

### {Outbreak of Gastrointestinal Illness in a Correctional Center in Oklahoma}

Outbreak management in correctional settings is critical to maintaining a safe environment for offenders, correctional staff, and the local community. Public health departments work with these settings regularly to address communicable disease issues.

The Oklahoma State Department of Health (OSDH) Acute Disease Service (ADS) was notified at 4:00 PM on Tuesday, 19 May 2009 that ten offenders at a correctional center in northern Oklahoma had presented to their Health Services unit during the previous hour with sudden onset of vomiting, diarrhea, and/or severe abdominal cramping. This report summarizes the epidemiologic, environmental, and laboratory results from the outbreak investigation conducted by OSDH.

The correctional center is a medium/minimum security facility with nine housing units, and the offender count was 926 that day. An investigation team with ADS and local county health department employees arrived there the next morning. At that time, a total of 104 offenders (11.2%) reported illness, with illnesses reported in each of the housing units. Attack rates per unit ranged from 6.7% to 27.8% with a median of 10%.

A retrospective cohort investigation was performed to identify the etiologic agent, determine the source of infection, and institute control measures. A questionnaire was developed and interviews were conducted to document offender demographics, symptoms of gastroenteritis, and foods consumed from 18–19 May. The Warden and the Health Services Administrator accommodated the investigation team by providing space in the clinic. The correctional security officers located and escorted the offenders into the clinic for the interviews and specimen collection from four consenting symptomatic offenders. Using the unit rosters, a stratified random sample process was used to select both ill and non-

ill persons from each unit. The randomized process was used to select approximately 30% ill and 15% non-ill from each unit. A case was defined as “an offender or employee at the correctional center who experienced an acute onset of vomiting or diarrhea ( $\geq 3$  loose stools in a 24 hour period) beginning 19 May.”

An environmental health specialist from OSDH Consumer Health Services inspected the food preparation facilities and collected food items and samples from surfaces and equipment in the food preparation area for bacterial culture, *Staphylococcus aureus* toxin testing, and norovirus testing by polymerase chain reaction (PCR).

A total of 163 individuals were interviewed on 20 May: 162 offenders and one ill employee. Thirty-nine (24%) people experienced symptoms that met the case criteria and 101 (62%) were asymptomatic. Twenty-three (14%) persons reported experiencing symptoms, but did not meet the case criteria; these individuals were excluded from the retrospective cohort analysis. The majority of cases had diarrhea (88%), nausea (87%) and/or vomiting (84%) (See Table). The majority of cases reported a symptom onset between noon and 4 PM on 19 May (See Graph). *Staphylococcus aureus* was identified in all four stool specimens; however, all were negative for *S. aureus* enterotoxins A-D. Three of four stool specimens were also positive for *Clostridium perfringens* enterotoxin A.

Analysis of exposures revealed consumption of chicken salad was significantly associated with illness. Of 109 persons that consumed the chicken salad, 38 (35%) became ill, compared with 1 (3%) ill of 31 unexposed (Relative Risk [RR] 10.8, confidence interval [CI] 1.55, 75.59). Two other foods served during the 19 May lunch were significantly associated with illness, however both accounted for a lower

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proportion of cases. Three (60%) of 5 persons that consumed onions became ill, compared with 36 (27%) of 135 unexposed (RR 2.25, CI 1.04, 4.85). Thirty-one (35%) of 89 persons that consumed ice became ill, compared to 8 (16%) of 51 unexposed (RR 2.22, CI 1.11, 4.46).

During the inspection of the food preparation area, the environmental health specialist noted the following concerns regarding the preparation of chicken for the chicken salad: the internal cooking temperature of the chicken was not tested to verify it reached the recommended 165° F, cooked chicken was stored in deep pans and locked in containers that would not have allowed rapid cooling, and the temperature of the cooled deboned chicken was not tested to verify it reached the 6 hour/41° F cooling requirement. Recommended corrective measures were to document temperatures during the food preparation and storage process as well as to store food in shallow pans to achieve the required cooling time/temperature parameters.

