APPLYING PUBLIC HEALTH EDUCATION AT RILEY COUNTY HEALTH DEPARTMENT: A FIELD EXPIERENCE REPORT

by

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Abstract

This is a report of field experience completed at the Riley County Health Department (RCHD) in Manhattan, KS. Under the supervision of Linda Redding RN, BSN, MPH and Patti Grub RN, two-hundred and forty hours of field experience were completed between January 13, 2014 and March 13, 2014. During the field experience, there was a variety of activities including developing a template for a monthly newsletter, attending meetings, shadowing staff in other departments, and working with Mrs. Grub on the disease investigations presented to the health department. The purpose of the field experience was to understand public health from the perspective of a local health department as well completing a report on tuberculosis, which was completed to know more about the disease itself.

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Chapter 1 - Field Experience

This is a report of the field experience completed at the Riley County Health Department (RCHD) in Manhattan, KS. Under the supervision of Linda Redding RN, BSN, MPH and Patti Grub RN, two-hundred and forty hours of field experience were completed between January 13, 2014 and March 13, 2014. During the field experience, I participated in a variety of activities including developing a template for a monthly newsletter, shadowing staff in other departments, and working with Mrs. Grub on the disease investigations presented to the health department. I also attended staff meetings, nurses meetings, weekly Family and Child Resource Center meetings, quarterly Riley County Board of Health meeting, the monthly Population Health and Preparedness Statewide call and monthly meetings between RCHD and the Medical Director. Interviews of multiple staff members were completed to comprehend the extent of what RCHD employees do on a daily basis and what they offer to the community. The purpose of the field experience was to understand public health from the perspective of a local health department as well as to complete a report on tuberculosis. I decided to do a report on tuberculosis to have a better understanding of the mechanism of the disease and to see how Manhattan and the state of Kansas compared nationally.

The history of the RCHD began in 1952 when a city-county Health Department was started. Since that time, it has grown into a county Health Department that serves the residents of Riley County, with a vision of "Healthy people in a healthy community", ("Health Department | Riley County Official Website", n.d.). The Health Department's mission is "To improve the health of the public by working to prevent epidemics and the spread of disease, by assuring quality and accessible health services for everyone, by responding to emergencies and environmental hazards and by promoting and encouraging healthy behaviors," created by Charles Murphy, a past administrator. Over the past couple of years, the Health Department has gone through many turnovers in administration and numerous other changes. One of the changes included a new Health Department administrator who was appointed by the county commission. Fresh ideas along with new renovations have given RCHD a new face and ideas to bring to the community.

Led by a staff of nearly 40 employees including administration, dietitians, nurses, social workers, and support staff, the Health Department is able to provide a wide range of resources to the community. RCHD offers an assortment of services including: community and individual health education, enrollment in the Insurance Marketplace, KanCare eligibility, immunizations and travel vaccinations, Mother and Infant Services, physicals, reproductive health services, tuberculosis skin tests, Women Infants & Children Nutrition Services (WIC) and more. Early

childhood services such as: child care licensing, consultations regarding behavioral health, home visiting with expectant or newly delivered parents, and the Raising Riley Right program is also provided at the health department. Figure 1-1 shows the staff and their roles at RCHD.

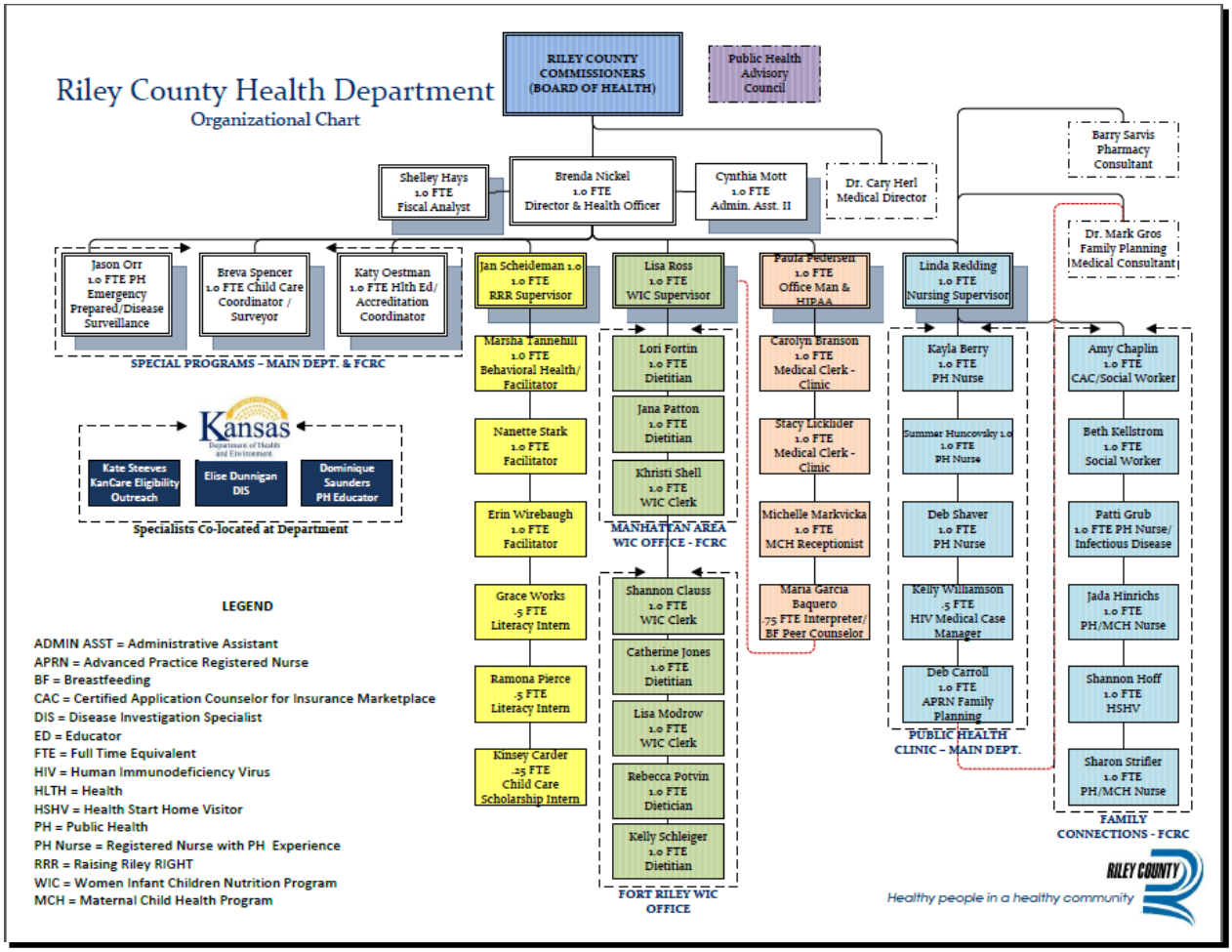

Figure 1-1 Riley County Health Department Organizational Chart ("Health Department | Riley County Official Website", n.d.)

Essential Public Health Services

As part of the new administration, the Health Department has shifted focus to The 10 Essential Public Health Services, listed by the Centers for Disease Control and Prevention in 2013, as part of the framework for providing valuable services to the community. Everybody employed by the Health Department plays a role in providing at least one service to the community, if not more. Altogether, RCHD is aiming to deliver all 10 essential services to the surrounding community.

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.

Figure 1-2 10 Essential Public Health Services (Centers for Disease Control and Prevention, n.d.)

