

# Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section

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<http://www.dhh.louisiana.gov/offices/reports.asp?ID=249&Detail=7428>

Infectious Disease Epidemiology Main Webpage

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## Blood Mercury Levels Louisiana, 2007

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In June of 2006, changes in disease reporting requirements mandated that healthcare providers report all laboratory results for cases of heavy metal exposure (arsenic, cadmium, lead and mercury) to the Louisiana Office of Public Health, Section of Environmental Epidemiology and Toxicology (OPH-SEET). Since mandatory reporting was initiated in 2006, over 2000 records have been received by OPH related to mercury exposure. This is the first statewide evaluation of blood mercury tests reported for Louisiana residents. Testing for mercury is not part of routine clinical assessments; therefore, results may be biased towards individuals who may have been exposed to mercury or towards those with symptoms consistent with mercury toxicity. This review evaluates the 928 blood mercury test results reported to OPH-SEET between January and December of 2007.

Urine and blood tests are typically conducted to assess possible mercury exposure. Biomonitoring of blood and urine must take into account the form of mercury and the time elapsed since exposure. Mercury exists in three general forms: elemental (metallic), inorganic, or organic; the form influences the distribution and excretion of mercury. (Table 1)

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## An Ocular Worm in Central Louisiana, 2008

David Holcombe, MD MSA FACP; Michele Pogue, MT ASCP;  
Karren Laird Russo MD; Michael W. Miguez MD

A sixty-eight year-old White woman presented to her ophthalmologist on August 6, 2008 with complaints of irritation and a foreign body sensation in her left eye, which she attributed to her "make up." Examination revealed a large, clear, mobile worm in the medial aspect of the sub-conjunctiva. The ophthalmologist extracted the worm, which appeared round, translucent and "forty millimeters in length."

The ophthalmologist suspected Loa Loa, but the patient had no history of foreign travel. The patient did not obtain a CBC for eosinophilia, but filariasis antibodies proved to be negative. A local pathology group photographed the head and tail of the 5.5 cm worm and submitted the photos to the Centers for Disease Control and Prevention (CDC), which identified it as a male worm of the *Dirofilaria* species, probably *Dirofilaria tenuis*. (Figure 1)

Figure 1: Tail-end of *Dirofilaria tenuis*, extracted from the eye of the patient Louisiana, 2008



*Dirofilaria tenuis* is a parasite of raccoons, which are very common in the Southeastern United States. A 1996 study in Georgia\* revealed that sixty-six percent of the raccoons tested (74 of 113) were positive for filarial species and *Dirofilaria*

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(An Ocular Worm.....Continued from page 1)

*tenuis* was found in over twenty percent of those (22 of 74). The parasite is transmitted by mosquitoes and humans can be an accidental host, where it causes subcutaneous or ocular lesions.\*

Patient follow-up by the ophthalmologist on August 13, 2008 revealed some soreness and residual conjunctival erythema. The patient stated that she lived at the edge of the woods and there were "lots of raccoons in her area." She often works outside in her garden, but did not recall a particular mosquito bite. Complete resolution of her signs and symptoms is expected.

\* For references or more information, please contact Ms. Pogue at (318) 487-5262 or email [mpogue@dhh.la.gov](mailto:mpogue@dhh.la.gov)

NOTE: The Infectious Disease Epidemiology Section (IDES) now has the capability to accept samples for telediagnosis of parasites through the CDC, Division of Parasitic Diseases (DPDx) network. As part of the CDC's Epidemiological and Laboratory Capacity (ELC) grant, the IDES received a phase contrast microscope with software for telediagnosis. If you are a healthcare professional with a suspect human parasite sample, please call the IDES at 504-219-4563.