Environmental specimens collected from the food preparation area and employees' hands were tested at the OSDH Public Health Laboratory for bacterial culture and isolation. No organisms were identified. Stool and food samples were submitted to the Minnesota Department of Health for additional testing. Similar to the stool specimens, *Staphylococcus aureus* was isolated from the chicken salad, although it was negative for *Staph* enterotoxins A-D.

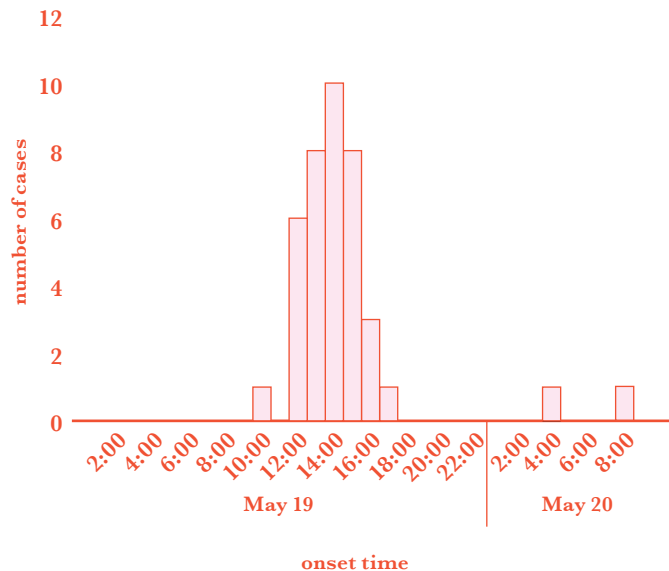
Epidemiologic and laboratory findings from this investigation indicate the most likely cause of this abrupt, short-lived gastroenteritis outbreak was a foodborne *S. aureus* enterotoxin. The presentation of a sudden onset of symptoms was consistent with a common source foodborne exposure. Although *C. perfringens* was present in 3 of 4 specimens, the toxin was not found in the implicated food, which suggests it was not the source of the outbreak. Prevention of foodborne illnesses includes frequent cleaning of hands and surfaces, avoidance of cross-contamination, cooking foods to proper temperatures, and appropriate chilling processes. These results and recommendations were conveyed to the Department of Corrections Medical Director.

Prepared by Becky Coffman, MPH, RN, CIC, Epidemiologist, ADS

### Frequency of Symptoms Reported by Gastroenteritis Cases, Correctional Center Acute Gastroenteritis Outbreak Investigation, Oklahoma, May 2009 (N=39)

symptoms	number (total responses)	percent
Diarrhea	28 (32)	87.5%
Nausea	34 (39)	87.2%
Vomiting	32 (38)	84.2%
Fatigue	30 (36)	83.3%
Abdominal Cramping	30 (38)	78.9%
Headache	22 (38)	57.9%
Myalgia	20 (37)	54%
Fever	16 (34)	47%

### Date and Time of Symptom Onset Among III Correctional Center Offenders and Employees, Correctional Center Acute Gastroenteritis Outbreak Investigation, Oklahoma, May 2009 (N=39)



## {Epidemiology of Reported Pertussis Cases in Oklahoma, 2006-2008}

Pertussis is a reportable condition in Oklahoma. Oklahoma notifiable disease rules (Oklahoma Administrative Code 310:515) require cases of pertussis to be reported to the OSDH within one business day of diagnosis or positive laboratory test by telephone (405.271.4060) or via the Public Health Investigation and Disease Detection of Oklahoma (PHIDDO) system. County Health Department Communicable Disease Nurses (CDNs) investigate cases of pertussis to identify exposed contacts, confirm age-appropriate vaccination histories, and recommend antibiotic prophylaxis. This report summarizes the epidemiology of reported pertussis cases in Oklahoma from 2006 through 2008.