By trying to implement these services in daily activities, not only do employees have a target to focus on but also a sense of fulfillment and a clear idea of why they come to work every day and do their job. Part of the new Health Department administrator's role has been to help the staff with the transformation while still bringing new and fresh ideas to the table

As part of the new leadership and fresh start, the Health Department will be participating in several new assessments and processes the next couple of years. Beginning the spring of 2014, RCHD started participating in a Community Needs Assessment, consisting of a community survey, community forums, and a focus group. During the summer, a Local Public Health System Assessment will be facilitated. This assessment is used to determine what the county residents need from RCHD and what they can do to improve and provide those services. The Health Department also looks towards developing a Community Health Improvement Plan based on the assessment results as well as strategic planning in the department by aligning resources.

Although it will be a long process, the Health Department hopes to work towards Public Health Accreditation, which will result in implementation of the standards of service and care, internal protocols and policies, and a framework for the programs currently offered.

Programs Offered

Child Care Assistance & Licensing

The goal of child care licensing is to protect children from safety risks or other predictable health risks by reducing these risks in child care facilities. This is done by conducting timely inspections, investigating complaints within the community, and monitoring for illegal child care. RCHD also tries to promote the need for quality child care by increasing awareness around the community.

Currently, there are 132 child care facilities in Riley County which are checked annually. If there are any complaints or the facility does not comply with the regulations, a follow-up check will be made. Since Lexie's Law (See Appendix A) was put into action in 2010, the number and quality of child care facilities has increased.

Raising Riley Right

Raising Riley Right (RRR) is a program that is grant funded and serves children from the ages of 0 to 5 years ("Raising Riley", 2014). RRR is aimed at improving the accessibility as well as the quality of the child care services offered for at-risk families in Riley County. The program also supports early childhood literacy and getting children ready for kindergarten. The money from the grant provides projects and programs to assist in child care provider training, child care scholarships, and assistance to Parents as Teachers. RRR educators provide monthly training to providers to help them reach their educational and program goals. Educators are also able to provide program ideas, activities for children of different ages, assessment for child development, and information regarding safety, behavior, and health. For the providers, there is an incentive program to help sustain quality care by assisting with start-up fees or equipment costs.

At-risk families that qualify for scholarships receive help with up to a third of their monthly child care tuition expenses. Those who receive a scholarship must be employed full-time, go to school full-time, or a combination of the two. The children must also participate in the community-wide screening sponsored by the local school district. The screening checks the child's vision, hearing, speech and language, and their development. These scholarships help

parents have better access to quality child care as well as giving providers assistance to improve the quality of care.

Childhood Immunizations & Travel Vaccinations

The RCHD nurses are well aware of the guidelines set by the state and nation regarding the schedules of childhood immunizations. The nurses use a program from the Kansas Department of Health and Environment (KDHE) called the Kansas Immunization Registry. This is a web-based program that is used to maintain immunization records for children up to the age of 18, which is collected from both public and private providers around the states. Also called KSWebIZ, the program allows users to track areas of low immunizations as well as ensuring compliance with state and national guidelines. The program is also useful to simply keep track of immunizations received so there is no duplication when moving to another city or state.

RCHD is also involved with the federally funded program, Vaccines for Children (VFC). This program is able to provide free vaccinations to children under the age of 18 that may not have the ability to pay for them. This program is possible thanks to the Centers for Disease Control and Prevention (CDC), who buys vaccines at a discounted price and then issues them to public health clinics as well as private providers ("Vaccines for Children Program", 2013). The Health Department is also able to provide the vaccinations needed for those who are traveling abroad. Due to these services, Riley County facilitates the prevention of disease for which effective vaccines are available.

Communicable Disease Surveillance

As a part of the Health Department's mission to prevent epidemics and the spread of disease, a communicable disease nurse is responsible for conducting investigations of reported disease in Riley County. The nurse contacts the patient in order to understand where and when the disease started, who has been in contact with them, and how to prevent spread to others. All this information is put into an electronic disease surveillance system called EpiTrax, which was created by KDHE. This program allows users to investigate infections, and prevent morbidity and mortality at the local and state agency level. EpiTrax is also used because it is mandated that certain diseases such as anthrax, botulism, cholera, measles, meningitis, mumps, pertussis, plague, rabies, SARS, smallpox, and tuberculosis are reported to KDHE within a certain period of time. The communicable disease nurse also sends out a weekly report to notify others of the

current diseases being reported. Under the supervision of the communicable disease nurse, investigations of several communicable diseases presented to the Health Department were completed during my field experience.

Community Health Resources

The health educator at the Health Department collaborates with community partners and programs to promote community wellness and to connect people to the resources needed to live a healthier life. The goal is to improve exercise, safety, and nutrition in the community through presentations during health fairs and at various other community activities. Examples of community involvement include bicycle safety training during bike month, promoting Walk Kansas, supporting the Flint Hills Wellness Coalition, providing cooking demonstrations, participating in Purple Power Play on Poyntz, assisting with the Riley County Health Fair, and providing advertisements for the local farmer's markets. While RCHD doesn't put these activities on, they actively participate and direct people to these resources when needed. The Health Department will also put on workshops, presentations, and programs aimed at health promotion and education by request.

Emergency Response Planning

The emergency preparedness coordinator, which is a fully funded grant position, is responsible for keeping the staff prepared for a public health emergency and keeping track of the training that employees receive, such as Occupational Safety and Health Administration (OSHA), blood borne pathogen, and hazardous communications training. This position is important in cases of emergency, such as a weather related disaster like a tornado or a mass casualty that could happen during a university sporting event. In the case of such an event, RCHD is also assessing it's capability during a medical surge by collaborating with other county emergency groups. It is important that as a Health Department, the role in an emergency response and recovery is defined clearly. It is also RCHD's duty to provide warning and emergency information to the public when needed. The Health Department must be ready to respond and delegate responsibilities to other individuals and agencies that would be helping during the emergency, such as Lafene Health Center, Mercy Regional Health Center, and Riley County EMS. Community members will look towards RCHD in a crisis so it's imperative to be prepared for an emergency. Due to this expectation, the Health Department actively participates

in drills, exercises, and training on a regular basis to test the response and planning capabilities for a public health emergency.

Family Connections Department

RCHD provides services to expecting as well as new mothers and families in Riley County, with the goal of improving early childhood and perinatal health. The Health Department has three different types of programs offered to pregnant or new mothers including Mother & Infant Health Program, Healthy Start Home Visitor Program, and the Home Visiting Program. The number of patients seen and the type of service used are kept in a database maintained by the department's clerk, which is used later when applying for grants.

Mother& Infant Health Program

The Mother and Infant Health program is grant funded and provides outreach to the families that have newborns. Since it is grant funded, there is no payment required for the services that are provided to the families. Services that are offered include information and education about pregnancy, healthy development of a child up to 1 year of age, as well as bonding exercises to strengthen the parent-child bond. A licensed social worker offers referral services, community resources, breastfeeding guidance, and assistance for enrolling or obtaining health insurance. What to expect during the pregnancy as well as what to prepare for in the upcoming months are common topics during the visit. The social worker will also talk to the parent about gestational and intellectual milestones the child should be making. If need be, the nurse or social worker can also refer the family to outside services, such as Infant & Toddler Services, Parents as Teachers, and La Leche League, which is a local breastfeeding group.

Healthy Start Home Visitor Program

Healthy Start Home Visiting (HSHV) is a program for women who are pregnant and for infants 0-2 months. It provides information over 1 to 2 visits about the care of infants and safety, infant weight checks, and car seat checks to make sure they are properly installed. Community resources such as depression hotlines, pamphlets on Teachers as Parents, and immunization guidelines are given to the new mother. A sleep sack is also given out to promote healthy sleep habits for the infant and to reduce the amount of deaths due to Sudden Infant Death Syndrome (SIDS). The Healthy Start visitor is also there to assess the mother's status and make sure she

and the baby are doing well. The objectives of the program as stated by KDHE ("Healthy Start Home Visitor Services", n.d.) include:

1. Increase the use of cost-effective preventive health care services such as prenatal care, family planning, immunizations, nutrition and well childcare.
2. Promote early entry into and compliance with prenatal care.
3. Discourage unhealthy maternal behaviors such as alcohol and tobacco use.
4. Identify families at risk and link them with services and supports.
5. Improve and enhance parenting and problem solving skills.
6. Reduce costs through use of paraprofessional visitors under nursing supervision.

