

Louisiana Morbidity Report



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Empedobacter brevis in a Newborn: Louisiana, 2015

Lauren Elmendorf, MPH

In the autumn of 2015, a 25-day old female was hospitalized for failure to thrive, lethargy, weight loss, diarrhea, and vomiting. Because of leukocytosis, a sepsis workup was done. It showed *E. brevis* and adenovirus in her cerebrospinal fluid.

The initial antibiotic treatment was modified after obtaining the resistance pattern. The *E. brevis* strain was resistant to aminoglycosides and ceftazidime and sensitive to imipenem and meropenem. The treatment included meropenem and acyclovir. After three days of receiving antibiotics the blood cultures were negative. The infant recovered and went home.

This may be the sixth reported case of *E. brevis* infection in the world and the first regarding an infant. *E. brevis* is an emerging pathogen.

E. brevis is a short, nonmotile, Gram-negative bacillus that belongs to the *Flavobacteriaceae* family and was formerly known as *Flavobacterium brevis*. It grows easily on routine culture media. It is commonly found in soil, water, plants, raw meat products, and hospital environments, but it remains an unusual

(continued on page 3)

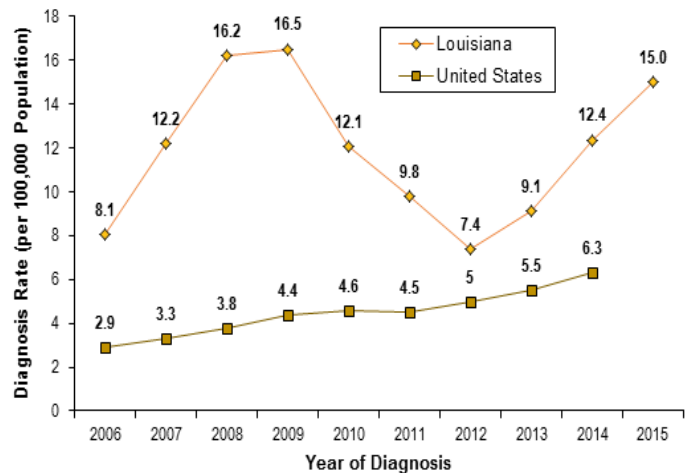
Syphilis Surveillance Update Louisiana, 2013-2015

Catherine Desmarais, DrPH;
 Mohammad Rahman, MBBS, MPH, PhD

In 2014, Louisiana ranked first in the nation for gonorrhea and congenital syphilis, second in the nation for primary and secondary (P&S) syphilis, and third in the nation for chlamydia. The 2015 rankings will be released by the Centers for Disease Control and Prevention (CDC) in November 2016.

Between 2013 and 2015, P&S syphilis diagnoses in Louisiana increased 65%, from 423 diagnoses in 2013 to 696 diagnoses in 2015. The case rate increased from 9.1 per 100,000 in 2013 to 15.0 per 100,000 in 2015 (Figure).

Figure: Primary and Secondary Syphilis Case Rates – Louisiana and the United States*, 2006-2015



* 2015 rates have not yet been released by the CDC

The majority of P&S syphilis cases in Louisiana were seen in males, increasing 64% from 2013 to 2015. Blacks are disproportionately affected by syphilis in Louisiana. Although blacks make up only 32% of the population, they account for 78% of new P&S syphilis diagnoses in 2015. The number of P&S syphilis diagnoses has increased in all age groups, with more than half of all diagnoses in persons aged 20-29 years in 2015 (Table).

(continued on page 6)

Contents

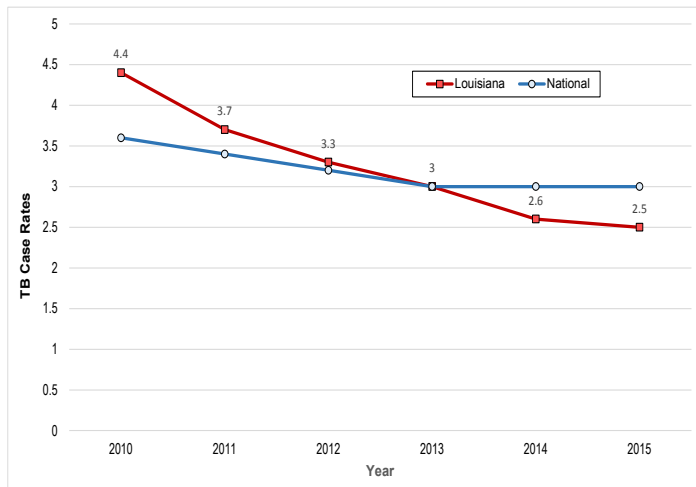
<i>Empedobacter brevis</i> in a Newborn: Louisiana, 2015	1
Syphilis Surveillance Update - Louisiana, 2013-2015	1
Progress Towards Ending Tuberculosis in Louisiana, 2016	2
Out-of-State Norovirus Outbreaks Associated With Louisiana Oysters, 2016	3
Healthy and Safe Swimming Week	3
An Unusual Case of <i>Aeromonas hydrophila</i> Necrotizing Fasciitis: Louisiana, 2015	4
IDEpi Question/Answer Corner	4
Announcements: July - International Group B Strep Throat Awareness Month; Updates, IDEpi Webpages; Rapid Response Team/ Field Epidemiology Workshop	5