An average of 74 pertussis cases were reported in Oklahoma from 2006-2008; 100 cases were reported in 2008, 58 cases in 2007, and 64 cases in 2006. The average annual incidence rate of reported cases in Oklahoma was 2.1 per 100,000 population, which is 50% less than the US rate (4.04 per 100,000 US population) reported during this 3-year period. From 2006-2008, the age range of cases was 1 day to 71 years; the median age of cases was 7 years. Infants accounted for 41.4% (N=92) of cases with an age-specific average incidence rate of 55.2 per 100,000 infants which is 19.3-572.4 times higher than all other age groups (refer to table). Of the 222 reported cases, 107 (48%) were laboratory confirmed by culture or reverse-transcriptase polymerase chain reaction (RT-PCR). Of the 107 lab confirmed cases, 13 (12%) were confirmed by culture, 43 (40%) were confirmed by RT-PCR, and 51 (48%) by both culture and RT-PCR. Among reported pertussis cases, 23.9% (N=53) attended, resided in, or worked in a high risk setting including schools (66%), healthcare (17%), childcare (11.3%) and long-term care (5.7%) settings.

Pertussis is characterized by spasms of severe coughing lasting weeks to months. Cases reported a cough duration that ranged from 5 days to 245 days with median cough duration of 35 days. Other symptoms experienced by cases included paroxysms (90%), post-tussive vomiting (56.7%) and an inspiratory whoop (55.8%). Infants experienced similar symptoms compared to cases in other age groups, which included paroxysms (92.3%), post-tussive vomiting (57.6%) and an inspiratory whoop (54.9%). In addition, apnea (68.1%) and cyanosis (63%) were prominent among infants. Among reported cases of pertussis from 2006-2008, 33.8% (N=75) were hospitalized due to pertussis with one death that occurred in 2007 in an infant. Among cases less than one year of age, 93.2% (N=69) required hospitalization.

Investigations of reported cases conducted by CDNs identified a total of 734 exposed contacts that were recommended to receive antibiotic chemoprophylaxis; the median number of contacts per case was two and ranged from zero to 23. Thirty (4%) close contacts experienced symptoms consistent with pertussis and were classified as epidemiologically-linked cases.

The median age of symptomatic contacts was 11 years and ranged from one month to 48 years. The majority of symptomatic contacts were in the 10-19 year age group (36.7%). The cough duration in symptomatic contacts ranged from 14 days to 150 days with a median of 40 days. Additional symptoms experienced by symptomatic contacts were similar to those experienced by cases and included paroxysms (97%), an inspiratory whoop (60%), post-tussive vomiting (40%), and apnea (17%). Of the 30 symptomatic contacts, three were confirmed by RT-PCR and 2 were confirmed by both RT-PCR and culture.

Pertussis is a vaccine preventable disease; however, the disease can occur among immunized individuals since vaccination is only 80% to 88% effective against pertussis infection. From 2006-2008, 52.7% (N=117) of pertussis cases had a history of at least one pertussis vaccination; however, only 27.4% (N=61) of cases were age-appropriately vaccinated. Pertussis vaccine (DTaP) is recommended for all children beginning at 2 months of age with the first three doses of a 4-dose series given at 4- to 8-week intervals followed by a booster vaccination between 4-6 years of age. Immunity to pertussis wanes approximately 5-10 years after completion of the primary childhood series, leaving adults and adolescents susceptible to the disease. An adolescent vaccine (Tdap) is recommended for persons 11-64 years of age. Older preschool children and school-age siblings who are not fully vaccinated and who develop pertussis can be important sources of infection for infants less than 1 year of age. Adults also play an important role in the transmission of pertussis to unvaccinated or incompletely vaccinated infants and young children. Tdap should replace a single dose of Td for adults aged 19 through 64 years who have not received a dose of Tdap previously. For further information on vaccination against pertussis, visit the OSDH Immunization Service Website at <<<http://imm.health.ok.gov/>>>.

Prepared by Renee Powell, MPH, Epidemiologist, ADS

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Summary of Demographics of Reported Pertussis Cases and Average Annual Incidence Rate per 100,000 Population, Oklahoma, 2006-2008 (N=222)

gender	number (%)	avg rate/100k*
Male	86 (38.7%)	1.6
Female	136 (61.3%)	2.5
age group	number (%)	avg rate/100k*
> 1	92 (41.4%)	55.2
1-9	32 (14.4%)	2.3
10-19	42 (18.9%)	2.9
20-29	9 (4.1%)	0.6
30-39	16 (7.2%)	1.2
40-49	15 (6.8%)	1.0
50-59	9 (4.1%)	0.6
60-69	5 (2.3%)	0.5
> 69	1 (0.5%)	0.1
race	number (%)	avg rate/100k*
White	168 (75.6%)	2.0
Black or African American	3 (1.4%)	0.3
American Indian	20 (9%)	2.3
Asian	1 (0.5%)	0.5
Hawaiian or Other Pacific Islander	1 (0.5%)	8.6
> 1 Race Reported	11 (4.9%)	2.5
Hispanic	22 (9.9%)	2.6

\*Average incidence rate calculated using 2006-2008 US Census population estimates for Oklahoma.

