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Kansas Department of Health and Environment

EPI UPDATES

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Kansas Department of Health & Environment

Bureau of Epidemiology & Public Health Informatics

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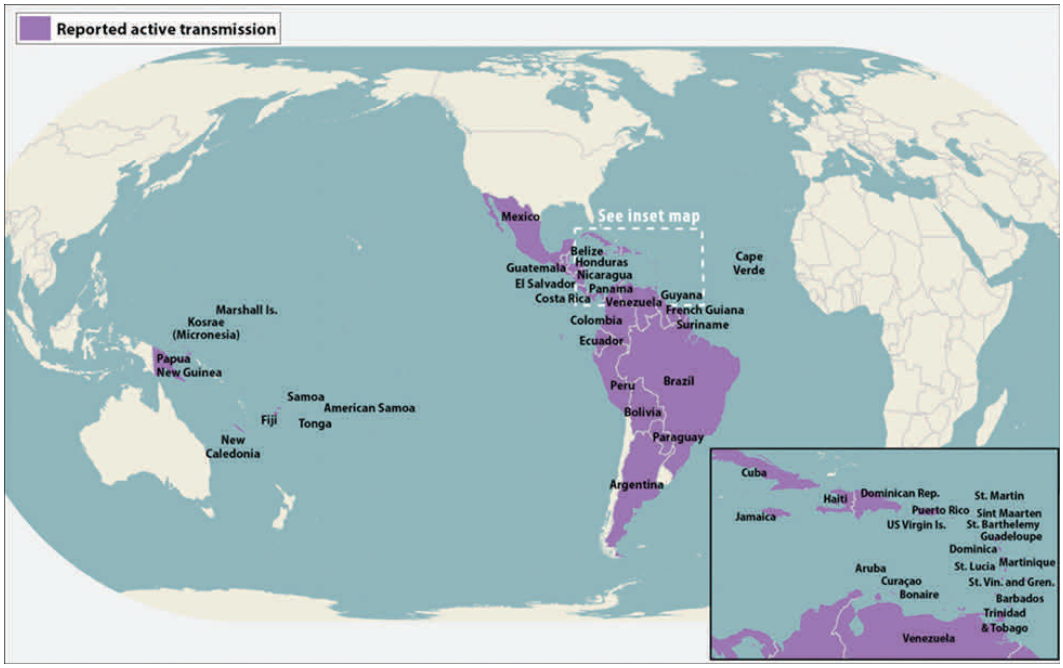
Zika Virus Update

by Daniel Neises, MPH

Zika virus, first discovered in Uganda in 1947, was limited to Africa and Asia. In May 2015, the World Health Organization reported the first local transmission of Zika virus in the Western Hemisphere. As of June 2016, local transmission has been identified in approximately 50 countries or territories in the Americas, with further spread to other countries in the region likely (Figure 1).

Figure 1: Countries and territories with active local Zika virus transmission



http://www.cdc.gov/zika/geo/active-countries.html

Currently, there is no local mosquito-borne transmission of Zika virus within the continental United States; all 618 infections among U.S. residents (excluding Puerto Rico) were acquired while traveling or acquired through sexual contact with a partner who traveled. Two cases have been identified among Kansas residents.

KDHE is developing a Disease Investigation Guideline for Zika virus. We expect to publish it by the end of June. In the meantime, please consider these main points:

TESTING

Currently, only the CDC laboratory can test Kansas residents for Zika virus. Physicians are required to contact the epidemiology hotline for Zika testing approval. If the patient meets CDC's criteria, KDHE works with the physician to complete the necessary forms to ship the specimen to CDC and enters the patient into EpiTrax.

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INVESTIGATION

No investigation should be performed unless a patient tests positive for Zika virus or another disease. If the patient is positive for Zika virus infection and not pregnant, **the LHD** will complete a brief interview about symptoms and travel.

If the patient is positive for Zika virus infection and pregnant, **KDHE** will complete a brief interview about symptoms and travel, and obtain any information needed to add the patient to the U.S. Zika Pregnancy Registry.

EDUCATION

If a physician seeks Zika virus testing for a patient, KDHE educates the physician or patient regarding the potential for sexual transmission, and avoiding mosquitoes to prevent further transmission.