Progress Towards Ending Tuberculosis in Louisiana, 2016

Michael Lacassagne, MPH

In 2016, the rate of tuberculosis (TB) cases in Louisiana continued to improve, declining from 2.6 cases per 100,000 population in 2014 to 2.5 cases in 2015 and from being ranked 17th among the 50 states in the nation for the highest case rates down to 18th during the same timeframe (Figure 1).

Figure 1: Tuberculosis Case Rates - Louisiana, 2010-2015



In 2015, Louisiana’s rate was 16% below the national case rate. In 2010, only eight states had higher case rates than Louisiana. By 2015 that number more than doubled, with 17 states having higher case rates than Louisiana.

Louisiana has also reduced the percentage of TB cases co-incident with HIV infection. From 1993 to 2010, the average percentage of TB cases with HIV in Louisiana was 10%. In 2015, the percentage of TB cases with HIV was reduced to 6.8%, a 32% total reduction in six years.

Louisiana's TB case rate in 2015 was 2.5 TB cases per 100,000 people, a 43% reduction from the 2010 case rate of 4.4 per 100,000 according to the latest statistics released by the Centers for Disease Control and Prevention (CDC).

These improvements have been credited to the close working relationships that the Department of Health’s (LDH) Office of Public Health (OPH) has with local communities and health care providers as well as the modern tools adopted by the TB Prevention and Control Program in 2010, including:

- T-SPOT.TB, a blood interferon gamma release assay that improves the diagnosis of TB infection; and
- 3HRp, a three-month course of therapy with the drugs isoniazid and rifapentine used as a preventive therapy in most persons infected with TB before they develop disease, which is extremely effective in preventing the development of TB disease.

LDH-OPH has nine state regional offices staffed with medical and allied health professionals to combat TB. Early detection of infection and disease are promoted, and complete treatment for TB for out-patients is provided.

World TB Day

In 1982, on the 100th anniversary of Robert Koch’s presentation to the Berlin (Germany) Physiological Society of his discovery that the etiologic agent of TB was a bacillus, *Mycobacterium tuberculosis*, the International Union Against TB and Lung Disease (IUATLD) proposed that March 24 be proclaimed an official World TB Day. By 2000, World TB Day was well established as an annual commemoration in the United States as well.

In keeping with the theme of World TB Day in 2016, which was “Unite to End TB,” Charles DeGraw was recognized as a “TB Elimination Champion” by the CDC (Figure 2).

Figure 2: DHH-OPH TB Prevention and Control staff (L to R) Charles DeGraw, Louis Trachtman, Michael Lacassagne, Phyllis Cruise



Photo courtesy of the Southeastern National Tuberculosis Center at the University of Florida School of Medicine

For more information on the TB Prevention and Control Program, go to <http://dhh.louisiana.gov/index.cfm/page/1005> or contact Michael Lacassagne at (504) 568-5015 or michael.lacassagne@la.gov.

Louisiana Morbidity Report	
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Out-of-State Norovirus Outbreaks Associated With Louisiana Oysters, 2016

Erin Delaune, MPH

In March of 2016, the IDEpi was notified by the Food and Drug Administration (FDA) about multiple norovirus outbreaks that occurred out of state and were possibly associated with the consumption of Louisiana oysters. Four events were held during the month of February at a country club out of state. Combined, over 200 people attended the events.

Oysters were served at all four events in various forms (raw, steamed, and roasted). Between 5% and 80% of attendees from each event reported symptoms for a total of 46 ill attendees. Symptoms included vomiting and diarrhea, typical of norovirus. A successful trace-back was conducted for the fourth event which implicated Louisiana oysters as a potential cause of the illnesses. Two stool samples were collected, one from an ill attendee of the third event and one from an ill attendee of the fourth event. Both were positive for norovirus GII.17B.

Left over oysters from the fourth event were sent to the FDA

Seafood Laboratory on Dauphin Island. The oysters arrived in the shell and were shucked at the laboratory. A composite of extracted gut from the oyster samples tested positive for norovirus GII.17B. The viral sequence of the norovirus from the stool samples and the oysters were an exact match to each other which showed an association between the illnesses and the consumption of oysters.