{Universal Birth Dose of Hepatitis B Vaccine – Why Should We Go There?}

Since 1991, there has been a push to eliminate perinatal hepatitis B virus (HBV) transmission. A recommendation to prenatally test all pregnant females for hepatitis B has been in place for decades. However, to date there are still inconsistencies in the actual screenings of pregnant women for HBV infection and ill-fated fetal outcomes occur that could have been prevented.

Risk factor-based screening has been noted to only identify 35% of all HBsAg-positive mothers. Use of a hepatitis panel, or hepatitis B markers other than the HBsAg, for screening has been shown to cause incorrect interpretations of a pregnant woman’s HBV status and infectiousness. Many irregularities in transcription of lab results, missing prenatal records for drop-in deliveries, failure to order HBsAg test for each pregnancy of a chronically infected woman, and ordering only anti-HBs test results if the patient has been immunized with hepatitis B (Hep B) vaccine are additional barriers to the goal of eliminating perinatal HBV transmission. In our state, the practice of perinatal hepatitis B screening is a “standard of care,” not a mandate. The following Oklahoma cases provide evidence of the persisting gaps in the appropriate identification of HBsAg-positive pregnant women and timely prophylaxis of their infants:

Case #1

A pregnant woman tested HBsAg-negative during her prenatal check and was not tested again at delivery. Approximately four weeks postpartum, the mother developed symptoms of hepatitis and tested positive for HBsAg at that time. No HBIG (hepatitis B immunoglobulin) or Hep B vaccine was given to the infant at birth. The infant was tested 4 days after the mother’s diagnosis and also tested positive for HBsAg. The infant was referred to a pediatric gastroenterologist and remains HBsAg-positive at 7 months of age.

Case #2

During a prenatal check, a woman tested positive for HBsAg, but the laboratory finding was not reported to the state health department. Reportedly, an employee at the prenatal physician’s office transcribed the HBsAg positive lab result incorrectly from the prenatal record to the hospital delivery facility record. Consequently, the infant did not receive HBIG or vaccine at birth. The infant received the Hep B vaccine

series —completed by 13 months of age. At 17 months of age, the child tested HBsAg-negative and anti-HBs-positive. The infant’s mother is pregnant again and enrolled in the perinatal hepatitis B program.

### Case #3

A woman tested negative for HBsAg during prenatal care and was not tested again at the time of delivery. Her infant received a birth dose of Hep B vaccine. At postpartum, the mom was discovered to have elevated liver enzymes and tested positive for HBsAg. Based on this finding, the infant received HBIG on day 4 of life. The infant continues to receive the HBV series and will be serologically tested after completion of the HBV series.

It is estimated that 800 newborns become chronically infected with HBV annually in the US.<sup>1</sup> Approximately 24,000 infants are born each year in the US to HBsAg-positive mothers. Of those mothers, the women who are also positive for HBeAg (a marker of increased viral load and infectivity) have an 85% - 90% likelihood of transmitting the virus to their babies. The development of chronic hepatitis B for these infants who are infected at birth and not given prophylaxis is as high as 90%. Therefore, the younger the patient is when HBV infection occurs, the more likely the patient will be a chronic carrier of HBV. Additionally, transmission of HBV within the household is more likely to occur between siblings when one sibling is a chronic carrier.