Symptomatic patients should avoid getting mosquito bites during the first week of illness.

Patients should avoid sexual transmission by using condoms or not having sex. Sexual activity is defined as vaginal, anal, or oral sex.

Females should follow precautions until at least 8 weeks after symptom onset.

Males should follow precautions until at least 6 months after symptom onset.

The CDC has extensive educational materials at http://www.cdc.gov/zika/prevention/index.html and http://www.cdc.gov/zika/transmission/sexual-transmission.html.

Stool Specimen Test Kit Reminder

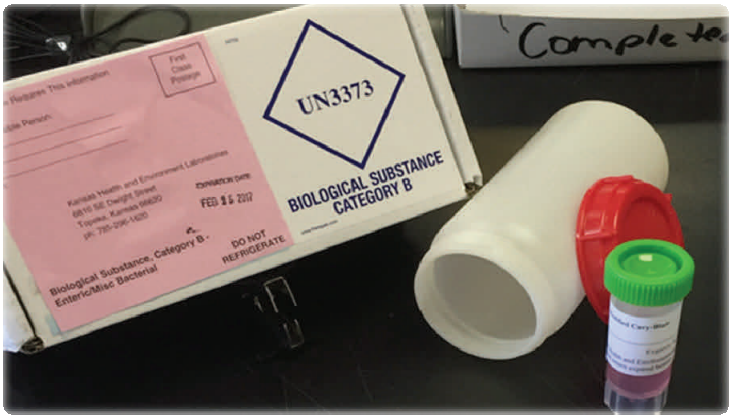
by Daniel Neises, MPH

Every local health department should have a supply of stool specimen test kits on-hand. Kits could be needed for:

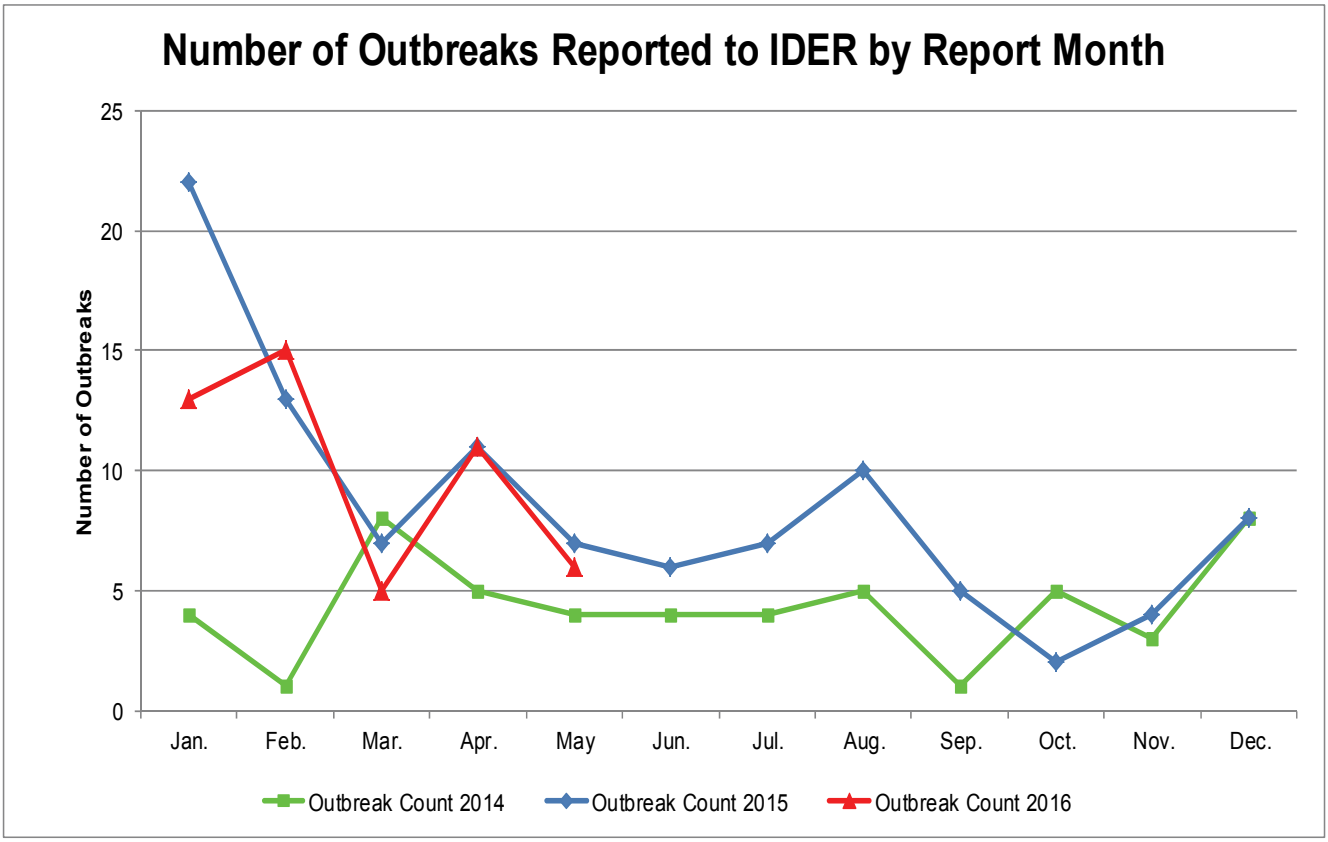
- Testing patients associated with a possible outbreak of gastrointestinal illness caused by parasites, bacteria, or norovirus.
- Testing patients who need to be excluded from work as a foodhandler, medical care provider, or day care provider or attendee until they are no longer shedding shiga toxin-producing *E. coli* or *Shigella.*