The norovirus-positive oyster guts indicated that the contamination occurred at the harvest site and not from an ill food handler. This resulted in a recall of remaining product. The FDA conducted an assessment of the Louisiana harvest area and found no pollution sources. The contamination appeared to be isolated; most likely harvester contamination.

For more information on norovirus, go to <http://new.dhh.louisiana.gov/index.cfm/page/531>.

Empedobacter brevis ... continued from page 1)

cause of infections in humans

Usually, *E. brevis* is susceptible to several classes of antibiotics, including beta-lactams, fluoroquinolones, and aminoglycosides. However, treatment of infections caused by *E. brevis* can be complicated by the presence of a chromosome-encoded Ambler class B beta-lactamase, which confers decreased susceptibility to extended spectrum cephalosporins and carbapenems.

Past reports:

- A series of 11 patients with *E. brevis* endophthalmitis after uncomplicated cataract surgery was reported from Germany. All 11 subjects were found to have *E. brevis* growing from intraocular cultures. They were treated with intravitreal vancomycin and amikacin in addition to ophthalmologic interventions and had good clinical outcomes. Culture of the solutions used for irrigation, intraocular lenses, tap water, and surgical instruments did not grow the organism. A problem with the sterilization process was considered the possible cause of this outbreak.

- *E. brevis* was implicated as a cause of cellulitis in an 83-year-old patient from Japan who presented with erythema, blisters, and purpura of her right foot. The infection resolved after treatment with intravenous minocycline.

- *E. brevis* was also been reported to cause ventriculostomy-associated infections. A retrospective review of 28 cases of meningitis in patients with ventriculostomy from Taiwan showed one infection to be caused by *E. brevis*.

- Most recently, a case of knee cellulitis with bacteremia was reported in a patient who had undergone right knee replacement six weeks prior to presentation. The *E. brevis* infection was successfully treated with intravenous levofloxacin for 10 days.

- The first report of *E. brevis* bacteremia in a patient with HIV was reported in *Case Reports in Infectious Diseases*, Volume 2015 (2015), Article ID 813528, by Syed Bokhari, Naeem Abbas et al, <http://dx.doi.org/10.1155/2015/813528>.

Healthy and Safe Swimming Week, 2016

The week before Memorial Day (May 23-29, 2016) was *Healthy and Safe Swimming Week*. Everyone can play a role in preventing illnesses and injuries linked to the water that is shared and used for swimming this summer. Chlorine and other disinfectants kill most germs within minutes, but some germs can survive for days. Urine, feces, sweat, and dirt from swimmers' bodies mix with chlorine and form chemicals that can make our eyes red and aggravate asthma. This mixing can also use up the chlorine, which would otherwise kill germs. To keep a pool clean and safe to swim in, adhere to the following recommendations:

Every swimmer should:

- Stay out of the water if you have diarrhea.
- Shower before you get in the water.
- Don't urinate or defecate in the water.
- Don't swallow the water.

Every hour - everyone out!

- Take kids on bathroom breaks.
- Check diapers and change them in a bathroom or diaper changing area - not poolside - to keep germs away from the pool.

For more information go to <http://new.dhh.louisiana.gov/index.cfm/page/535>.

An Unusual Case of *Aeromonas hydrophila* Necrotizing Fasciitis: Louisiana, 2015

Michele Pogue, MT (ASCP)

Necrotizing fasciitis (NF), commonly known as flesh-eating disease, flesh-eating bacteria, or flesh-eating bacteria syndrome, is a rare infection of the deeper layers of skin and subcutaneous tissues that easily spreads across the fascial plane within the subcutaneous tissue. The most consistent feature of NF was first described in 1952 as necrosis of the subcutaneous tissue and fascia with relative sparing of the underlying muscle.

NF progresses rapidly, having greater risk of developing in immunocompromised conditions such as advanced diabetes, chemotherapy and transplantation. It is a severe disease of sudden onset and is usually treated immediately with surgical debridement and high doses of intravenous antibiotics, with delay in surgical treatment being associated with higher mortality.

Some of the types of bacteria that can cause NF include:

- Group A streptococcus (*Streptococcus pyogenes*),
- *Staphylococcus aureus*,
- *Clostridium perfringens*,
- *Bacteroides fragilis*,
- *Aeromonas hydrophila*, and
- *Vibrio vulnificus*.

This case report is about NF caused by *Aeromonas hydrophila*.