Home Visiting Program

The Home Visiting Program is aimed towards pregnant women and their families that have children up to 3 years of age and that are interested in a higher level of support. Mother and infant registered nurses and social workers at the Health Department offer their services in the clinic as well as at the parent's home. This allows those who cannot leave home to also receive services. The services provided include enhancing parenting skills, information about pregnancy and early developmental stages of children, and referrals to community resources. The home visitor assesses the child to make sure he or she is doing well mentally, physically, and emotionally. They also assess the new mother for post-partum depression. The nurses and social workers also work with families to strengthen the family bond by promoting activities to do together or just simply sitting down at the table together to eat a meal.

Reproductive Health Services

Family Planning

The Health Department works to decrease the number of unintended pregnancies and to increase screenings to detect diseases earlier. RCHD does this by providing preventative services and promoting health by offering services such as STD testing, annual well women exams, pregnancy tests, birth control, health education, Pap smear tests, and pelvic exams. These services are offered for free or at reduced cost at the clinic by using a sliding scale based on income and the size of the family. To reach the targeted group of women 24 years of age and

younger, the current marketing strategies are being evaluated and a Family Planning Advisory Group will be formed.

The clinic was once a primary care clinic but has been altered into a clinic that mainly treats woman and children, but will test and treat men with STDs. The clinic has also changed from a walk-in clinic to appointment only so it can give greater quality of care to the patients.

Women, Infants, & Children (WIC) Program

The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) is a government nutrition program based on income that provides many services including: breastfeeding support, health education, healthy food choices, nutrition education, and referral of qualifying clients to other resources at no cost ("Information for Families", n.d.). The goal of the WIC program in Manhattan and the surrounding community is to reach out to those mothers and children that are at nutritional risk and provide them with resources to keep them healthy.

A proof of identity is needed for the mother and the children. Proof of living address and household income must also be provided. The amount of food assistance in the form of checks for the child and mother is based on several factors. How old the child is determines the amount and type of food checks he or she will receive. Infants and children up to the age of 5 are eligible. As far as the mother, support is determined by whether or not she is pregnant, whether she is breastfeeding (up to a year after delivery), or non-breastfeeding up to 6 months after delivery ("Information for Families", n.d.). Mothers who are pregnant or breastfeeding get larger packages because their nutritional requirements are greater.

The program offers healthy food choices by providing the family with checks that must be used on certain items. The family must first meet with a WIC dietitian to go over paperwork, take surveys, educate, and determine the nutritional requirements for each member of the family. They are taught about portion sizes as well as healthy foods to eat. Up to 3 months of checks can be given out at a time and then another appointment is needed to receive more checks. If the checks are lost, they can be replaced once during the year for each child or mother. The first set of checks must not be used if found. If they are, the child or mother is kicked off the program for a period of time.

If a family's income exceeds the income limit, they should withdraw from the program. However, the WIC program operates on the honor system: WIC families can also be on food stamps at the same time. Manhattan WIC serves 1,133 individuals while Fort Riley serves 1,967.

Together with Riley and Pottawattamie County, WIC serves 3,515 a month. There are 11 stores in Riley County and Pottawattamie County that provide WIC services.

Other Services Provided

Breastfeeding Peer Counseling

The Health Department also has a breastfeeding peer counselor to talk to mothers when experiencing breastfeeding problems or just to check up on them to make sure everything is going well. Since breastfeeding provides nutritional advantages to infants compared to formula, RCHD encourages mothers to try breastfeeding and offers follow-up phone calls to keep mothers motivated and less discouraged when experiencing difficulties.

Community Clinics

RCHD works to decrease the spread of infectious disease; by increasing immunization compliance through the education of the community, clients, and medical providers about the importance of vaccinations. The public health clinic also provides education about disease prevention when investigating possible infectious disease cases reported to the Health Department.

Since the Health Department closed the primary clinic last year, RCHD now goes into the community to perform blood pressure checks, screening services, and to give flu shots to Riley County's vulnerable population. The Health Department also refers individuals to other clinics in the surrounding area if needed.

Medical Coverage and Assistance

RCHD has a Certified Application Counselor that assists families to enroll for insurance, whether it's through the Affordable Care Act marketplace or KanCare. Many times for students that are foreign, it has been difficult to obtain insurance so the Health Department assists them.

Chapter 2 - Field Experience Project

Tuberculosis

I decided to prepare a report on TB to get a better understanding of disease and how Manhattan and the state of Kansas compare nationally. I was also just interested and wanted to learn more about the disease.

Background Information

Mycobacterium tuberculosis (TB) was first identified on March 24, 1882 by the German scientist, Robert Koch (Lawn, 2011). TB can be caused by a complex group of organisms: *M. africanum, M. bovis, M. canetti, M. microti,* and *M. tuberculosis* (Lawn, 2011). According to the World Health Organization, there are around 9 million cases of TB recorded yearly, with 80% of the cases coming from 22 countries (Alterado, 2013).

Tuberculosis is a disease that generally attacks the lungs and is most commonly caused by the bacterium, *Mycobacterium tuberculosis*. The bacteria itself is considered an acid-fast, aerobic, non-spore forming bacillus and is most successful in high oxygen tissues of the human body (Lawn, 2011). The bacterium has a slow replication rate, dividing only every 15-20 hours, which is considered slow compared to other bacteria (Lawn, 2011). Not limited to the lungs, TB can affect any part of the human body and can be fatal if not treated. Transmission of TB is spread through the air when an infected person speaks, coughs, sneezes, or even sings. There are two types of TB infections: latent infection and active infection.

It is not clear exactly when or who brought TB into the United States, but in the 1900s, rate of infection was 194 per 100,000 ("Tuberculosis through History", 2013). With better sanitation methods, increased education, and establishing a public health practice, that rate dropped to 6 per 100,000 in the 1960s ("Tuberculosis through History", 2013). TB rates once again rose during the 1980s, due to an increase in immigration, spread of the Human Immunodeficiency Virus (HIV), and a complacent health care system. The number of TB cases has decreased over the years due to an increased awareness, increased availability of medicine to people living in TB prevalent areas, and an overall global effort to end TB.

Risk Factors

Individuals who are immunocompromised or have HIV are placed at a higher risk for contracting TB than people with health immune systems. Individuals that have a substance abuse problem, have other health problems, have been recently diagnosed for TB infection, or those who weren't treated or treated correctly in the past are more likely to develop the active form of TB. These groups of individuals also have a higher chance of a latent infection turning into an active infection. Cohabitating with infected individuals, smoking, living in poverty, and crowded living conditions place uninfected individuals at a higher risk of contracting TB (Lonnroth, 2010).

Latent Infection

Latent TB infection is when the bacteria lie dormant in the human body without causing the individual to become ill or feel sick. It is estimated that 10-15 million people in the United States have a latent TB infection ("Tuberculosis (TB)", 2012). Individuals with latent TB cannot spread the disease and are not infectious unless the bacteria become active and start to multiply. Latent TB is contracted when a healthy individual breathes in the TB bacterium from an infectious individual. Most the time, the body is able to fight off the infection, stop the growth, and keep the disease from becoming active. There are some individuals that will never develop the active form of TB infection while others transition to the active form quickly. Risk and timing of transmission from the latent to active infection largely depends on the individual's immune system capabilities. If the body cannot fight off the infection, the latent TB bacterium becomes active.