It is important to periodically check your supply of kits, as they expire over time.

KDHE recommends maintaining a supply of 2 to 4 Bacterial Enteric kits containing Cary Blair media, and 2 Parasite O&P kits containing Formalin and PVA. Each specimen kit includes the category B shipper for transport to the KDHE laboratory. However, each specimen needs an accompanying KDHE Universal Laboratory Specimen Submission Form (Health) to ensure the proper tests are ordered. These need to be ordered separately.



To order stool specimen test kits, specimen submission forms, or other supplies from the KDHE laboratory, please call (785) 296-1623, or download an order form from http://www.kdheks.gov/labs/cust_serv/download/specimen_kit_request_form.pdf. Completed forms should be faxed to (785) 296-1641.



Date Reported	Exposure Setting	Transmission	Disease	County
5/10/2016	Restaurant	Food	Unknown Etiology	Riley
5/12/2016	School or college	Unknown	Unknown Etiology	Montgomery
5/12/2016	Child care center	Person-to-Person	Shigellosis	Johnson
5/13/2016	School or college	Unknown	Norovirus	Sedgwick
5/19/2016	Restaurant	Food	Unknown Etiology	Douglas
5/24/2016	School or college	Person-to-Person	Shigellosis	Atchison

Tickborne Disease Season is Here!

by Daniel Neises

Tick nymphs and adults are most prevalent from May through July in Kansas. Accordingly, we have seen an increase in testing for tickborne illness this spring.

If you would like a refresher on tickborne disease investigations, please visit our disease investigator training website at http://www.kdheks.gov/epi/disease_training.htm, where you can find links to KS-TRAIN courses on Lyme disease, spotted fever rickettsiosis, ehrlichiosis/anaplasmosis, and tularemia.

The CDC recently updated a great resource for physicians and patients, "Tickborne Diseases of the United States: A Reference Manual for Health Care Providers, Second Edition", which can be downloaded from http://www.cdc.gov/lyme/resources/TickborneDiseases.pdf.

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 May 1 to May 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! All of the vaccine preventable diseases reported this month met the benchmark for date of birth, gender, race, and ethnicity.