(Blood Mercury Levels.....Continued from page 1)

**Table 1:** Exposure Routes, Target Organs and Health Effects of Different Forms of Mercury, OPH-SEET\*\*

	Elemental (Metallic)	Inorganic	Organic
<b>Primary Exposure Route</b>	Inhalation	Oral	Oral
<b>Target Organs</b>	Kidney; CNS; PNS*	Kidney; PNS	CNS
<b>Specimen Type</b>	Urine or Blood	Urine or Blood	Blood
<b>Local Clinical Signs</b>	Lungs: bronchial irritation, pneumonitis	GI: irritation, corrosive; Skin: irritation, ulceration	
<b>Systemic Effects</b>	Kidney: proteinuria; CNS: mood changes; PNS: tremors	Kidney: proteinuria, tubular necrosis; PNS: tremors, numbness	Developmental effects in fetus and newborn; CNS: in adults

\*PNS = Peripheral Nervous system, CNS = Central Nervous System  
 \*\*Based on information from NHANES-CDC

In order to identify cases of blood mercury poisoning in adults (≥ 16 years of age), and children (< 16 years of age), OPH-SEET compared blood mercury test results to the case definition for mercury poisoning developed by the U.S. Centers for Disease Control and Prevention (CDC), which is a blood mercury level greater than ten micrograms per liter. In order to differentiate clinical cases from cases above background, OPH-SEET also compared blood mercury test results to the national background blood mercury levels established by the CDC through its National Health and Nutrition Examination Survey (NHANES). NHANES tests a random sample of the U.S. population for a number of substances including mercury. NHANES found that the ninety-fifth percentile of blood mercury levels are 1.9 µg/L in children one to five years of age (Confidence Interval (CI) 1.4 - 2.9 µg/L), and 4.6 µg/L in women sixteen to forty-nine years of age (CI 3.7 - 5.9 µg/L). (NHANES does not present background blood mercury levels for men). The upper confidence limit was used to identify individuals with blood mercury levels exceeding the national background (≥3 µg/L for children less than 16 years; ≥6 µg/L for adults ≥16 years). Based on these comparison values, cases were classified according to blood mercury test results as presented in Table 2.

**Table 2:** Guidance Values for Blood Mercury Cases, OPH-SEET\*\*

	Children (Less Than 16 Years)	Adults (Greater Than or Equal to 16 Years)
<b>Background</b>	< 3	< 6
<b>Above Background</b>	3 - 10	6 - 10
<b>Case</b>	> 10 µg/L	> 10 µg/L

\*\*Based on information from NHANES-CDC

**Results**

Between January and December of 2007, a total of 928 blood mercury tests were reported for 892 individuals in thirty-two Louisiana parishes. Data elements reported include personal identifiers, demographics (age, sex), laboratory and healthcare provider information and laboratory results.

Blood mercury levels were reported for approximately twenty out of 100,000 people in Louisiana between January and December of 2007. Individuals with blood mercury levels within NHANES background ranges (< 3 µg/L for children and < 6 µg/L for adults) comprised approximately ninety-five percent of tested population. (Table 3)

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# Screening for Type 2 Diabetes in School-Based Health Centers Louisiana, 2007-2008

Maureen Daly, MD MPH; Christine Armand-Perret, MPH

Easy access to students in the school setting allows for screening, early detection and monitoring of type 2 diabetes. The school setting also provides an excellent opportunity for education on lifestyle changes and implementation of policies and programs that can address obesity.

Youth who develop type 2 diabetes face the devastating micro- and macro-vascular complications associated with this disease in adults and at a younger age. In addition, there is evidence that “youths with type 2 diabetes have significantly higher rates of microalbuminuria and hypertension than their peers with type 1 diabetes, despite shorter diabetes duration and lower HgBA1c (glycated blood hemoglobin).”<sup>\*</sup> It is therefore important to detect type 2 diabetes early in this age group and intervene to achieve glycemic control.

Since 2002, Louisiana school-based health centers (SBHCs) have systematically been testing at risk adolescents for type 2 diabetes. At the end of the 2007-2008 fiscal year, there were sixty-nine SBHCs in the State, sixty-two of which were funded by the Department of Health and Hospitals/Office of Public Health (OPH). Each SBHC is staffed by a multi-disciplinary team of health care professionals, physicians, nurse practitioners, nurses and master level mental health professionals, who provide comprehensive primary and preventive physical and mental health services to students. These SBHCs provide access to nearly 60,000 students in twenty-six parishes.