The term “universal birth dose of Hep B vaccine” is the implementation of routine Hep B vaccine to every newborn delivered in all birthing hospitals. Hep B vaccine can be administered soon after birth — ideally within the first twelve hours of life — and is the required postexposure immunoprophylaxis to prevent perinatal HBV infection. Administering the birth dose of Hep B vaccine serves as a “safety net” to prevent perinatal infection among infants born to HBsAg-positive mothers who are not identified. Although the administration of both Hep B vaccine and HBIG is the recommended treatment for infants born to HBV-infected mothers, vaccine given alone has an efficacy of preventing HBV transmission of 70% to 95%. This is an extremely important intervention due to the fact that infants who do become chronically infected with HBV have a 25% risk of dying prematurely from cirrhosis or liver cancer.

The Centers for Disease Prevention and Control (CDC) recommends the following with regard to administering the birth dose of Hep B vaccine prior to hospital discharge of all newborns. The American Academy of Pediatricians and the American Academy of Family Physicians have also endorsed these recommendations.

- All delivery hospitals should implement standing orders for administration of hepatitis B vaccine as part of routine medical care of all medically stable infants weighing 2 kg (4.4 lb.) or more at birth.
- All medically stable infants weighing 2 kg (4.4 lb.) or more at birth and born to HBsA-negative mothers should receive the first dose of hepatitis B vaccine (single-antigen only) before hospital discharge.
- On a case-by-case basis and only in rare circumstances, the first dose may be delayed until after hospital discharge for an infant who weighs 2 kg or more and whose mother is HBsAg-negative. In this case, a physician’s order not to give the birth dose must be written, and a copy of the original HBsAg-negative laboratory report during this pregnancy should be placed in the infant’s medical record. The official CDC recommendations for hepatitis B vaccination of children are available at <<[www.cdc.gov/mmwr/pdf/rr/rr5416.pdf](http://www.cdc.gov/mmwr/pdf/rr/rr5416.pdf)>>.

All delivery hospitals may obtain Hep B vaccine for newborns that are eligible for the federal Vaccines for Children Program (VFC) at no cost. Many of Oklahoma’s delivery hospitals have done this to provide HBV protection for each child, each child’s family, and equally important, for each female child’s future offspring. A universal birth dose policy in every birthing hospital will ensure that all vulnerable newborns will receive life-protecting hepatitis B vaccination.

For additional information or questions related to perinatal transmission of HBV and the universal Hep B vaccine birth dose policy, contact Janet S. Wilson, RN, at 405.271.4636.

Prepared by Janet S. Wilson, RN, Program Manager, Viral Hepatitis Service, OSDH

<sup>1</sup> Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention. 2006 Disease Profile, 2008. [http://www.cdc.gov/nchhstp/Publications/docs/2006\\_Disease\\_Profile\\_508\\_FINAL.pdf](http://www.cdc.gov/nchhstp/Publications/docs/2006_Disease_Profile_508_FINAL.pdf).

## {Investigation of Two *Haemophilus influenzae* type b Cases in Oklahoma Infants and Vaccination Recommendations}

Invasive *Haemophilus influenzae* disease is a reportable condition in Oklahoma. Oklahoma disease rules (Oklahoma Administrative Code 310:515) require cases of invasive *H. influenzae* to be reported to the OSDH immediately upon suspicion, diagnosis or positive laboratory test by telephone (405.271.4060) or via the PHIDDO system. All *H. influenzae* sterile-site isolates are required to be submitted to the OSDH Public Health Laboratory (PHL) for confirmation and serotype identification.

When cases of *H. influenzae* type b (Hib) invasive disease are reported, an epidemiologist with the ADS works with local county health department Communicable Disease Nurses to immediately conduct an investigation to identify persons at high risk of exposure to confirm age-appropriate vaccination histories and recommend antibiotic prophylaxis to susceptible contacts. *H. influenzae* bacteria may either be encapsulated (types a-f) or unencapsulated (nontypeable), and virulence seems to be associated with capsulation. Type b is the only serotype for which there is a vaccine and for which control measures are necessary.<sup>1</sup> Recommendations for chemoprophylaxis are made for all the case's exposed contacts if a child under 4 years of age who is unvaccinated or incompletely vaccinated with Hib vaccine is identified. Chemoprophylaxis eradicates nasopharyngeal carriage in all primary contacts to prevent Hib disease in children under 4 years of age, and is only recommended for persons directly exposed to the case patient.<sup>2</sup>

During February 2009, the OSDH ADS investigated two cases of Hib in young children, the first cases of Hib in children <5 years in Oklahoma since 1998. This article summarizes the investigation of two Hib cases in Oklahoma and Hib vaccination recommendations.