Still room for improvement... Pertussis, *Streptococcus pneumoniae* and varicella cases had four indicators fall below the 90% benchmark. *Haemophilus influenzae* had three indicators fall below the 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 May 1 to May 31, 2016 in Kansas

Indicators	*Haemophilus influenzae,* invasive	Pertussis	*Streptococcus pneumoniae,* invasive	Varicella
Number of reported cases	10	17	24	25
% of cases with date of birth	100%	94%	100%	100%
% of cases with gender	100%	100%	100%	100%
% of cases with race	100%	100%	100%	100%
% of cases with ethnicity	100%	100%	96%	96%
% of cases with onset date‡	**70%**	**88%**	**80%**	**84%**
% of cases with hospitalized noted	90%	94%	**83%**	91%
% of cases with died noted	**80%**	94%	**83%**	**82%**
% of cases with vaccination status*	**70%**	**88%**	**71%§**	96%
% of cases with transmission setting¶	N/A**	**88%**	N/A**	**72%**
% of cases with completed symptom profiles	N/A**	**71%**	N/A**	**48%**

*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. 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

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. Percentages noted in red indicate a decrease in completeness compared to April 2016.

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 stubach@kdheks.gov.

May 2016	State's Total Number of Cases* = 288	
EpiTrax Indicators		
EpiTrax Field	**Number of Cases with Field Completed**	**Percent Completed**
Address City	286	99
Address County	288	100
Address Zip	285	99
Date of Birth	288	100
Died	253	**88**
Ethnicity†	255	89
Hospitalized	255	**89**
Occupation	166	58
Onset Date	206	**72**
Pregnancy††	119	84
Race †	263	91
Sex †	286	99
Date LHD Investigation Started	219	76
Date LHD Investigation Completed	200	**69**
Persons Interviewed	176	64
Persons Lost to Follow-Up	21	1
Persons Refused Interview	3	8
Persons Not Interviewed	75	27
Performance Measures		
	Number of Cases	**Percent of Cases**
Diseases were reported on time according to disease reporting regulations***	246	**85**
Disease control measures began within the target for each disease^	170	**59**
Case investigations were completed within the target for each disease^	112	**39**

* 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; 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, postdiarrheal; 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) – (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

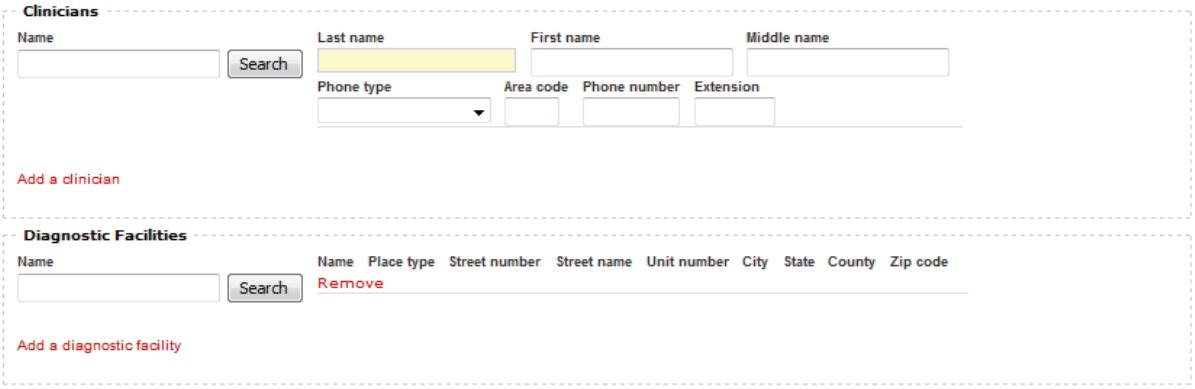
EpiTrax Routing Report

In the past, you have received regular emails regarding open cases assigned to your jurisdiction. These emails included friendly reminders to accept, investigate, or close your records. The routing reports are currently on hold due to higher volumes of laboratory reporting. We hope to return to these emails soon. In the meantime, please do not hesitate to contact us at epitraxadmin@kdheks.gov if you have any questions.

Changes Coming to EpiTrax

You might have recently noticed some changes on your Clinical Tab in EpiTrax. The current functionality of Clinicians and Diagnostic Facilities are causing multiple duplicate records in our EpiTrax system. This affects the speed of the system as the system has to sort through more records. We currently have many duplicate Clinicians and Diagnostic Facilities in EpiTrax. Performing a search before adding a Clinician is critical to stop the duplicate records from continuing to increase in the system. The changes detailed below to the Clinician and Diagnostic Facilities have been designed to improve performance and allow automated case creation.