A 72-year-old with a history of rheumatoid arthritis who was on immunosuppressants and hypertension medication, with no history of diabetes nor history of chronic heart or lung disease, had a sudden onset of pain and redness in his left hand and mild fever. Within a few hours, the entire arm was swollen with an intense sensation of "burning". Within one hour and a half, the redness had progressed by two inches. The patient was immediately placed on IV antibiotherapy with ciprofloxacin, doxycycline, imipenem and vancomycin. A culture grew *A. hydrophila* resistant to ampicillin and ampicillin sulbactam. A CT scan of the upper left arm showed signs consistent with cellulitis. Due to sepsis, the patient was moved to ICU for debridement and long term wound care.

Exposure:

The patient was cleaning fish the day before the onset of the infection.

Aeromonas is a common freshwater bacteria and a common

pathogen of cold-blooded animals (snakes and frogs). *Aeromonas* is also found in estuarine and coastal waters, shellfish, farm animals, and many common groceries, including: beef, pork, lamb, poultry, and vegetables. *A. hydrophila* can be recovered from most foods by direct plating onto a solid medium containing starch as the sole carbohydrate source and ampicillin to retard the growth of most competing microorganisms.

The main species are *A. hydrophila*, *A. caviae*, and *A. sobria*. Since little is known about the virulence mechanisms of *A. hydrophila*, it is presumed that not all strains are pathogenic, given the ubiquity of the organism. Those that are producing an exotoxin may be pathogenic.

Exposure to ponds and lakes are a risk factor for cellulitis and extra intestinal infections. Drinking untreated water from wells is thought to be a source of GI infection.

The relative frequency of *A. hydrophila* disease in the United States is unknown since efforts to ascertain its true incidence have only recently been attempted. Most cases have been sporadic rather than associated with large outbreaks, but increased reports have been noted from several clinical centers.

A. hydrophila may spread throughout the body and cause a general infection in persons with impaired immune systems. Those at risk are individuals with leukemia, carcinoma, and cirrhosis; being treated with immunosuppressive drugs; or undergoing cancer chemotherapy.

Recovered from a sterile site (e.g., urinary tract, otitis, or cholecystitis), *Aeromonas* is an obvious pathogen. However, when recovered from stools, its pathogenic role is controversial. Infected persons have watery, non-bloody stools with no fever and no constitutional symptoms. On rare occasions, the dysentery-like syndrome is severe and may last for several weeks. Children have more severe symptoms while adults tend to have chronic cramps and diarrhea.

Treatment with effective antibiotics (SXT-TMP or tetracyclines) relieves symptoms while treatment with ineffective antibiotics (ampicillin, cephalothin) aggravates symptoms.

For more information on NF go to <http://new.dhh.louisiana.gov/index.cfm/page/531>.

IDEpi Question/Answer Corner

What is the procedure for disinfecting a hospital area that has had a corpse with tissue gas?

Tissue gas is the name given to the action of the bacteria *Clostridium perfringens* (formerly known as *C. welchii*) in dead bodies. Its effect on the deceased is that of an extremely accelerated decomposition. It is only halted by embalming the body, and special additive chemicals must be employed. It most commonly

occurs in the bodies of people who have died of gangrene, large decubitus ulcers or necrotising fasciitis or who have had soil, feces or water forced into wounds.

C. perfringens is ever present in nature and can be found as a normal component of decaying vegetation, marine sediment, the intestinal tract of humans and other vertebrates, insects, and soil.

In the corpse there may be vegetative bacteria and spores (probably more vegetative bacteria).

1-Vegetative bacteria will be killed by chlorine if exposed at a correct concentration for a sufficient time; (for the usual

(continued on page 5)

IDEpi Question ... continued from page 4)

recommendation go to http://www.cdc.gov/hicpac/Disinfection_Sterilization/6_0disinfection.html).

2-Spores are not inactivated by chlorine. This is the reason why "sterilization" is performed using special methods. One of the methods acceptable for sterilization is steam sterilization (autoclaving) that has to be done at correct temperature for a sufficient time. Vacuum steam sterilization is very rapid; autoclaving is not done with vacuum so it takes longer (go to the Centers for Disease Control and Prevention [CDC] guidelines for sterilization http://www.cdc.gov/hicpac/Disinfection_Sterilization/toc.html).

To clean properly:

- 1-Make sure that everything is cleaned thoroughly.
- 2-Sterilize the instruments that can be sterilized using the CDC guidelines, even those that went through a sonic washer.
- 3-Clean correctly the suite using chlorine or whatever your facility uses.

The following is a sample of the many Ebola-related questions/concerns received by the epidemiologists in LDH's Infectious Disease Epidemiology Section. The callers were concerned about the chances of infection.

Q1. "I cut the hair last week of a man who stated he had recently returned from Africa. I don't know what country. The man was not ill, and I didn't have contact with his blood or body fluids."

Q2. "I visited my friend, who had just returned from South Africa the day before he presented symptoms, and hugged him. Upon follow-up, my friend was feeling healthy."

