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Kansas Department of Health and Environment

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Kansas Oral Health School Screening Program, 2012-2013

By Charles Cohlmia, MPH

Since the 2008-2009 academic year, the Kansas Department of Health and Environment, Bureau of Oral Health (BOH) has implemented an in-school screening program to provide dental inspections to and collect oral health surveillance data on children in grades K-12 while also assisting the schools in compliance with Kansas statute. Under Kansas state law, schools are required to provide a free annual dental inspection for all children during the school year (K.S.A. 72-5201). In the 2012-2013 academic year, 154,025 children in 706 schools participated in the Kansas School Screening Program.

Screenings monitored both untreated and treated dental decay as well as the presence of dental sealants on permanent molar teeth. Among the total population screened in the 2012-13 academic year, 16.2% had untreated dental decay, 2.5% were recommended for urgent restorative care, 38.9% had treated dental decay, and 33.8% had dental sealants on permanent molar teeth. Improvement was noted in all four categories from the previous academic year (Figure 1). A recommendation for urgent restorative care indicates that the child should seek restorative oral health care within the next 24 hours and is indicated by pain, infection, or swelling in the oral cavity.

Children in 3rd grade are targeted for intervention through the application of dental sealants for the prevention of tooth decay at the national level. Among 3rd grade children who received a dental inspection through the Kansas School Screening Program, 38.5% had dental sealants, an increase of 3.6% compared to the screening data from the previous academic year.

Certain schools in Kansas, denoted as "high-risk schools," are of particular interest in oral health surveillance. Schools are considered to be high-risk when more than 50% of the student

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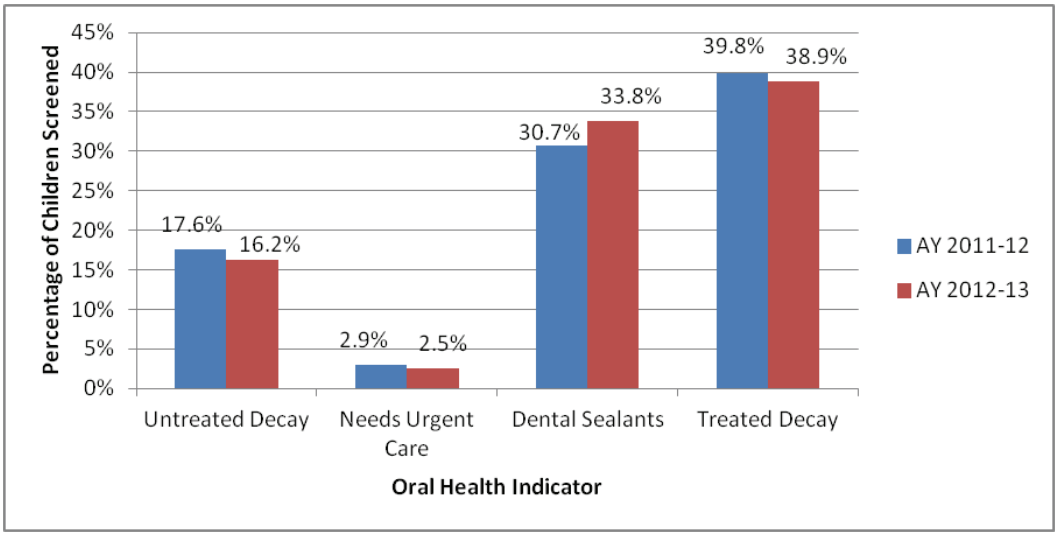
Figure 1. Oral Health Status of Kansas School Children, Kansas, 2011-2013[1]



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population is eligible for the National School Lunch Program (NSLP). Oftentimes, eligibility for NSLP is used as a proxy for low socioeconomic status. The screening program data show that, among the 448 high-risk schools surveyed, the prevalence of both untreated and treated dental decay were significantly higher than the 257 non-high-risk schools. High-risk schools also saw a significant increase in the percentage of children who were recommended for urgent dental care as well as a significant decrease in the percentage of children with dental sealants on a permanent molar tooth when compared with non-high-risk schools (Figure 2). Three of the schools participating did not provide data regarding student eligibility for the NSLP.[3]

School surveillance activities will resume at the commencement of the 2013-2014 academic year. In addition to the methodology used in the 2012-2013 academic year, the BOH hopes to collect information on children under the age of 5. These data would be collected through pre-kindergarten and early pre-kindergarten screening. Further questions regarding the Kansas School Screening Program may be directed to either Charles Cohlmia at (785) 296-1242 (CCohlmia@kdheks.gov) or Jennifer Ferguson at (785) 250-1980 (JFerguson@kdheks.gov).