### Case Histories

The first case patient was a 4-month-old male from northeast Oklahoma. The infant was brought to an area hospital after the parents observed multiple episodes of apnea and was admitted with the diagnoses of apnea, sepsis, and bilateral pneumonia. Health history included premature delivery and chronic lung disease. The infant had received the recommended first dose of Hib-containing vaccine at 2 months of age. Investigation of contacts identified two

siblings in the household, both current on Hib-containing vaccine, and no history of attending a childcare setting. Since all child contacts were current on Hib vaccination, antibiotic prophylaxis was not recommended for contacts of this case.

The second case patient was a 2-month-old female from western Oklahoma found unresponsive at home who later expired; *H. influenzae* was isolated from blood on postmortem examination with serotype b confirmed by the PHL. The infant had received the first recommended Hib vaccine 5 days prior to illness onset. Investigation of this case identified a twin, an older sibling and two parents as household contacts. The twin sibling had a history of one Hib vaccination received on the same day as the case and was considered susceptible; antibiotic prophylaxis was recommended for the household members to prevent disease in the exposed sibling. A booster dose of Hib-containing vaccine was also recommended for the older sibling.

The case also had a history of attendance in a childcare center during the seven days prior to illness onset. Public health officials conducted a childcare center investigation to verify vaccination status of the attendees less than 5 years of age. Of the 20 children identified at the childcare center, one was undervaccinated with Hib-containing vaccine and five had not received the booster dose. The remaining children were current on Hib vaccination. The local county health department worked with parents and their physicians to provide Hib vaccination for the 6 individuals in the childcare center.

### Vaccination Recommendations

A nationwide shortage of Hib vaccine began in December 2007 resulting in temporary recommendations by the CDC to defer the Hib booster (routinely recommended at 12 to 15 months) for children who are NOT at high risk of Hib disease. Those children identified as high-risk for disease should continue to receive the full primary series and the booster dose during this shortage. High-risk children include those with sickle cell disease, leukemia, malignant neoplasms, HIV infection or other immunocompromising conditions, and those of American Indian/Alaskan Native heritage.<sup>3</sup>

Effective June 26, 2009, CDC, in consultation with the Advisory Committee on Immunization Practices (ACIP), is recommending reinstatement of the booster dose of Hib vaccine for children aged 12-15 months who have completed the primary 3-dose series. Children aged 12-15 months should receive the booster dose on time. Older children for whom the booster dose was deferred should receive their Hib booster dose at the next routinely scheduled visit or medical encounter.<sup>4</sup>

Prepared by Jolianne Stone, MPH, Epidemiologist, ADS

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#### Resources

- <sup>1</sup> CDC. Epidemiology and Prevention of Vaccine-Preventable Diseases. Atkinson W, Wolf S, Hamborsky J, McIntyre L, eds. 11th ed. Washington DC: Public Health Foundation, 2009:71-84.
- <sup>2</sup> American Academy of Pediatrics. *Haemophilus influenzae* Infections. In: Pickering LK, Baker CJ, Long SS, McMillan JA, eds. Red Book: 2006 Report of the Committee on Infectious Diseases. 27th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2006:310-318.
- <sup>3</sup> CDC. Interim Recommendations for the Use of *Haemophilus influenzae* Type b (Hib) Conjugate Vaccines Related to the Recall of Certain Lots of Hib-Containing Vaccines (PedvaxHIB® and Comvax®). MMWR 2007; 56(50):1318-1320.
- <sup>4</sup> CDC. Updated Recommendations for Use of *Haemophilus influenzae* Type b (Hib) Vaccine: Reinstatement of the Booster Dose at Ages 12-15 Months. MMWR 2009;58(24):673-4.