Active Infection

Individuals with active TB infection are infectious and readily able to transmit TB to those in close contact. To be considered the active form of TB, the bacterium must be able to overcome the immune system and be able to multiple in the body. Those who are immunocompromised or have HIV are placed at a higher risk for contracting TB or the latent infection turning into an active infection than people with normal immune systems. Individuals that have a substance abuse problem, have other health problems, have been recently diagnosed for TB infection, or those who weren't treated or treated correctly in the past are more likely to develop the active form of TB.

Symptoms of the active form include: chest pains, chills, a cough that lasts for more than 3 weeks, a cough that produces blood or sputum, fatigue, fever, loss of appetite, night sweats, weakness, and weight loss (Small, 2001).

Testing

TB skin tests, also known as Mantoux tuberculin skin tests, used to be commonly used until tests frequently produced false positives due to vaccination against TB. The skin test has been replaced by the TB blood test, now considered the gold standard. Two assays that have been approved by the U.S. Food and Drug Administration (FDA) include the T-Spot and the QuantiFERON blood tests ("Tuberculosis (TB)", 2012). If the test result is negative, the individual is unlikely to have TB in either form. If the results are positive, the individual is likely to have TB. The downfall to both types of tests is that neither is able to differentiate between latent and active infections. Further testing is done to determine the stage of infection including: a radiograph of the chest, sputum tests, and other laboratory tests. The results of those tests give doctors and care providers needed information to determine the best regimen of treatment options.

Treatment

Depending on the type of TB infection, different courses and timeframes of medication may be prescribed. Those with a latent infection are prescribed medication to prevent the active form of TB from developing. If the individual has the active form of TB, they are treated until the infection has cleared and the active form of illness has been reduced to the latent stage. For those individuals with the active form of TB, it is imperative that the medication regimen is completed; otherwise, the TB bacteria could become drug-resistant, making it more difficult and costly to treat. Common medications prescribed include: ethambutol (EMB), isoniazid (INH), pyrazinamide (PZA), rifampin (RIF), and rifapentine (RPT) ("Tuberculosis (TB)", 2012). The variety of treatment options for both latent and active forms of TB are listed in Table 1 and 2.

Table 1 Treatment Options for Latent Infections ("Tuberculosis (TB)", 2012)

Drugs	Duration	Interval	Minimum doses
Isoniazid	9 months	Daily	270
		Twice weekly*	76
Isoniazid	6 months	Daily	180
		Twice weekly*	52
Isoniazid and Rifapentine	3 months	Once weekly*	12
Rifampin	4 months	Daily	120

*Use Directly Observed Therapy (DOT)

Table 2 Treatment Options for Active Infections ("Tuberculosis (TB)", 2012)

Preferred Regimen	Alternative Regimen	Alternative Regimen
Initial Phase Daily INH, RIF, PZA, and EMB* for 56 doses (8 weeks)	Initial Phase Daily INH, RIF, PZA, and EMB* for 14 doses (2 weeks), then twice weekly for 12 doses (6 weeks)	Initial Phase Thrice-weekly INH, RIF, PZA, and EMB* for 24 doses (8 weeks)
Continuation Phase Daily INH and RIF for 126 doses (18 weeks) or Twice-weekly INH and RIF for 36 doses (18 weeks)	Continuation Phase Twice-weekly INH and RIF for 36 doses (18 weeks)	Continuation Phase Thrice-weekly INH and RIF for 54 doses (18 weeks)

*EMB can be discontinued if drug susceptibility studies demonstrate susceptibility to first-line drugs.

Prevention and Infection Control

In order to prevent transmission, infected individuals associated with a health care facility or setting must follow a rigorous control plan. It's important to take precautions against airborne transmission (such as wearing a mask). Individuals should take precaution when traveling to areas of the world with high TB prevalence. Wearing a mask and eliminating long exposure to infected individuals are examples of precautionary measures. If an individual suspects that he/she could have contracted TB after traveling, it's advised that they should be seen by a doctor.

There is also a vaccine available. The bacille Calmette-Guerin (BCG) is a vaccine that is used in countries with a high TB prevalence but isn't available in the United States ("BCG

Vaccine", 2011). The vaccine tends to interfere with the skin tests and can cause false positive results.

There are challenges when trying to prevent the spread of infection. Infected patients may not understand the importance of taking their medicine. Many infected individuals are from a country where TB is prevalent, so it's hard for them to comprehend why the disease is controlled differently here in the United States. Effective follow-up can also become difficult, making it hard to control TB in the United States.

Stigmas Associated with TB

According to Alterado (2013), stigmas against diseases are highest among individuals with HIV/AIDS and TB. Once individuals have been diagnosed with either of the diseases and others find out, they suffer from discrimination, limited social interactions, and difficulty accessing healthcare services (Alterado, 2013). It's also important to note that many individuals are simply unaware of the mechanisms behind the disease. "Misinformation about what causes TB, how the disease is transmitted and whether it can be cured is linked to the stigmatization of TB and of people with TB" ("A Human Rights Approach to Tuberculosis", 2001). Better education of the public and doctors will help reduce the myths surrounding the disease and hopefully decrease the stigma related to having TB.

Tuberculosis in Kansas

On the national level, Kansas is one of the states with a low prevalence of TB. According to the KDHE, Kansas averages less than 3 cases per 100,000 people. In 2012, there were 42 cases of TB reported, with individuals aged 25-64 accounting for 41% of reported cases ("2012 TB Statistical Highlights", n.d.). Table 3 provides information of the TB rates in America from 2011-2012.

Table 3- Tuberculosis Cases and Case Rates per 100,000 Population: Reporting areas, 2012 and 2011 (United States, 2013)

Table 30. Tuberculosis Cases and Case Rates per 100,000 Population: Reporting Areas, 2012 and 2011