In 2007-2008, there were 133,781 individual visits made to Louisiana SBHCs, with sixty percent of visits made by African-American students and thirty-eight percent by Caucasian students. Sixty-six percent of students are on Medicaid/Louisiana Children’s Health Insurance Program, twenty-three percent have private insurance, seven percent are uninsured and for four percent of students, the insurance status is unknown. Students served are in pre-K through twelfth grades. Most visits are made by the adolescent population, ten to eighteen years of age.

Louisiana SBHCs test at risk adolescents for type 2 diabetes based on the American Diabetes Association’s (ADA) 2000 rec-

ommendation for screening. ADA does not recommend routine screening of all adolescents but it is advised that any student, ten years of age or older, or at onset of puberty if it occurs at a younger age, who is overweight (body mass index >85% for age and gender), and has at least two risk factors be screened. (Table 1)

**Table 1:** Number of students screened in SBHC found to have elevated glucose levels - Louisiana, 2002-2008

Year	Number Screened	Number/ Percent Positive
2002-03	1,035	13 (1.3%)
2003-04	1,130	9 (0.8%)
2004-05	1,728	11 (0.6%)
2005-06	691	9 (1.3%)
2006-07	1,151	21 (1.8%)
2007-08	925	17 (1.8%)

Many of the students were screened by obtaining a random plasma glucose rather than the ADA recommended test of a fasting plasma glucose. This is likely because of the difficulty in obtaining fasting glucose specimens on students. Students found to have elevated glucose values are referred for further work-up to their primary care physician, to physicians within the Charity health care system, or to a hospital emergency room depending on the student’s health care coverage or the elevation of their glucose level.

Risk factors include: family history of type 2 diabetes in first- or second- degree relative; American Indian, African-American, Hispanic and/or Asian/Pacific Islander ethnicity; signs of insulin resistance or conditions associated with insulin resistance (such as acanthosis nigricans, hypertension, dyslipidemia (triglycerides  $\geq 250$  or HDL  $\leq 35$ ); polycystic ovarian syndrome.

Fasting plasma glucose (no consumption of food or beverage other than water for at least 8 hours before testing) is the preferred method for screening according to the ADA. The two-hour oral glucose tolerance test may also be used. Random plasma glucose and HgBA1c are not ADA recommended screening tests for children at this time. HgBA1c, however, is an important laboratory test for the management of diabetes.

The incidence of type 2 diabetes among youth is increasing worldwide. This rise corresponds with the increasing incidence of childhood obesity. However, just how widespread type 2 diabetes is among children and adolescents is not known. There is still much to learn about the most appropriate diagnostic cutoff points, effective treatment modalities and the natural history of type 2 diabetes in youth.

More research is needed to better understand type 2 diabetes in the adolescent population as well as to determine the scope of the problem both here in Louisiana and nationally.

<sup>\*</sup>For references or more information, please call the Adolescent School Health Program Office at (504) 361-6900 or email Ms. Armand-Perret at [carmand@dhh.la.gov](mailto:carmand@dhh.la.gov).

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## Infectious Disease Epidemiology Rapid Response Training - New Orleans July, 2008



(Blood Mercury Levels.....Continued from page 2)

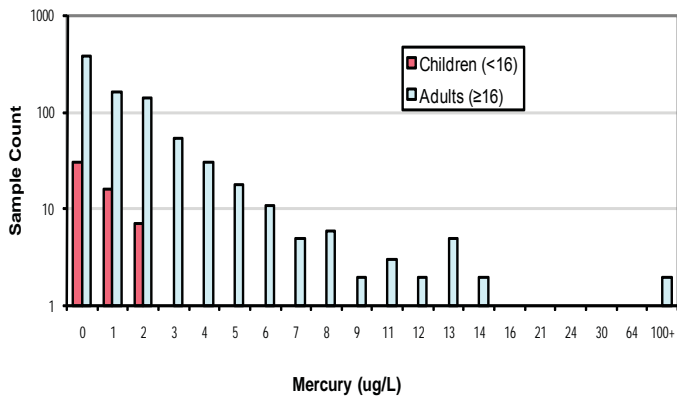
Table 3. The Distribution and Rates of Cases with Reported Blood Mercury Tests by age and gender - Louisiana, 2007