## Summary of Selected Notifiable Disease Reports in Oklahoma

diseases/conditions	winter quarter <sup>1</sup>	year to date <sup>2</sup>	5 year average <sup>3</sup>
Campylobacteriosis	90	143	200.6
Chlamydial infections	4,115	5,821	5,932
Cryptosporidiosis	24	37	20.8
<i>E. coli</i> O157:H7	5	6	15.8
Ehrlichiosis	1	2	49.2
Giardiasis	39	60	65.8
Gonorrhea	1,094	1,683	2,301.4
<i>H. influenzae</i> , invasive (all types)	21	45	46.8
<i>H. influenzae</i> , type b (kids < 5)	0	2	0
Hepatitis A (acute)	0	1	8
Hepatitis B (acute)	19	52	39
Hepatitis C (acute)	2	6	9
Meningococcal invasive disease	1	4	10.2
Pertussis	5	15	8.4
Rabies, animal	15	21	51.2
Rocky Mountain Spotted Fever	3	9	108.2
Salmonellosis	139	244	225.4
Shigellosis	66	108	229.6
<i>Streptococcus</i> group A, invasive	31	96	63.6
<i>S. pneumoniae</i> , invasive (kids < 5)	16	34	33.8
Syphilis (primary & secondary)	9	29	35.2
Syphilis (early latent)	33	57	55.8
Tuberculosis	17	42	70.8
West Nile Virus	0	0	1.8

diseases/conditions	year to date <sup>2</sup>	5 year average <sup>3</sup>
Brucellosis	0	0.2
Hemolytic Uremic Syndrome (HUS)	0	2.6
Legionellosis	3	5.8
Listeriosis	2	1.4
Lyme disease	0	1.0
Malaria	1	4.2
Mumps	0	4.0
Shiga toxin producing <i>E. coli</i> non-O157	3	5.8
Tularemia	0	7.4
Typhoid fever	2	0.2
Vibriosis	1	0.8

number of animal rabies cases by animal type	year to date <sup>2</sup>	percent
Bat	1	4.8
Cat	1	4.8
Cow	4	19
Fox	1	4.8
Horse	1	4.8
Skunk	13	69.1
<b>Total</b>	<b>21</b>	<b>100</b>

<sup>1</sup> 04.01.09 through 06.30.09

<sup>2</sup> 01.01.09 through 06.30.09

<sup>3</sup> Five year average of year to date data for 2004 through 2008.

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## Reportable Diseases/Conditions