Q3. "I work at a casino, so i don't know if I've had any contact. I have not had contact with any body fluids that I know of nor any sick contacts that I know of."

Q4. A nurse called because a patient has an African name and the patient's father is Nigerian. The father lives in Atlanta and patient lives in Louisiana. Neither have travel history.

Q5. The mother of a baby stated that he was exposed to a relative who was exposed to a friend who had been in Morocco. Neither of the contacts were ill.

Q6. "I am concerned because I fly on international flights and have contact with many people, including shaking hands. My last flight was to Paris."

Q7. "I am concerned because my husband was recently in St. Lucia, where lots of Africans fly".

Q8. "I work at a waffle house. Anyone there could be from anywhere. I've done no travel and have not had exposure to Ebola."

Q9 The patient had recent history of head surgery, presented with fever, vomiting, and seizures, and had recent travel history to Canada

Q10. A nurse called about a woman with flu-like symptoms. The woman had no international travel but had "contact with an asymptomatic person from the islands."

Q11. "I was exposed to my brother who recently returned from deployment in Afghanistan."

Q12. "I am a waitress, and I had a customer last Wednesday

who was talking about returning from Africa, but not one of the Ebola countries. The customer was not sick, and I had no contact with the customer's body fluid. I have no symptoms. Is it safe to see my son?"

Q13. "I traveled to Washington DC for 3 days."

The answer to all 13 concerns/questions was that there was NO RISK of Ebola transmission.

A nurse called because a patient had a temperature of 98°F in the office, had been in New York, and has had symptoms since she returned. Her family members are also sick. There is no history of travel to West Africa and no known contact with anyone who was diagnosed with Ebola.

Evaluate and treat the patient as they would any other without concern for Ebola.

Announcements

July

International Group B Strep Throat Awareness Month

Updates: Infectious Disease Epidemiology (IDEpi) Webpages
www.infectiousdisease.dhh.louisiana.gov

Annual Reports: Norovirus; Outbreaks; Rabies; Rocky Mountain Spotted Fever; Several Year Comparison 2014-2016; Streptococcal Invasive Disease, Group A (GAS); Tetanus; Tularemia; Vancomycin Resistant Enterococcus (VRE); Varicella; Vibrios

Antibiotic Sensitivity: Louisiana Antibiogram Questions and Answers

Arboviral: New Web Page

Epidemiology Manual: Instructions for Shipping Zika Samples; Lab Form 96; Rabies Summary; Rotavirus; Zika CDC Key Messages; Zika-Possible Virus Infection Among Pregnant Women-MMWR

Influenza: Weekly Report

LEEDS: LEEDS Syndromic Surveillance in Louisiana

Reportable Disease Surveillance: IDRIS 2 External User Manual

State Epidemiologist: Special Studies

Rapid Response Team/Field Epidemiology Workshop

Deridder - July 12, 2016

Bogalusa - October 12, 2016

(continued on page 6)

Announcements ... continued from page 5)

Sponsored by the Department of Health's Office of Public Health's Infectious Disease Epidemiology Section. This is a one-day workshop targeted towards sanitarians, public health nurses, infection control professionals, disease surveillance specialists, teachers, epidemiologists, health care providers, and other public health care professionals interested in epidemiological principles

and outbreak investigations.

This workshop is free to attend and open to the public. Registrations are necessary to assure both seating and handouts availability. Sanitarian education credits are available and nurse education credits have been applied for.

Please go to <http://new.dhh.louisiana.gov/index.cfm/page/1816> for a registration form and more information.

Syphilis Surveillance ... continued from page 1)

Table: Primary and Secondary Syphilis Cases and Case Rates by Sex at Birth, Race/Ethnicity, Age Group, and Region - Louisiana, 2013 - 2015

	2013		2014		2015	
	Cases	Rate	Cases	Rate	Cases	Rate
TOTAL	423	9.1	575	12.4	696	15.0
Sex at Birth						
Female	115	4.9	132	5.6	189	8.0
Male	308	13.6	443	19.5	507	22.3
Race/Ethnicity						
Black/Afr-American	329	22.2	432	29.0	541	36.3
Hispanic/Latino	7	3.2	12	5.3	8	3.6
White	86	3.1	125	4.5	133	5.0
Other/Multi-race	1	-	6	-	8	-
Age Group						
0-9	0	0.0	0	0.0	0	0.0
10-14	3	0.8	2	0.7	2	0.7
15-19	51	17.7	66	22.0	79	26.3
20-24	112	33.5	159	45.5	213	60.9
25-29	86	27.3	115	33.9	168	49.5
30-34	57	18.7	77	23.3	83	25.1
35-39	29	11.1	44	15.4	56	19.5
40-44	24	8.9	37	13.2	29	10.4
45+	61	3.5	75	4.1	66	3.6
Region						
1-New Orleans	93	10.6	199	22.4	199	22.4
2-Baton Rouge	70	10.4	80	11.8	123	18.1
3-Houma	21	5.2	54	13.3	43	10.6
4-Lafayette	49	8.2	43	7.1	60	10.0
5-Lake Charles	7	2.4	6	2.0	14	4.7
6-Alexandria	13	4.2	10	3.2	34	11.0
7-Shreveport	126	22.9	110	20.1	115	21.0
8-Monroe	30	8.4	56	15.7	81	22.8
9-Hammond/Slidell	14	2.5	17	3.0	27	4.8