Previously when adding a new Clinician, EpiTrax did not notify users of duplications and allows any type of addition.



The Clinicians and Diagnostic Facilities section now looks like this:

The clinician search function on the left hand side did not change. Please begin by searching for the clinician. If a new clinician needs to be added to EpiTrax, the user will type the last and first name in the provided boxes, along with any other information requested. The user will click on the Add the Clinician button. If the clinician is already in EpiTrax, the system will notify the user that the record you are looking for already exists.

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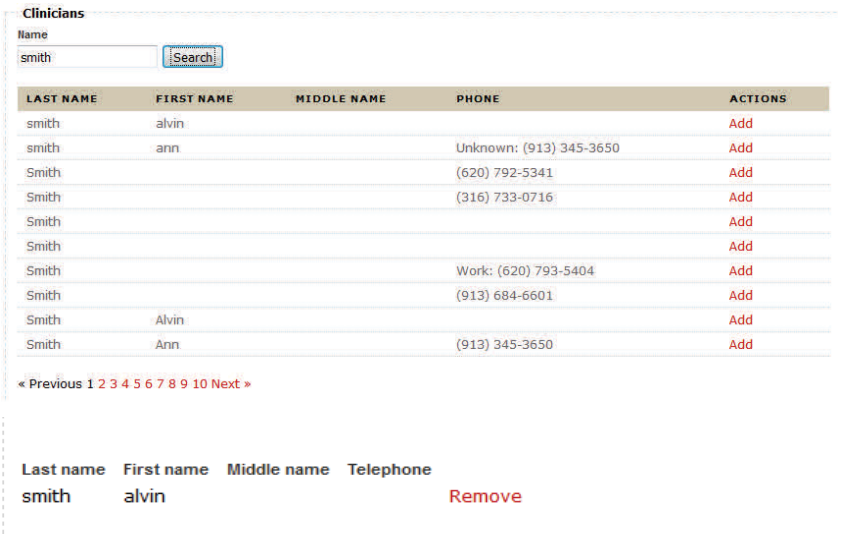
The user can click on Cancel, type the name in the Search box, click on Search, and find the Clinician name. Clicking on Proceed will add the Clinician's name to the CMR and the list of Clinicians in the system. Please be absolutely certain that the Clinician is not already in the system before proceeding with the addition.



Clinicians

Name: smith [Search]

LAST NAME	FIRST NAME	MIDDLE NAME	PHONE	ACTIONS
smith	alvin			Add
smith	ann		Unknown: (913) 345-3650	Add
Smith			(620) 792-5341	Add
Smith			(316) 733-0716	Add
Smith				Add
Smith				Add
Smith			Work: (620) 793-5404	Add
Smith			(913) 684-6601	Add
Smith	Alvin			Add
Smith	Ann		(913) 345-3650	Add

« Previous 1 2 3 4 5 6 7 8 9 10 Next »

Last name	First name	Middle name	Telephone	
smith	alvin			Remove

Users are no longer able to add a new Diagnostic Facility. Please use the Search function to find the facility. Click on Add and the facility will be added to the CMR. If the facility is not in EpiTrax, you will receive the following message: **No results**. Please notify EpiTrax Administration at epitraxadmin@kdheks.gov, and we will add the facility for you.

Diagnostic Facilities

Name: olathe medical [Search]

NAME	ADDRESS	TYPE	ACTIONS
Olathe Medical Center, Inc.	20333 West 151st Street Olathe 66061	Hospital / ICP and Laboratory	Add
Olathe Medical Center - LFC		Laboratory	Add
Olathe Medical Center - GFC		Laboratory	Add
Olathe Medical Center - ACFC		Laboratory	Add
Olathe Medical Center - IMA		Laboratory	Add

Contact your EpiTax Administrator to Add a new Diagnostic Facility

Diagnostic Facilities

Name: Smithville Hospital [Search]

Name	Place type	Street number	Street name	Unit number	City	State	County	Zip code	
No results									Remove

Contact your EpiTax Administrator to Add a new Diagnostic Facility

If you have any questions, please contact us at epitraxadmin@kdheks.gov.

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) for current case count information.