[1] Source: Kansas School Screening Program, 2011-13

[2] Source: Kansas School Screening Program, 2012-13

[3] Eligibility for the NSLP is determined through a building code system by the Bureau of Education. For most schools, each building has a unique building code which matches to the student eligibility for Free and Reduced Lunch. For seven of the participating schools, there were multiple unique building codes for the same establishment. For eight of the participating schools, there was one building code for multiple establishments (i.e. Kansas Elementary School and Kansas Middle School had the same building code).

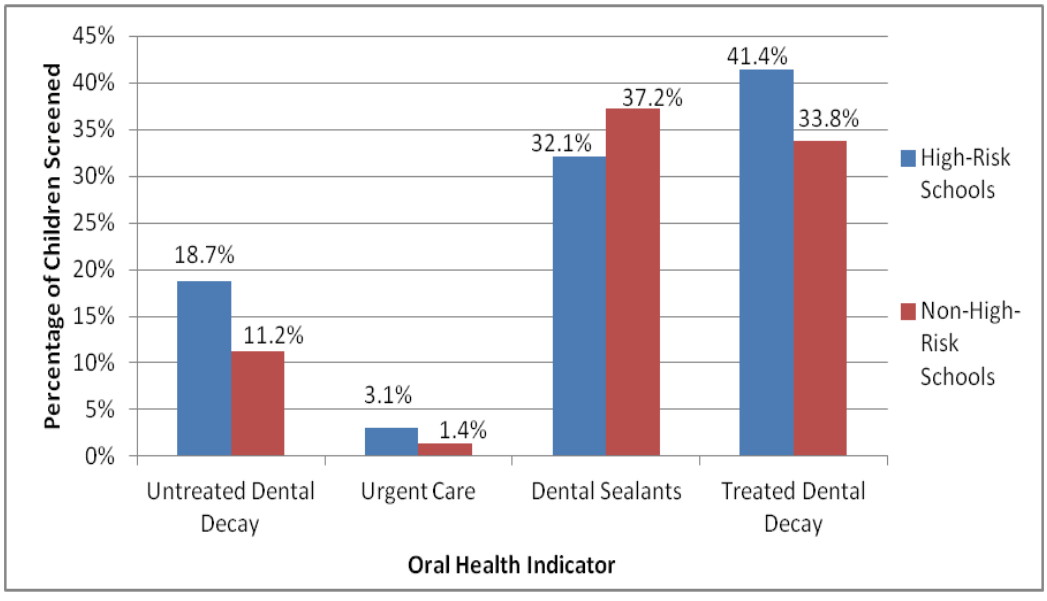
Negligence at Oklahoma Dental Practice Affects Kansas Residents

By M. Ella Vajnar

In April 2013, Kansas counties were called upon to assist the Oklahoma State Department of Health (OSDH) in the investigation of potential blood-borne pathogen exposures in an Oklahoma dental practice. Current and former patients of the implicated practice were offered free testing at the OSDH public health laboratory for HIV, hepatitis B, and hepatitis C, but it was necessary for local health departments to provide specimen collection services and shipment of specimens to the public health laboratory. A complete report on the investigation of affected Kansas residents is available at: http://www.kdheks.gov/epi/outbreaks.htm.

Although transmission of blood-borne pathogens in a dental healthcare setting is rare, it can have serious consequences. Incidents of acute hepatitis or the detection of HIV (in a patient with no risk factors but with history of medical procedures) should result in a swift investigation to determine the plausibility of transmission from a medical practice and to actively search for additional cases. This investigation of the Oklahoma dental practice highlights the importance of determining the reason for testing with all newly reported hepatitis cases to allow for the discovery of any acute illness.