Reporting Area	Cases		Case Rates		Rank According to Rate		Population Estimates July 1, 2012
	2012	2011	2012	2011	2012	2011	
United States	**9,945**	**10,517**	**3.2**	**3.4**	--	--	**313,914,040**
Alabama	134	161	2.8	3.4	18	13	4,822,023
Alaska	66	67	9	9.3	1	1	731,449
Arizona	211	255	3.2	3.9	13	8	6,553,255
Arkansas	70	85	2.4	2.9	24	18	2,949,131
California	2,191	2,322	5.8	6.2	3	3	38,041,430
Colorado	64	70	1.2	1.4	43	36	5,187,582
Connecticut	74	83	2.1	2.3	29	27	3,590,347
Delaware	28	21	3.1	2.3	14	28	917,092
District of Columbia[1]	37	55	5.9	8.9	--	--	619,020
Florida	679	754	3.5	4	9	7	19,317,568
Georgia	357	347	3.6	3.5	8	11	9,919,945
Hawaii	117	123	8.4	8.9	2	2	1,392,313
Idaho	15	12	0.9	0.8	45	47	1,595,728
Illinois	347	358	2.7	2.8	20	19	12,875,255
Indiana	102	100	1.6	1.5	34	35	6,537,334
Iowa	46	40	1.5	1.3	36	37	3,074,186
Kansas	42	36	1.5	1.3	38	40	2,885,905
Kentucky	80	70	1.8	1.6	32	34	4,380,415
Louisiana	149	167	3.2	3.7	11	10	4,601,893
Maine	17	9	1.3	0.7	41	50	1,329,192
Maryland	224	232	3.8	4	6	6	5,884,563
Massachusetts	215	195	3.2	3	12	16	6,646,144
Michigan	149	170	1.5	1.7	35	32	9,883,360
Minnesota	162	137	3	2.6	15	22	5,379,139
Mississippi	81	91	2.7	3.1	19	14	2,984,926
Missouri	89	98	1.5	1.6	37	33	6,021,988
Montana	5	8	0.5	0.8	49	46	1,005,141
Nebraska	22	23	1.2	1.2	44	41	1,855,525
Nevada	82	96	3	3.5	16	12	2,758,931
New Hampshire	9	11	0.7	0.8	46	45	1,320,718
New Jersey	302	331	3.4	3.7	10	9	8,864,590
New Mexico	40	49	1.9	2.4	30	26	2,085,538
New York	866	905	4.4	4.6	5	5	19,570,261
North Carolina	211	244	2.2	2.5	28	23	9,752,073
North Dakota	26	7	3.7	1	7	44	699,628
Ohio	149	145	1.3	1.3	40	39	11,544,225
Oklahoma	88	94	2.3	2.5	25	24	3,814,820
Oregon	61	74	1.6	1.9	33	30	3,899,353
Pennsylvania	234	260	1.8	2	31	29	12,763,536
Rhode Island	23	27	2.2	2.6	27	21	1,050,292
South Carolina	122	140	2.6	3	22	15	4,723,723
South Dakota	19	15	2.3	1.8	26	31	833,354
Tennessee	164	156	2.5	2.4	23	25	6,456,243
Texas	1,233	1,325	4.7	5.2	4	4	26,059,203
Utah	37	34	1.3	1.2	39	43	2,855,287
Vermont	4	8	0.6	1.3	47	38	626,011
Virginia	235	221	2.9	2.7	17	20	8,185,867
Washington	185	199	2.7	2.9	21	17	6,897,012
West Virginia	8	13	0.4	0.7	50	49	1,855,413
Wisconsin	71	70	1.2	1.2	42	42	5,726,398
Wyoming	3	4	0.5	0.7	48	48	576,412
American Samoa[1,2]	1	3	1.8	5.5	--	--	54,947
Fed. States of Micronesia[1,2]	173	142	162.5	133.3	--	--	106,487
Guam[1,2]	68	79	42.5	49.4	--	--	159,914
Marshall Islands[1,2]	145	148	211.7	216.1	--	--	68,480
N. Mariana Islands[1,2]	21	31	40.9	60.3	--	--	51,395
Puerto Rico[1,2]	71	50	1.9	1.4	--	--	3,690,923
Republic of Palau[1,2]	2	8	9.5	38	--	--	21,032
U.S. Virgin Islands[1,2]	4	...	3.8	...	--	--	105,275

[1] Not ranked with the states. See Table 31 for District of Columbia ranking among states.
[2] Not included in U.S. totals.

Note: Denominators for computing 2011 and 2012 rates for states, the District of Columbia, and Puerto Rico were obtained from Annual Estimates of the Resident Population for the United States, Regions, States, and Puerto Rico: April 1, 2010 to July 1, 2012 (http://www.census.gov/popest/data/national/totals/2012/index.html) (accessed August 12, 2013); for all other areas, from IDB Summary Demographic Data (http://www.census.gov/population/international/data/idb/informationGateway.php) (accessed August 12, 2013).
Ellipses indicate data not available.
See Technical Notes.
See Surveillance Slide #4.

Figures 2-1 and 2-2 portray the decline of TB rates over the past 20-30 years. Compared to the national reported cases, Kansas seems to fluctuate more than the national average. This is due to the low number of reported cases, so minor changes in cases causes more fluctuation than if there were a larger pool of diseased individuals.

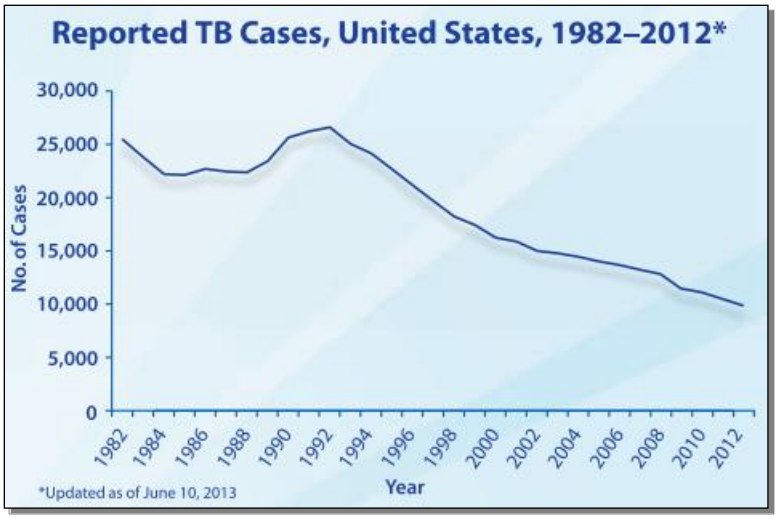

Figure 2-1 Reported TB Cases, United States, 1982-2012 (“Tuberculosis (TB)”, 2012)

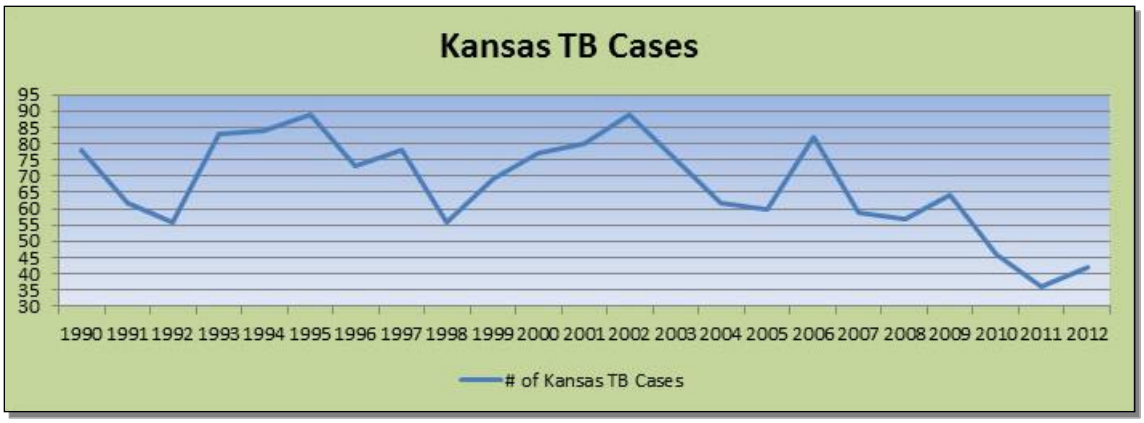

Figure 2-2 Kansas TB Cases ("2012 TB Statistical Highlights”, n.d.)

Tuberculosis in Manhattan

According to the TB nurse at RCHD, many years ago, the University of Kansas and Wichita State University started a pilot program where international students arrive a week before all other students for the fall or spring semester. The students receive a physical

examination and are tested for TB. If they are positive, they are isolated until further tests are preformed to make sure it isn't a false positive or until they have started medication and are no longer infectious. Medication must be taken under direct supervision of a doctor or nurse, also known as directly observed therapy (DOT). This is to ensure that the patient takes the medicine and the likelihood of a multidrug-resistant TB is kept at bay. Kansas State University started a similar program 3-4 years ago. Due to the chance that a student may be isolated due to contracting TB, a handful of studio apartments are not leased on the off-campus apartment complex owned by Kansas State University. Since 2012, it is now a rule that international students are tested (See Appendix B).

Although international students are required to take a TB test, there is a loophole in the statute that may need to be revisited in order to eliminate TB in Kansas. As it stands currently, professors or short-term study groups from countries prevalent in TB are not required to be tested when coming to a postsecondary education institute.

Using the disease surveillance system EpiTrax, estimates of reported cases were charted. The reported cases are not definite due to a few reasons. First, reported cases of latent infections that have turned active and vice versa may not have been updated in the system, shifting the estimated number of TB cases. Individuals that may have moved into or out of the county can also cause fluctuation. Lastly, individuals that could not be contacted are considered suspect cases; therefore, they are a separate division. Table 4 shows the estimated prevalence in Riley County, separated by gender if it is known.