	Total			Below Background			Above Background			Case		
	Count	% of Tested	Rate per 100,000	Count	% of Group Tested	Rate per 100,000	Count	% of Group Tested	Rate per 100,000	Count	% of Group Tested	Rate per 100,000
<b>Gender</b>												
Male	463	51.9	20.9	432	93.3	19.47	16	3.5	0.72	15	3.2	0.68
Female	395	44.3	16.8	381	96.5	16.22	8	2.0	0.34	6	1.5	0.26
Unknown	34	3.8	NA	33	97.1	NA	1	2.9	NA	0	0.0	NA
<b>Total</b>	<b>892</b>	<b>100.0</b>	<b>19.5</b>	<b>846</b>	<b>94.8</b>	<b>18.52</b>	<b>25</b>	<b>2.8</b>	<b>0.55</b>	<b>21</b>	<b>2.4</b>	<b>0.46</b>
<b>Age</b>												
0-15	58	6.5	5.9	54	93.1	5.54	2	3.4	0.21	2	3.4	0.21
16-20	18	2.0	5.3	17	94.4	4.98	0	0.0	0.00	1	5.6	0.29
21-30	54	6.1	8.1	53	98.1	7.99	1	1.9	0.15	0	0.0	0.00
31-40	100	11.2	17.4	94	94.0	16.38	4	4.0	0.70	2	2.0	0.35
41-50	153	17.2	23.5	143	93.5	21.95	5	3.3	0.77	5	3.3	0.77
51-60	194	21.7	32.6	182	93.8	30.54	8	4.1	1.34	4	2.1	0.67
61-70	144	16.1	38.3	134	93.1	35.67	4	2.8	1.06	6	4.2	1.60
71+	170	19.1	43.5	168	98.8	42.98	1	0.6	0.26	1	0.6	0.26
Unknown	1	0.1	NA	1	100.0	NA	0	0.0	NA	0	0.0	NA
<b>Total</b>	<b>892</b>	<b>100.0</b>	<b>19.5</b>	<b>846</b>	<b>94.8</b>	<b>18.52</b>	<b>25</b>	<b>2.8</b>	<b>0.55</b>	<b>21</b>	<b>2.4</b>	<b>0.46</b>

Note: In cases where more than one test result was available for an individual, the highest test result was used for this analysis.

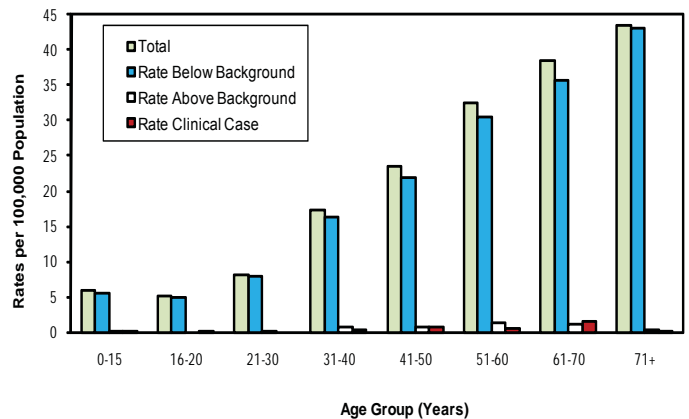
Just over five percent of individuals tested were above the national background levels ( $\geq 3 \mu\text{g/L}$  for children and  $\geq 6 \mu\text{g/L}$  for adults), of which an estimated two percent met the CDC's case definition of mercury poisoning ( $>10 \mu\text{g/L}$ ). (Figure 1)