Figure 2. Oral Health Status of Kansas School Children by High-Risk Designation, Kansas, 2012-2013[2]



Vaccine-Preventable Disease Surveillance Indicators
Quarterly Report

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 June 30, 2013, can be found in Table 1. The bolded percentages represent the indicators that have less than 90% completion. Changes have been made in how the completeness of two indicators are calculated: transmission setting and vaccination status. Initially, for completeness of indicators, fields that were marked as unknown or left blank were considered unanswered. Beginning with the surveillance indicators reported in April 2013 for cases that were reported in March, unknown is considered a valid response for transmission setting and for vaccination status if the patient is older than 18 years. The case counts presented in this report are preliminary numbers and are subject to change.

Keep up the good work! Some indicators (date of birth, gender, ethnicity, hospitalization, and died) were completed for at least 90% of all VPDs reported from April 1 to June 30, 2013. Local health departments completed at least 95% of all indicators for pertussis cases except for completed investigations, which was at 89%, and at least 94% of all indicators for varicella cases except for transmission setting, which was also at 89%. All surveillance indicators were completed for the one influenza-associated pediatric mortality case. With the exception of onset date, all indicators were completed for *Haemophilus influenzae* cases reported from April to June. When compared to the previous quarter, cases reported from January to March 2013, completeness of indicators has improved for many diseases. The percentages highlighted in blue represent improvement in completeness.

Still room for improvement…Completeness of vaccination status was 50% and 77% for meningococcal and *Streptococcus pneumoniae* cases, respectively. Onset date was completed for only 67% of *Haemophilus influenzae* cases and 74% of *Streptococcus pneumoniae* cases. Even though more than half of the indicators were completed for at least 90% of *Streptococcus pneumoniae* cases, completeness for race, ethnicity, hospitalization, died, vaccination status, and completed investigations decreased when compared to the last quarterly report.