Table 4- Most Recent Reported Cases of TB in Riley County as of March 2014 Compiled from EpiTrax Data

Disease	Jurisdiction	Gender	Count
Tuberculosis, Active	Riley County	Female	3
Tuberculosis, Latent Infection (LTBI)	Riley County	Female	111
		Male	143
		Unknown	4
Tuberculosis, suspect	Riley County	Female	59
		Male	41
		Unknown	6

Chapter 3 - Other Projects

Disease Investigations

Under the supervision of the communicable disease nurse, several investigations were concluded during the field experience.

Investigation Procedures

The first step in the investigation process is contacting the person who ordered testing of the disease or who is handling the case and confirming the diagnosis with them. The case definition of the disease must be met in order to be a confirmed infection. On the KDHE website, a case definition for each reportable disease and the proper protocols for investigation are available. According to the CDC, a communicable disease is defined as "an illness caused by an infectious agent or its toxins that occurs through the direct or indirect transmission of the infectious agent or its products from an infected individual or via an animal, vector or the inanimate environment to a susceptible animal or human host" ("Definitions for Consideration", 2010). After the diagnosis has been confirmed, a case investigation is conducted in order to identify the possible source of infection. If there are additional cases or individuals that came into contact with the infected person, an additional contact investigation would be conducted. The next step is to identify whether or not the infection is a concern for public health. After that, preventative measures to help control and prevent further spread of the disease are initiated. All information is reported through EpiTrax and the investigation is completed. Below is the detailed process of each step of the investigation process.

Case Investigation

The nurse or medical investigator who is investigating the case must contact the provider or person handling the case and attain crucial information. Clinical information such as the symptoms of the individual, the onset date and time of the infection, and the recovery date and time if possible is collected. Examination of test results and determination of future testing is debated next, even if the case is still labeled as a suspect infection. Demographic information including address, phone number, birth date, race or ethnicity, and gender is collected. If the individual was hospitalized, the duration and dates of the stay are recorded. Mortality is also recorded.

The next step in the investigation is to contact the infected individual. A total of 3 attempts are made before the case is lost to follow-up and closed. If the individual is successfully contacted, a series of questions based on the suspect infection is asked. This could include starting a week prior to the onset of symptoms: others who have many been exposed, history of food consumption, history of group gatherings, animal contact, water sources, underlying medical conditions, and association with any institutions such as day cares, schools, or health care facilities. If the person reports coming into contact with other individuals while sick, those individuals must also be investigated if contact is possible. If there are numerous cases of the same disease in a concentrated area, an outbreak may be suspected.

Contact Investigation

As stated above, if the infected person associated with any institutions such as day cares, schools, health care facilities, or came into contact with anybody while sick, those individuals or facilities are contacted. Due to the risk of transmission to younger children, investigation of day care centers must be thorough to prevent further disease spread. Investigation guidelines vary depending on the age of the children, whether or not they are toilet trained, and whether or not they provide in-house food preparation. People that work in a school or children that attend school are contacted only if they share similar exposure activities and there is evidence of transmission. Individuals that handle or prepare food as well as high-risk individuals are contacted during an investigation. Lastly, contacts that live with the infected individual or have sexual contact with them are investigated.

The above individuals who report similar signs of illness are questioned regarding the onset date and time, recovery date and time, as well as the location and activities during the week prior to becoming infected. A listed of contacts that could be at-risk of developing the disease is created if there is a risk of transmission. It is recommended that there is a follow-up to the household and contacts of the infected individual as well as control measures such as isolation or restrictions at institutions such as a daycare or work places.

Case Management

In order to prevent future infections or transmission of the disease, education is provided to the infected individuals and additional follow-up is pursued as needed to assure compliance. If there are any changes in the individual's status, it is reported.

Contact Management

Individuals on the contact listing who are regarded as having high risk of acquiring the disease are followed-up to conclude whether or not transmission of the disease had occurred. Collection of the contacts' status, occupation, and attendance at schools or daycares are reported. Again, in order to prevent future infections or transmission of the disease, the contact-individual is provided education and additional follow-up may be needed to assure compliance. If it is suspected the contact individual has contracted the disease, the case is reported to KDHE, and the individual is urged to seek medical care as well to restrict contact with others until he or she is proven not ill.

Environmental

A regulatory agency is brought in if the transmission has been associated with a school or daycare facility, commercial food service, water supply for the public, or raw milk for commercial use ("Salmonellosis (Non-Typhoid) Investigation Guideline", 2012). The facility is then inspected and samples are collected. In order to control the transmission, water may have to be boiled or chlorinated and possibly contaminated surfaces are sanitized and cleaned with a bleach solution.

Education

Individuals in a case-investigation are provided education about methods to prevent disease transmission and future illness as well as some restrictions that may be deemed necessary depending on the individual's disease or occupation. Fact sheets are available through KDHE to help educate the individual.

See Appendix C

Monthly Newsletter

Many other Health Departments around the state send out weekly or monthly epidemiology newsletter updates. The director of the Health Department expressed that she would like a monthly newsletter to send to other Health Departments as well as area providers. This newsletter would be beneficial for keeping local doctors and clinics aware of current infections happening in the county as well as informing them about the resources available to them and their patients.

I created a template that was approved by the director and will be going out to area providers by the first week of April 2014. Due to the field experience ending before the newsletter could be sent, other staff members were delegated specific areas of the newsletter to work on for each month.

See Appendix D

Chapter 4 - Conclusion

Before starting my field experience at the Health Department, I didn't have much idea as to what they did besides giving flu shots and helping people that are uninsured. After the 8 week internship, I am amazed at the magnitude of services and resources the Health Department provides. It's more than just a place to receive an immunization or apply for the WIC program. It's much more than I could have ever imagined. As a way to understand all the services offered through the Health Department, I took it upon myself to try and interview as many people as possible to get an idea of what goes on behind the scenes. After interviewing 20 employees, I've come to a better understanding of what each department does and how they interact with the other departments. Much of the information collected from the various staff members was used to write the report.

Academic experiences in courses such as epidemiology, human parasitology, emerging diseases, global health issues, administration of health care organization, social and behavioral bases of public health, and biology of disease vectors were all utilized during the field experience. It allowed for the information from the courses to be applied in real life situations.

Epidemiology was used when discussing the risk or rate of a disease in a population and the number of disease cases in EpiTrax. The course also helped me understand the amount of people with a disease, if the number is increasing or decreasing, and how it is affecting our community. The Human Parasitology course and laboratory was useful when talking about certain diseases such as Giardiasis or Cryptosporidiosis, which must be reported to the KDHE. I understood how the diseases were spread and how to prevent future transmission of parasitic diseases. The course on Biology of Disease Vectors was also applied when discussing certain diseases at the Health Department.

Biostatistics will be useful in the deigning, collecting, and interpretation of data from experiments, surveys, or studies. This course is also important when discussing missing data, developing new statistical methods, and analyzing data from trials and studies. The Environmental Toxicology course applied when discussing the harmful effects of blood lead level on the population.

Emerging diseases was useful due to the increased number of people sick with the Influenza A (H1N1) virus. The disease, which was prevalent in 2009, made a reappearance

starting in late 2013. Understanding who the disease infected and how important getting the flu vaccine was forwarded on to patients to keep the number of infections down. Global Health issues included topics like the lack of access to health care systems. Due to the Affordable Care Act, the number of people enrolling in health insurance has increased at RCHD and was discussed daily. Although there are many people still without insurance, the overall number is slowly decreasing.