In 2015, new diagnoses of P&S syphilis occurred in 51 of Louisiana's 64 parishes. Since 2013, the number of P&S syphilis diagnoses has increased in all regions except the Shreveport region, where case counts remain below the 2013 total. The New Orleans region had the highest number of new diagnoses (199); which is more than two times the number of cases in 2013. This rise in New Orleans has mostly been observed among men who

have sex with men (MSM). The Monroe region had the highest rate of new diagnoses (22.8 per 100,000), which is nearly three times the case rate in 2013.

The SHP office regularly reports and publishes data on websites www.std.dhh.louisiana.gov and www.HIV411.org. For more information, please contact Jessica Fridge, Surveillance Manager at (504) 568-7474 or email jessica.fridge@la.gov.

Table: Communicable Disease Surveillance, Incidence by Region and Time Period, March-April, 2016

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Mar-Apr 2016	Mar-Apr 2015	Jan-Dec Cum 2016	Jan-Dec Cum 2015	Jan-Dec % Chg*	
Vaccine-preventable															
Hepatitis B	Cases	0	1	1	0	0	2	0	0	1	5	12	15	23	-34.8
	Rate ¹	0.0	0.2	0.3	0.0	0.0	0.7	0.0	0.0	0.3	0.1	0.3	0.3	0.5	NA*
Measles	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Mumps	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis	Cases	1	1	0	0	1	0	1	0	1	5	5	31	14	121.4
Sexually-transmitted															
HIV/AIDS	Cases ²	52	35	9	20	3	5	7	5	12	148	197	376	361	4.2
	Rate ¹	6.2	5.3	2.2	3.4	1.0	1.6	1.3	1.4	2.2	3.3	4.3	8.3	8.0	NA*
Chlamydia	Cases ^{1,3}	1,018	592	382	509	177	264	546	315	326	4,129	5,186	8,190	10,078	-18.7
	Rate ¹	115.6	87.7	94.4	85.4	60.0	85.5	99.4	88.4	58.3	89.3	112.1	177.1	217.9	NA*
Gonorrhea	Cases ^{1,3}	368	227	164	228	78	94	205	133	143	1,640	1,597	3,008	3,136	-4.1
	Rate ¹	42.4	33.8	40.5	38.5	26.5	30.3	37.2	37.3	25.9	35.6	34.5	65.0	67.8	NA*
Syphilis (P&S)	Cases ^{1,3}	11	11	8	8	3	3	10	1	0	55	91	134	178	-24.7
	Rate ¹	1.3	1.6	2.0	1.4	1.0	1.0	1.8	0.3	0.0	1.2	2.0	2.9	3.8	NA*
Enteric															
Campylobacter	Cases	2	6	5	5	1	4	0	0	7	30	41	55	60	-8.3
Hepatitis A	Cases	1	0	0	0	0	0	0	0	0	1	0	5	1	NA*
	Rate ¹	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	NA*
Salmonella	Cases	12	23	9	27	13	6	7	14	20	131	131	239	200	19.5
	Rate ¹	1.2	4.0	2.4	5.2	4.9	2.0	1.4	4.0	5.2	3.0	3.0	5.5	4.6	NA*
Shigella	Cases	9	27	2	5	0	3	4	1	7	58	21	116	42	176.2
	Rate ¹	0.9	4.8	0.5	1.0	0.0	1.0	0.8	0.3	1.8	1.3	0.5	2.7	1.0	NA*
Vibrio, cholera	Cases	1	0	0	0	0	0	0	0	0	1	0	1	0	NA*
Vibrio, other	Cases	1	0	0	0	1	0	0	0	2	4	13	5	17	-70.6
Other															
<i>H. influenzae (other)</i>	Cases	1	0	1	0	2	1	2	0	3	10	18	22	25	NA*
<i>N. Meningitidis</i>	Cases	1	0	0	0	0	0	0	0	0	1	0	1	2	NA*

¹ = Cases Per 100 000 Population.