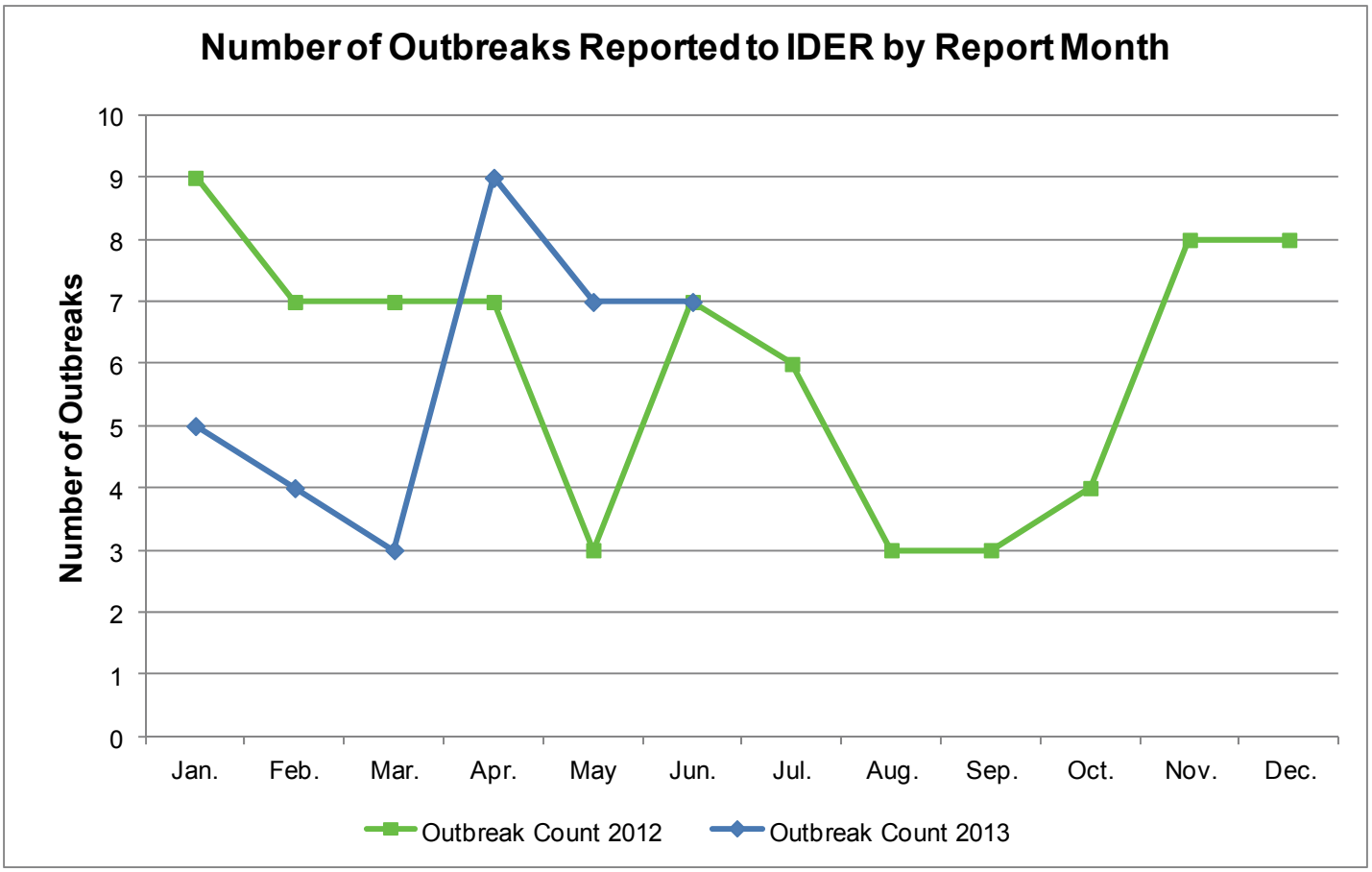
Please continue to focus on completing these fields in EpiTrax for all VPDs as the goal is to reach 90% or higher completion on all indicators. For questions regarding this data, please contact Chelsea Raybern at (785) 296-0339 or craybern@kdheks.gov.

Table 1. VPD Indicators Reported from April 1 to June 30, 2013 in Kansas‡

Indicators	*Haemophilus influenzae, invasive*	Influenza-associated pediatric mortality	Meningococcal disease	Pertussis	*Streptococcus pneumoniae, invasive*	Varicella
Number of reported cases	9	1	2	65	39	194
% 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%	98%	**87%**	97%
% of cases with ethnicity	100%	100%	100%	95%	90%	96%
% of cases with onset date	**67%**	100%	100%	97%	**74%**	96%
% of cases with hospitalized noted	100%	100%	100%	98%	92%	98%
% of cases with died noted	100%	100%	100%	98%	95%	98%
% of cases with vaccination status	100%	100%	**50%**	97%	**77%***	94%
% of cases with transmission setting	N/A§	N/A§	N/A§	97%	N/A§	**89%**
% of investigations completed by local health departments†	100%	100%	100%	**89%**	**87%**	96%

‡Indicator regarding median (range) number of days from report to case acceptance is not included in this quarterly report due to some discrepancies that occurred during data extraction for the multiple months. This problem is being addressed.
*Indicator is considered complete if either polysaccharide or conjugate pneumococcal vaccine history is documented.
§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.

MONTHLY OUTBREAK SUMMARIES



Facility Type	Organism	Transmission	County	Reported Date
Restaurant	Norovirus	Food	Saline	6/2/2013
Banquet Facility	*Clostridium perfringens* food intoxication	Food	Douglas	6/5/2013
Doctor's Office	Outbreak Case - Unknown Etiology	Food	Shawnee	6/13/2013
Camp	Outbreak Case - Unknown Etiology	Person-to-Person	Rooks	6/17/2013
Restaurant	Outbreak Case - Unknown Etiology	Indeterminate/Other/ Unknown	Shawnee	6/18/2013
Restaurant	Outbreak Case - Unknown Etiology	Indeterminate/Other/ Unknown	Johnson	6/19/2013
Restaurant	Outbreak Case - Unknown Etiology	Food	Saline	6/25/2013