The course on Administration of Health Care Organizations was experienced first-hand while working at RCHD. It was interesting to see how the Health Department worked with other organizations and health care systems to affect healthy outcomes and quality of care for the community. Reshaping the organization and management of the Health Department over the past year will be beneficial in improving the quality of care RCHD is able to give to the surrounding community. Social and Behavioral Bases of Public Health was useful when trying to come up with new ideas on how to promote a higher quality of life in the community, reduce morbidity, and increase a healthier lifestyle in general. The monthly newsletter that I created will help with communication about diseases to local providers and help them disperse that knowledge to their patients to decrease morbidity and mortality that could've been avoided. This is done by understanding the framework of public health problems and developing a strategy on how to overcome them.

Lastly, Multidisciplinary Thought and Presentation taught me how to be a better writer and be comfortable when presenting. The more I know about a subject the easier it is to talk about it.

Overall, the internship at the RCHD was a wonderful experience. It focused on public health from a variety of different standpoints and provided a view on how all the pieces fit together to make a healthy community.

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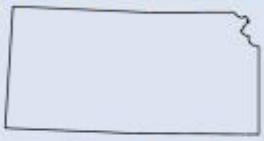
Appendix A - Lexie's Law

Child Care Homes in...



Kansas

- ✘ Background checks for providers do not include a fingerprint check against state and federal records or a check of the sex offender registry.
- ✘ Child care providers are required to complete only 15 hours of training before caring for children.
- ✘ Providers are only required to complete 5 hours of annual training.

Child Care Aware® of America's Parent Polling shows:

- 78 percent of parents believe all child care programs are licensed.
- 88 percent believe that child care providers should have training in health and safety practices before working with children.

Child Care Aware® of America
703-341-4100
www.usa.childcareaware.org
Grace.Reef@usa.childcareaware.org

In 2004, Lexie Engelman, a 13-month-old toddler, died from injuries received in a family child care home. Bryan and Kim Engelman, Lexie's parents, rushed to the hospital where Lexie had been taken after an accident at child care, due to the provider's lack of supervision. Lexie spent five days in a pediatric intensive care unit. Walking out of the hospital without their daughter will always be one of the most traumatic days of the Engelmans' lives. Following this tragedy, Bryan and Kim began to examine the child care system. They found their experience was not an isolated incident, and significant system changes were needed.

Years of work with Kansas state regulators and legislators resulted in the 2010 passage of Lexie's Law, which requires a child care license for all providers caring for unrelated children, increases minimum education requirements for providers applying for a license, improves health and safety requirements, strengthens the child supervision requirements, and permanently prohibits anyone who has had a child care license revoked from receiving another one. The law also requires inspections for child care programs every 12 months and requires the Kansas Department of Health and Environment to create an online system of child care records to give families access to compliance history.

Child Care Aware® of America's Policy Recommendation:

- As part of the reauthorization of the Child Care and Development Block Grant in the 112th Congress, require that all paid child care providers have a minimum of 40 hours of initial training in child development and basic health and safety.
- Require states to have in place appropriate supervisory practices.
- Require all child fatalities in child care to be reported to the state licensing office, reported to the U.S. Department of Health and Human Services, and require a corresponding review of how to prevent such deaths.

Kim & Bryan Engelman
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Child Care Aware® of Kansas
785-823-3343
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leadell@ks.childcareaware.org

Appendix A- Lexie's Law (Engelman, n.d.)

Appendix B - 62-129e

2012 Kansas Statutes

65-129e. Tuberculosis evaluation requirements for certain students; rules and regulations; evaluation criteria; treatment and monitoring of infected persons. (a) The secretary of health and environment is hereby authorized and directed to adopt rules and regulations establishing tuberculosis evaluation requirements for certain students entering classrooms of a postsecondary educational institution in Kansas who are considered as high risk for tuberculosis as defined by the department of health and environment. These rules and regulations shall establish evaluation criteria in compliance with best practice standards as recommended by the division of tuberculosis elimination of the centers for disease control and prevention.

(b) Each postsecondary educational institution shall develop and implement tuberculosis evaluation requirements with assistance of the department of health and environment. Each postsecondary educational institution shall designate a person who is responsible for the oversight and implementation of the requirements. Such person shall maintain the record for at least five years and the department of health and environment shall have the right to review and inspect the records upon request. Such person shall report immediately the positive findings of tuberculosis infection or disease to the department of health and environment.

(c) Each student entering classrooms of a postsecondary educational institution in Kansas shall comply with the tuberculosis evaluation requirements implemented by such institution where the student is enrolled by providing requested information in accordance with a screening and evaluation through an enrollment process. Any student who is not in compliance with the requirements shall not be attending classes or eligible to enroll for a subsequent semester or term or to obtain an official academic transcript or diploma until the student is compliant with the requirements.

(d) Nothing in this section and K.S.A. 2012 Supp. 65-129f, and amendments thereto, shall be construed as applying to individuals who are not attending the classes regularly but participating in the continuing education programs or any other seminar or function at the postsecondary educational institution.

(e) "Postsecondary educational institution" used in this section and K.S.A. 2012 Supp. 65-129f, and amendments thereto, means any public or private university, municipal university, community college or technical college.

(f) All costs associated with the evaluation requirements of the prevention and control plan shall be the responsibility of the student.

(g) Any person found to be infected with tuberculosis infection or tuberculosis disease will be provided treatment and ongoing monitoring in accordance with K.S.A. 65-116a to 65-116m, inclusive, and amendments thereto.

History: L. 2005, ch. 122, § 5; L. 2010, ch. 118, § 3; Apr. 29.

Appendix B- Statute 65-129e ("Legislative Resources", 2012)

Appendix C - Kansas Notifiable Disease Form

KANSAS NOTIFIABLE DISEASE FORM

Today's Date: ____ / ____ /____

Patient's Name: _____
Last First Middle

Day Phone: _____ **Evening Phone:** _____

Residential Address: _____

City: _____ **Zip:** _____ **County:** _____

Ethnicity: Hispanic or Latino Not Hispanic or Latino Unknown

Race: *(Circle all that apply)*

American Indian/Alaska Native Asian Black or African American

Native Hawaiian or Other Pacific Islander White Unknown

Sex: M F **Date of Birth:** _____ / _____ / _____ **Age if DOB unknown:** _____

Disease Name: _____

Symptoms: Onset: ___ / ___ /____ **List the 3 most prominent symptoms**:

Symptom 1: _____ Symptom 2:_____ Symptom 3:_____

Outbreak associated? Y N **Died?** Y N **Hospitalized?** Y N

Institutional Residence? None Nursing Home Correctional Residential Hospital Psych

Physician Name: _____ **Physician Phone:** _____

Laboratory Information:

Specimen Collection Date: _____ / _____ / _____ Date Reported To You: _____ / _____ / _____

Name of Test Performed: _____ Results of Test: _____

Name of Laboratory: _____ Laboratory Results Attached? Y N

Treatment Information:

Date of Treatment: _____ / _____ / _____ Treatment Type and Dosage: _____

Treatment Status: Complete On-going Discontinued

Name of person reporting: _____ **Phone:** _____

Comments: _____

Mail or fax reports to your local health department and/or to:
KDHE Office of Surveillance and Epidemiology, 1000 SW Jackson, Suite 210, Topeka, KS 66612-1274
Fax: 877-427-7318 (toll-free) Epidemiology Hotline: 877-427-7317 *(Revised 07/2008)*

REPORTABLE DISEASES IN KANSAS for health care providers, hospitals, and laboratories
(K.S.A. 65-118, 65-128, 65-6001 - 65-6007, K.A.R. 28-1-2, 28-1-4, and 28-1-18. Changes effective as of 4/28/2006)

☎ **- Indicates that a telephone report is required by law within four hours of *suspect* or *confirmed* cases to KDHE toll-free at 877-427-7317**

ⓘ **- Indicates that an isolates must be sent to:** Division of Health and Environmental Laboratories
Forbes Field, Building #740, Topeka, KS 66620-0001
Phone: (785) 296-1633