Figure 1: Blood Mercury Concentration Distribution Louisiana, 2007



Older individuals (e.g., age 41-70 years) had higher rates above background, possibly due to increased testing of this age group and the effects of bioaccumulation. Children below the age of sixteen years made up a small percentage of individuals tested (6.5%), compared to other age groups. (Table 3, Figure 2)

Figure 2: Rates of Blood Mercury Cases by Age Group Louisiana, 2007



Information on the source of exposure is typically not collected with lab reports, however cases with blood mercury levels exceeding  $15 \mu\text{g/L}$  were investigated to identify the source of exposure ( $n=9$ ). The two most severe incidents involved five patients exposed to elemental mercury in their homes. Of the other four cases, one was exposed to an unknown source and three were exposed via fish consumption. The fish consumption cases involved people who ate fish on a regular basis from local waterbodies which were under fish consumption advisories. (Case Studies 1 and 2)

*Southeast  
Louisiana  
Winter  
Wonderland*



**Case Study # 1**

An elderly adult man presented with symptoms of burning feet. Mercury testing revealed a blood mercury level of 30 $\mu$ g/L. An investigation indicated seafood as a possible source of exposure. The patient fishes frequently in Lake Bistineau which has been under a fish consumption advisory since March, 2006. This advisory recommends limiting consumption of select seafood species in the area to four meals per month, with specific recommendations for women and children of one meal per month. Despite the advisories, the patient consumed up to eight meals per month of fish from the lake. Following a decrease in consumption of seafood from Lake Bistineau, the man's mercury level decreased to 7 $\mu$ g/L in three months.

**Case Study # 2**

An adult man presented with a blood mercury level of 16  $\mu$ g/L. A survey administered to the patient indicated seafood as a possible source of exposure. The patient fishes primarily in the Gulf of Mexico which is under a fish consumption advisory. The advisory recommends limiting consumption of blackfin tuna and other select seafood species in the area to four meals per month, with specific recommendations for women and children of one meal per month. Despite the advisories, the patient consumed up to eight meals per month of tuna, wahoo and dolhin from these waters. Following a decrease in consumption of seafood from the Gulf of Mexico, the patient's mercury level decreased to 12 $\mu$ g/L.

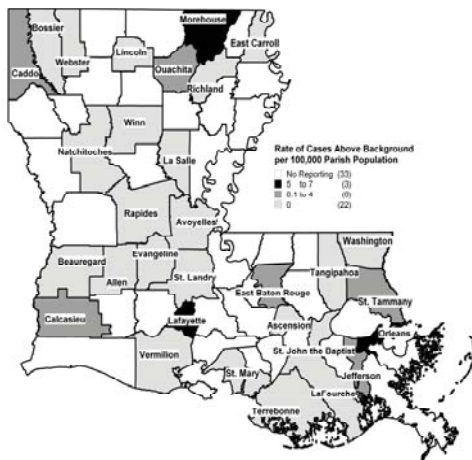
One of the most common sources of mercury exposure is by eating fish containing methylmercury. Since 1992, Louisiana has issued fish consumption advisories for mercury on local waterbodies. Because fish is an important dietary component for Louisiana residents, mercury toxicity due to the consumption of fish under advisory is a legitimate health concern. Mercury exposure may also occur through the inhalation of elemental mercury vapors.

In an effort to determine parishes of potential concern, parishes with a high rate of cases above the national background ( $\geq 3$   $\mu$ g/L for children and  $\geq 6$   $\mu$ g/L for adults) per 100,000 parish population were identified among the parishes reporting: Allen, Ascen-

sion, Avoyelles, Beaugard, Bossier, Caddo, Calcasieu, East Baton Rouge, East Carroll, Evangeline, Jefferson, La Salle, Lafayette, Lafourche, Lincoln, Morehouse, Natchitoches, Orleans, Ouachita, Rapides, Red River, St. John the Baptist, St. Landry, St. Mary, St. Tammany, Tangipahoa, Terrebonne, Vermilion, Washington, Webster, Winn.

