	Norovirus	Sedgwick
9/1/2016	Child care center	Person-to-Person	Shigellosis	Crawford
9/9/2016	Other	Food	Norovirus	Sedgwick
9/12/2016	School or college	Other or Unknown	Unknown Etiology	Shawnee
9/21/2016	School or college	Person-to-Person	<i>Staphylococcus aureus</i>	Shawnee
9/26/2016	Adult care facility	Food	Unknown Etiology	Sedgwick
9/26/2016	Hotel or motel	Food	Unknown Etiology	Johnson
9/26/2016	Hotel or motel	Water	Legionellosis	Pawnee
9/30/2016	Fair or festival	Food	Salmonellosis	Reno

### Building and Maintaining Reports in EpiTrax AVR Training

We are excited to announce an upcoming training for Local Health Departments. We will be providing a training over the EpiTrax AVR reporting system. Please come join us, and learn more about your reporting options! Space is limited, so please R.S.V.P. to Shannon Sandall at [shannon.sandall@ks.gov](mailto:shannon.sandall@ks.gov) as soon as possible. There is no cost to participate.

**Date:** Friday, November 18, 10:00 a.m. - 2:00 p.m. We will break for an hour lunch.

**Location:** Kansas Department of Health and Environment, Garden Level Computer Resource Room, 1000 SW Jackson, Topeka, Kansas.

**Instructors:** Shannon Sandall (Kansas Department of Health and Environment) and Christine Steward (Sedgwick County Health Department).

## 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 September 1 to September 30, 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 indicators for date of birth, gender, race, ethnicity, onset date, hospitalized, and died noted were above the 90% benchmark of all VPDs reported from September 1 to September 30, 2016. The pertussis cases had eight indicators improve in comparison to last month's report. Cases of *Streptococcus pneumoniae* had one indicator improve in comparison to last month's report, and varicella had four indicators improve since last month's report.

**Still room for improvement...** Pertussis cases had two indicators fall below the 90% benchmark. Varicella cases had two indicators fall below the benchmark, and *Streptococcus pneumoniae* cases had one indicator fall below the benchmark. Indicators that did not meet the 90% completion benchmark are bolded in the chart below.

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

### VPD Indicators Reported from September 1 to September 30, 2016 in Kansas

Indicators	<i>Haemophilus influenzae</i> , invasive	Pertussis	<i>Streptococcus pneumoniae</i> , invasive	Varicella
Number of reported cases	6	11	13	32
% 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%	92%	100%
% of cases with onset date <sup>‡</sup>	100%	91%	92%	94%
% of cases with hospitalized noted	100%	91%	92%	94%
% of cases with died noted	100%	100%	92%	94%
% of cases with vaccination status*	100%	91%	<b>86%</b> §	97%
% of cases with transmission setting <sup>¶</sup>	N/A**	<b>82%</b>	N/A**	<b>6%</b>
% of cases with completed symptom profiles	N/A**	<b>73%</b>	N/A**	<b>45%</b>

\*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 (BEPHI) 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. Percentages noted in red indicate a decrease in completeness compared to August 2016 or are below 90%. Over one quarter of cases are still not being interviewed. Occupation is still not consistently being completed.

Also, in January 2016 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 those counties that are still conducting those interviews.

For questions, contact Sheri Tubach at Sheri.Tubach@ks.gov.

September 2016		State's Total Number of Cases* = 294	
EpiTrax Indicators			
EpiTrax Field	Number of Cases with Field Completed	Percent Completed	
Address City	293	100	
Address County	294	100	
Address Zip	292	99	
Date of Birth	292	99	
Died	246	84	
Ethnicity†	241	82	
Hospitalized	247	84	
Occupation	161	55	
Onset Date	226	77	
Pregnancy††	98	77	
Race †	256	87	
Sex †	294	100	
Date LHD investigation started	222	76	
Date LHD investigation Completed	209	71	
Persons Interviewed	187	65	
Persons Lost to Follow-Up	19	7	
Persons Refused Interview	5	2	
Persons Not Interviewed	76	26	
Performance Measures			
	Number of Cases	Percent of Cases	
Diseases were reported on time according to disease reporting regulations**	279	95	
Disease control measures began within the target for each disease^	168	57	
Case investigations were completed within the target for each disease^	128	44	

\* 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**

<b>Diseases</b>	<b>Disease Control (Days)*</b>	<b>Completed Case Investigation (Days)**</b>
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), 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 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

**Cheat Sheet with New Recommendations for Managing Animals Exposed to Rabies!**

The Lawrence-Douglas County Health Department has created a one-page algorithm on how to manage animals that have been exposed to rabies. This information is based off of the new recommendations put out by the National Association of State Public Health Veterinarians in March 2016. The algorithm can be found at: [http://www.kdheks.gov/epi/download/Management\\_of\\_Animal\\_Exposed\\_to\\_Rabies.pdf](http://www.kdheks.gov/epi/download/Management_of_Animal_Exposed_to_Rabies.pdf).

**Monthly Disease Counts**

The Monthly Disease Counts Report will no longer be part of *Epi Updates*. Please refer to the Cumulative Case Reports of Disease ([http://www.kdheks.gov/epi/case\\_reports\\_by\\_county.htm](http://www.kdheks.gov/epi/case_reports_by_county.htm)) for current case count information.