² = These totals reflect people with HIV infection whose status was first detected during the specified time period. This includes people who were diagnosed with AIDS at the time HIV first was detected. Because of delays in reporting HIV/AIDS cases, the number of persons reported is a minimal estimate. Data should be considered provisional.

³ = Preliminary data.

* = Percent change not calculated for rates or count differences less than 5.

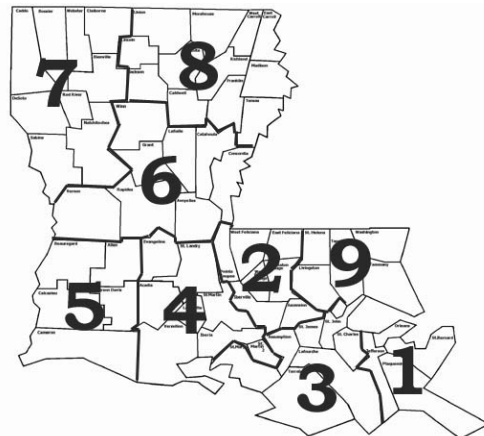
Table 2. Diseases of Low Frequency, January-December, 2016

Disease	Total to Date
Legionellosis	4
Lyme Disease	0
Malaria	3
Rabies, animal	0
Varicella	34

Table 3. Animal Rabies, March-April, 2016

Parish	No. Cases	Species
	0	

Figure: Department of Health Regional Map



Sanitary Code - State of Louisiana Part II - The Control of Disease

LAC 51:II.105: The following diseases/conditions are hereby declared reportable with reporting requirements by Class:

Class A Diseases/Conditions - Reporting Required Within 24 Hours

Diseases of major public health concern because of the severity of disease and potential for epidemic spread-report by telephone immediately upon recognition that a case, a suspected case, or a positive laboratory result is known; [in addition, all cases of rare or exotic communicable diseases, unexplained death, unusual cluster of disease and all outbreaks shall be reported.

Acute Flaccid Paralysis	Fish/Shellfish Poisoning (domoic acid, neurotoxic shellfish poisoning, ciguatera, paralytic shellfish poisoning, scombroid)	Plague (<i>Yersinia pestis</i>)	Smallpox
Anthrax	Foodborne Infection	Poliomyelitis (paralytic & non-paralytic)	<i>Staphylococcus aureus</i> , Vancomycin Intermediate or Resistant (VISA/VRSA)
Avian or Novel Strain Influenza A (initial detection)	<i>Haemophilus influenzae</i> (invasive infection)	Q Fever (<i>Coxiella burnetii</i>)	Staphylococcal Enterotoxin B (SEB) Pulmonary Poisoning
Botulism	Influenza-associated Mortality	Rabies (animal and human)	Tularemia (<i>Francisella tularensis</i>)
Brucellosis	Measles (Rubeola imported or indigenous)	Ricin Poisoning	Viral Hemorrhagic Fever (Ebola, Lassa, Marburg, Crimean Congo, etc.)
Cholera	Neisseria meningitidis (invasive infection)	Rubella (congenital syndrome)	Yellow Fever
<i>Clostridium perfringens</i> (foodborne infection)	Outbreaks of Any Infectious Disease	Rubella (German Measles)	
Diphtheria	Pertussis	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)	

Class B Diseases/Conditions - Reporting Required Within 1 Business Day

Diseases of public health concern needing timely response because of potential of epidemic spread-report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

Amoeba (free living infection: <i>Acanthamoeba</i> , <i>Naegleria</i> , <i>Balamuthia</i> , others)	Chagas Disease	Hepatitis B (perinatal infection)	Mumps
Anaplasmosis	Chancroid	Hepatitis E	Salmonellosis
Arthropod-Borne Viral Infections (West Nile, Dengue, St. Louis, California, Eastern Equine, Western Equine, Chikungunya, Usutu, and others)	<i>Escherichia coli</i> , Shiga-toxin producing (STEC), including <i>E. coli</i> O157:H7	Herpes (neonatal)	Shigellosis
Aseptic Meningitis	Granuloma Inguinale	Human Immunodeficiency Virus ² [(HIV), infection in pregnancy]	Syphilis ¹
Babesiosis	Hantavirus (infection or Pulmonary Syndrome)	Human Immunodeficiency Virus ² [(HIV), perinatal exposure]	Tetanus
	Hemolytic-Uremic Syndrome	Legionellosis	Tuberculosis ³ (due to <i>M. tuberculosis</i> , <i>M. bovis</i> , or <i>M. africanum</i>)
	Hepatitis A (acute illness)	Malaria	Typhoid Fever
	Hepatitis B (acute illness and carriage in pregnancy)		

Class C Diseases/Conditions - Reporting Required Within 5 Business Days

Diseases of significant public health concern-report by the end of the workweek after the existence of a case, suspected case, or a positive laboratory result is known.