	Diseases Reported to KDHE June 2013						
	State Case Status					Grand Total	3 Year Average 2010-2012
	Confirmed	Probable	Suspect	Not a Case	Unclassified		
Disease	**Count**	**Count**	**Count**	**Count**	**Count**	**Count**	**Count**
Anaplasma phagocytophilum (f. HGE)	0	1	0	0	1	**2**	**4**
Babesiosis	0	0	0	1	0	**1**	**0**
Botulism, wound	0	0	1	0	0	**1**	**0**
Brucellosis	0	0	1	0	0	**1**	**1**
Campylobacteriosis	32	0	24	2	14	**72**	**84**
Coccidioidomycosis	0	0	1	0	0	**1**	**1**
Cryptosporidiosis	2	4	0	0	0	**6**	**12**
Dengue	0	0	0	1	0	**1**	**0**
Ehrlichiosis, *Ehrlichia chaffeensis* (f. HME)	3	4	0	10	13	**30**	**11**
Ehrlichiosis/Anaplasmosis, undetermined	0	0	0	1	0	**1**	**0**
Giardiasis	4	0	0	0	0	**4**	**18**
Hemolytic Uremic Syndrome (HUS) postdiarrheal	0	0	0	0	1	**1**	**0**
Haemophilus influenzae, invasive disease (including Hib)	0	0	0	1	0	**1**	**2**
Harmful Algal Bloom Illness, human	0	0	0	1	0	**1**	**2**
Hepatitis A	1	1	0	2	1	**5**	**39***
Hepatitis B pregnancy event	1	0	1	0	2	**4**	**0**
Hepatitis B virus infection, chronic	0	14	0	22	3	**39**	**39**
Hepatitis B, acute	0	0	0	1	3	**4**	**7**
Hepatitis C virus, past or present	67	1	14	23	72	**177**	**159**
Hepatitis C, acute	1	0	0	0	0	**1**	**1**
Legionellosis	0	0	0	0	2	**2**	**4**
Lyme Disease (*Borrelia burgdorferi)*	3	2	3	26	19	**53**	**40**
Malaria (*Plasmodium spp.)*	1	0	0	0	0	**1**	**0**
Measles (Rubeola)	0	0	0	3	0	**3**	**2**
Meningitis, bacterial other	0	0	1	1	1	**3**	**2**
Mumps	0	0	0	3	1	**4**	**4**
Norovirus	4	11	0	0	0	**15***	**0**
Outbreak Case - unknown etiology	0	0	2	0	0	**2**	**4**
Pertussis	14	3	0	4	6	**27**	**104***
Q Fever (*Coxiella burnetti)*, acute	0	1	0	2	0	**3**	**2**
Rabies, animal	9	4	3	2	3	**21**	**12**
Rubella	0	0	0	1	0	**1**	**2**
Salmonellosis	35	0	0	0	1	**36**	**48**
Shiga toxin-producing *Escherichia coli* (STEC)	14	0	2	0	0	**16**	**16**
Shigellosis	8	0	0	0	0	**8**	**17**
Spotted Fever Rickettsiosis (RMSF)	1	26	3	26	30	**86**	**60**
Streptococcal disease, invasive, Group A	4	0	0	0	0	**4**	**3**
Streptococcus pneumoniae, invasive disease	13	0	0	1	0	**14**	**10**
Transmissible Spongioform Enceph (TSE/CJD)	1	0	0	2	0	**3**	**1**
Tularemia (*Francisella tularensis)*	3	6	1	0	0	**10**	**3**
Vaccinia infection	0	0	0	0	1	**1**	**0**
Varicella (chickenpox)	27	17	1	19	6	**70**	**32**
West Nile virus non-neuroinvasive disease	0	0	0	9	1	**10**	**7**
Grand Total	**248**	**95**	**58**	**164**	**183**	**746**	**649**

*Differences in counts due to outbreak or protocol change