These diseases are to be reported to the OSDH by phone or PHIDDO <b>immediately</b> upon suspicion, diagnosis, or positive test	These diseases are to be reported to the OSDH within <b>one business day</b>	These diseases/test results are to be reported to the OSDH within <b>one month</b>
<p>Anthrax            Bioterrorism-suspected disease            Botulism            Diphtheria  <i>H. influenzae</i> invasive disease            Hepatitis A (anti-HAV IgM+)            Hepatitis B during pregnancy (HBsAG+)            Measles (Rubeola)            Meningococcal invasive disease            Outbreaks of apparent infectious disease            Plague            Poliomyelitis            Rabies            Smallpox            Tularemia            Typhoid fever            Viral hemorrhagic fever</p>	<p>Acid Fast Bacillus (AFB) positive smear            AIDS (Acquired Immunodeficiency Syndrome)            Arboviral Infections            Brucellosis            Campylobacteriosis            Congenital rubella syndrome            Cryptosporidiosis            Cyclosporiasis            Dengue Fever  <i>E. coli</i> O157, O157:H7 or a Shiga-like toxin producing <i>E. coli</i> (STEC)            Ehrlichiosis            Giardiasis            Hantavirus Pulmonary Syndrome            Hemolytic Uremic Syndrome, postdiarrheal            Hepatitis B (HBsAg+, anti-HBc-IgM+, HBeAg+, and/or HBV DNA+)<sup>1</sup>            Hepatitis C (confirmed by RIBA or NAT for HCV RNA or s/co ratio or index)<sup>1</sup>            Human Immunodeficiency Virus (HIV) infection            Influenza-associated Pediatric Mortality            Legionellosis            Leptospirosis            Listeriosis            Lyme Disease<sup>2</sup>            Malaria            Mumps            Pertussis            Psittacosis            Q Fever (<i>coxiella burnetii</i>)            Rocky Mountain Spotted Fever            Rubella            Salmonellosis            Shigellosis  <i>Staphylococcus aureus</i> (VISA or VRSA)  <i>Streptococcus</i>, group A invasive disease  <i>Streptococcus pneumoniae</i> invasive disease, children &lt;5 yrs            Syphilis            Tetanus            Trichinellosis            Tuberculosis            Unusual syndrome, or uncommon disease            Vibriosis including cholera            Yellow Fever</p>	<p>CD4 Cell Count &lt;500 with cell count %  <i>Chlamydia</i> infections            Creutzfeldt-Jakob Disease            Gonorrhea            HIV viral load            Pelvic Inflammatory Disease</p> <p>Isolates of the following organisms must be sent to the <b>OSDH Public Health Laboratory</b>:            P.O. Box 24106 OKC, OK 73214</p> <p><b>01</b> <i>Bacillus anthracis</i>  <b>02</b> <i>Brucella</i> spp.  <b>03</b> <i>E. coli</i> O157, O157:H7, or a shiga toxin producing <i>E. coli</i> (STEC)  <b>04</b> <i>Francisella tularensis</i>  <b>05</b> <i>H. influenzae</i> (sterile site isolates only)  <b>06</b> <i>Listeria</i> (sterile site isolates only)  <b>07</b> <i>Mycobacterium tuberculosis</i>  <b>08</b> <i>N. meningitidis</i> (sterile site isolates only)  <b>09</b> <i>Plasmodium</i> spp.  <b>10</b> <i>Salmonella</i> spp.  <b>11</b> <i>Staphylococcus aureus</i> (VISA or VRSA)  <b>12</b> <i>Vibrio</i> spp.  <b>13</b> <i>Yersinia</i> spp.</p> <p><b>Contacts</b></p> <p><b>HIV/STD Service</b>  <b>ph</b> 405.271.4636  <b>fax</b> 405.271.1187</p> <p><b>Acute Disease Service</b>  <b>ph</b> 405.271.4060 or 800.234.5963  <b>fax</b> 405.271.6680 or 800.898.6734</p>
	<p><sup>1</sup>With entire Hepatitis Panel Results</p>	



## Changes to the Communicable Disease and Injury Reporting Rules

### Changes to the Communicable Disease and Injury Reporting Rules

The new Communicable Disease and Injury Reporting rules went into effect on June 25, 2009. The significant changes to the rules are listed below.

<p>Changes to Diseases and Conditions to be Reported Within One Business Day</p>	<p><b>Newly Reportable Diseases/Conditions</b></p> <ul style="list-style-type: none"><li>- Influenza-associated pediatric mortality</li><li>- Q Fever (<i>Coxiella burnetii</i>)</li></ul> <p><b>Diseases/Conditions No Longer Reportable</b></p> <ul style="list-style-type: none"><li>- Hepatitis, acute unspecified</li><li>- Leprosy (Hansen's Disease)</li></ul> <p><b>Modified Diseases/Conditions</b></p> <ul style="list-style-type: none"><li>- Cryptosporidiosis - all species of <i>Cryptosporidium</i> are now reportable</li><li>- Enterohemorrhagic shiga-like toxin producing <i>E. coli</i> (EHEC) has been updated to Shiga toxin producing <i>E. coli</i> (STEC)</li><li>- Ehrlichiosis - added reporting of <i>Anaplasma</i> spp</li><li>- Hepatitis C - added reporting of an index that is predictive of a true positive</li><li>- Legionellosis - all species of <i>Legionella</i> are now reportable</li><li>- Lyme disease - removed condition of Erythema migrans or EIA+ confirmed by Western Blot for reporting</li><li>- Psittacosis - <i>Chlamydia psittaci</i> is updated to <i>Chlamydophila psittaci</i></li><li>- Trichinosis has been updated to Trichinellosis</li></ul>
<p>Changes to Organisms/Specimens to be Sent to the Public Health Laboratory</p>	<ul style="list-style-type: none"><li>- <i>Campylobacter</i> spp. is removed</li><li>- HIV is removed</li><li>- <i>Shigella</i> spp. is removed</li></ul>

For more information or to obtain access to PHIDDO: **Anthony Lee** AnthonyL@health.ok.gov