Acquired Immune Deficiency Syndrome (AIDS)
Amebiasis
Anthrax ☎
Arboviral disease (including West Nile virus, Western Equine encephalitis (WEE) and St. Louis encephalitis (SLE)) - indicate virus whenever possible
Botulism ☎
Brucellosis
Campylobacter infections
Chancroid
Chlamydia trachomatis genital infection
Cholera ☎
Cryptosporidiosis
Cyclospora infection
Diphtheria
Ehrlichiosis
Escherichia coli O157:H7 (and other shiga-toxin producing E. coli, also known as STEC) ⓘ
Giardiasis
Gonorrhea
Haemophilus influenza, invasive disease
Hantavirus Pulmonary Syndrome
Hemolytic uremic syndrome, postdiarrheal
Hepatitis, viral (acute and chronic)
Hepatitis B during pregnancy
Human Immunodeficiency Virus (HIV) (includes Viral Load Tests)
Influenza deaths in children <18 years of age
Legionellosis
Leprosy (Hansen disease)
Listeriosis
Lyme disease
Malaria
Measles (rubeola) ☎
Meningitis, bacterial ☎
Meningococcemia ⓘ ☎
Mumps ☎
Pertussis (whooping cough) ☎
Plague *(Yersinia pestis)* ☎
Poliomyelitis ☎
Psittacosis
Q Fever *(Coxiella burnetii)* ☎
Rabies, human and animal ☎
Rocky Mountain Spotted Fever
Rubella, including congenital rubella syndrome ☎
Salmonellosis, including typhoid fever ⓘ
Severe Acute Respiratory Syndrome (SARS) ⓘ ☎
Shigellosis ⓘ
Smallpox ☎
Streptococcal invasive, drug-resistant disease from Group A *Streptococcus* or *Streptococcus pneumoniae* ⓘ
Syphilis, including congenital syphilis
Tetanus
Toxic shock syndrome, streptococcal and staphylococcal
Transmissible Spongioform Encephalopathy (TSE) or prion disease (includes CJD)
Trichinosis
Tuberculosis, active disease ⓘ ☎
Tuberculosis, latent infection
Tularemia
Varicella (chickenpox)
Viral hemorrhagic fever ☎
Yellow fever

In addition, laboratories must report:
- Viral load results of reportable diseases
- ALL blood lead levels, as of 12/2002 (KCLPPP/ABLES)
- CD4+ T-lymphocyte count < 500/ µl or CD4+ T-lymphocytes <29% of total lymphocytes

Outbreaks, unusual occurrence of any disease, exotic or newly recognized diseases, and suspect acts of terrorism should be reported within 4 hours by telephone to the Epidemiology Hotline: 877-427-7317

Mail or fax reports to your local health department and/or to:
KDHE Office of Surveillance and Epidemiology, 1000 SW Jackson, Suite 210, Topeka, KS 66612-1274
Fax: 877-427-7318 (toll-free)

Appendix C- Kansas Notifiable Disease Form ("Kansas Notifiable Disease Form", 2008)

Appendix D - Monthly Newsletter Sample

Healthy People in a Health Community

RILEY COUNTY

Monthly Newsletter

Riley County Health Department

March 2014
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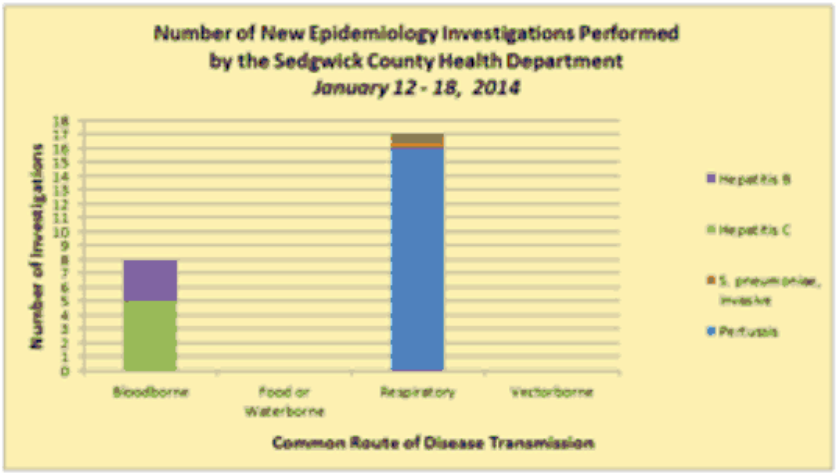
Everybody Counts

Several members of the health department participated in Everybody Counts on January 29th, 2014 at the First United Methodist church of Manhattan, Ks. The event provided free services and food to Manhattan's vulnerable population. Booths addressing dental care, medical care, car safety and other various organizations were set up around the church.



The Number of Pertussis Investigations Remains High

The Sedgwick County Health Department continues to investigate high numbers of reported pertussis (whooping cough) cases. See graphs showing 2013 and 2014 investigations and confirmed and probable cases. Vaccination is still the best way to prevent pertussis.

Avian Influenza: Information for Health Professionals and Laboratories

From CDC:

"In light of the recent case of human infection with highly pathogenic avian influenza A (H5N1) in North America, CDC is currently updating several of the H5N1 and general avian influenza interim guidance documents. The updated documents will be posted here as they are finalized. In the meantime, please refer to the most recent interim H7N9 and H5N1 documents available."

Going Paperless

RCHD traveled to Johnson County Department of Health and Environment to look at their electronic medical records in Insight. Notes were taken and we are excited about beginning our journey to being "paper free"! According to Johnson County's IT expert, "Your visit gave me the opportunity to see what another health department is interested in doing and I can use that as the starting point to create the training and documentation materials for my backup staff here in Johnson County."

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We're on the Web!
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Influenza (Flu) Surveillance

Influenza activity remains high in Kansas and nationwide (see January 23 report). In South Central Kansas, one indicator of influenza activity, selected providers reporting influenza-like symptoms, showed a decrease in cases. However, hospitals in Wichita continue to see many cases of influenza.

The predominant influenza virus continues to be 2009 pH1N1, a subtype of influenza A. Nationwide statistics show this virus is affecting a larger proportion of people aged 18-64 compared to other age groups.

Annual vaccination is the best tool for the prevention of influenza and its complications. The 2009 pH1N1 strain is included in the 2013-14 influenza vaccine. Anyone who is 6 months of age or older can be vaccinated against influenza.

School Surveillance Report: Jan. 15

Among all 21 schools reporting absences on January 15, the mean percentage of students and staff ill was 3.0%, about the same as on December 18 and January 8. Nine schools reported greater than 3% ill (range, 3.14 - 4.9%). Five schools reported greater than 1% of students and staff ill with gastrointestinal symptoms (range, 1.02-2.31%), and three schools reported greater than 1% ill with influenza-like symptoms (range, 1.03-2.35%).

Thank you to the school nurses at the 21 reporting schools. We encourage all school nurses in Sedgwick County to report. Reporting is voluntary and entails tallying absences one day per week - on Wednesday. Reporting symptom information is encouraged, but not required. If you have questions, email us at DiseaseReport@sedgwick.gov.

Quick Links

From CDC:

Emerging Infectious Diseases Journal:

- Investigation of Inhalation Anthrax Case, United States

- CDC Expert Panel Meetings on Prevention and Treatment of Anthrax in Adults

- Special Considerations for Prophylaxis for and Treatment of Anthrax in Pregnant and Postpartum Women

- Congenital Rubella Syndrome in Child of Woman without Known Risk Factors, New Jersey.

Disclaimer

The information provided in this report is compiled by the Sedgwick County Health Department for the purpose of updating community partners. Please consult with Sedgwick County before publishing any of the information contained in this report.