Acquired Immune Deficiency Syndrome ³ (AIDS)	Giardiasis	Listeriosis	Staphylococcal Toxic Shock Syndrome
<i>Anaplasma Phagocytophilum</i>	Glanders (<i>Burkholderia mallei</i>)	Lyme Disease	Streptococcal Disease, Group A (invasive disease)
Blastomycosis	Gonorrhea ⁴ (genital, oral, ophthalmic, pelvic inflammatory disease, rectal)	Lymphogranuloma Venereum ¹	Streptococcal Disease, Group B (invasive disease)
Campylobacteriosis	Hansen's Disease (leprosy)	Melioidosis (<i>Burkholderia pseudomallei</i>)	Streptococcal Toxic Shock Syndrome
Chlamydial infection ¹	Hepatitis C (acute illness)	Meningitis, Eosinophilic (including those due to <i>Angiostrongylus</i> infection)	<i>Streptococcus pneumoniae</i> , invasive disease
Coccidioidomycosis	Histoplasmosis	Nipah Virus Infection	Transmissible Spongiform Encephalopathies (Creutzfeldt-Jacob Disease & variants)
Cryptococcosis (<i>C. neoformans</i> and <i>C. gattii</i>)	Human Immunodeficiency Virus ² (HIV) (infection other than as in Class B)	Non-gonococcal Urethritis	Trichinosis
Cryptosporidiosis	Human T Lymphocyte Virus (HTLV I and II infection)	Ophthalmia neonatorum	Varicella (chickenpox)
Cyclosporiasis	Leptospirosis	Psittacosis	<i>Vibrio</i> Infections (other than cholera)
Ehrlichiosis (human granulocytic, human monocytic, <i>E. chaffeensis</i> and <i>E. ewingii</i>)		Spotted Fevers [<i>Rickettsia</i> species including Rocky Mountain Spotted Fever (RMSF)]	Yersiniosis
<i>Enterococcus</i> , Vancomycin Resistant [(VRE), invasive disease]		<i>Staphylococcus aureus</i> (MRSA), invasive infection	

Class D Diseases/Conditions - Reporting Required Within 5 Business Days

Cancer	Heavy Metal (arsenic, cadmium, mercury) Exposure and/or Poisoning (all ages) ⁵	Phenylketonuria ⁴	Severe Traumatic Head Injury
Carbon Monoxide Exposure and/or Poisoning ⁵	Hemophilia ⁴	Pneumoconiosis (asbestosis, berylliosis, silicosis, byssinosis, etc.)	Severe Undernutrition (severe anemia, failure to thrive)
Complications of Abortion	Lead Exposure and/or Poisoning (all ages) ^{4,5}	Radiation Exposure, Over Normal Limits	Sickle Cell Disease ⁴ (newborns)
Congenital Hypothyroidism ⁴	Pesticide-Related Illness or Injury (all ages) ⁵	Reye's Syndrome	Spinal Cord Injury
Galactosemia ⁴			Sudden Infant Death Syndrome (SIDS)

Case reports not requiring special reporting instructions (see below) can be reported by mail or facsimile on Confidential Disease Report forms (2430), facsimile (504) 568-8290, telephone (504) 568-8313, or (800) 256-2748 for forms and instructions.

¹Report on STD-43 form. Report cases of syphilis with active lesions by telephone, within one business day, to (504) 568-8374.

²Report to the Louisiana HIV/AIDS Program: Visit www.hiv.dhh.louisiana.gov or call 504-568-7474 for regional contact information.

³Report on form TB 2431 (8/94). Mail form to TB Control Program, DHH-OPH, P.O. Box 60630, New Orleans, LA. 70160-0630 or fax both sides of the form to (504) 568-5016

⁴Report to the Louisiana Genetic Diseases Program and Louisiana Childhood Lead Poisoning Prevention Programs: www.genetics.dhh.louisiana.gov or facsimile (504) 568-8253, telephone (504) 568-8254, or (800) 242-3112

⁵Report to the Section of Environmental Epidemiology and Toxicology: www.seet.dhh.louisiana.gov or call (225) 342-7136 or (888) 293-7020

All **laboratory facilities** shall, in addition to reporting tests indicative of conditions found in §105, report positive or suggestive results for additional conditions of public health interest. The following findings shall be reported as detected by laboratory facilities: 1. adenoviruses; 2. coronaviruses; 3. enteroviruses; 4. hepatitis B (carriage other than in pregnancy); 5. hepatitis C (past or present infection); 6. human metapneumovirus; 7. parainfluenza viruses; 8. respiratory syncytial virus; and 9. rhinoviruses.