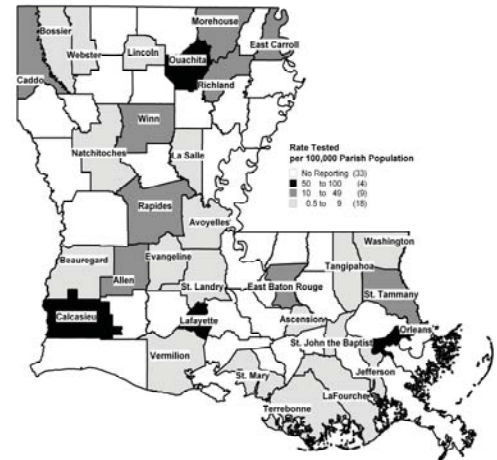
Based on the rate of individuals with blood mercury levels above background, the parishes of potential concern are: Morehouse, Orleans, Lafayette, Caddo, Calcasieu, East Baton Rouge, Ouachita, Jefferson, St. Tammany. (Figure 3). However, these parishes also had the highest testing rates. (Figure 4)

**Figure 3:** Rate of individuals with blood mercury levels above background levels per 100,000 parish population - Louisiana, 2007



*Note: 2007 Population Estimate Source: U.S. Census Bureau, Population Estimates Program. Parishes that tested and reported, but had no, or a low number of cases above background and/or very low testing rates are identified with a "0". Parishes that did not test and/or report are identified as "No Reporting".*

**Figure 4:** Rate of individuals tested per 100,000 parish population Louisiana, 2007



Parishes with higher testing and reporting rates are likely to have higher rates above background. An accurate ranking of parishes in terms of exposure to mercury cannot be made as some parishes under-tested and/or under-reported. Physicians need to be aware of the potential sources of mercury exposure in their areas and vigilant of clinical signs of mercury poisoning.

**Conclusion**

This report represents the first surveillance of blood mercury levels among Louisiana residents that has been conducted using statewide reported laboratory test results. Approximately five percent of individuals tested exceeded national background blood mercury levels, two percent of which met the case definition for mercury poisoning. High blood mercury levels, when they occur, may be a consequence of Louisiana's heavy seafood diet, as the most common source of exposure to mercury is via consumption of fish contaminated with methylmercury. It is recommended that individuals with blood mercury levels greater than 10  $\mu$ g/L decrease their fish consumption and return for follow-up testing. An assessment of potential sources of mercury exposure should also be conducted by the consulting physician.

All mercury laboratory test results must be reported to Louisiana OPH-SEET. This reporting requirement was promulgated to help collect data on exposed individuals in an effort to identify sources of mercury exposure and reduce mercury-related health impacts across the state. Cases of mercury exposure in adults and children can be reported to OPH-SEET via fax (504) 219-4582, telephone during business hours (888) 293-7020, or (504) 219-4518.

*Information for Health Care Professionals: Mercury Exposure and Toxicity* is a web-based document developed by OPH-SEET that summarizes information on sources, exposure pathways, laboratory testing, treatment and reporting of mercury exposure. Also included are links to many health-based documents and references about mercury. This document and a downloadable form for reporting cases of mercury exposure is also available on OPH-SEET's Heavy Metal Surveillance Program website at: [www.seet.dhh.louisiana.gov](http://www.seet.dhh.louisiana.gov).

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<http://www.infectiousdisease.dhh.louisiana.gov>

**ANNUAL REPORTS:** Amebiasis; Salmonella; Shigella  
**EPIDEMIOLOGY MANUAL:** *Clostridium perfringens*; Water Bacteria  
**LOUISIANA MORBIDITY REPORT:** Index 1981  
**PROFESSIONAL EDUCATION:** Formaldehyde-MP3 Download  
**REPORTABLE DISEASE SURVEILLANCE:** Reportable Diseases in  
Louisiana  
**VETERINARY INFORMATION:** Feline and Equine Common Veteri-  
nary Infections-2007

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**Note: Year and Issue Number are listed after the comma on each line - 08/06 = Issue Number 6 (Nov-Dec) for the Year 2008.** Indices for the years 1967-1981 and 2000-2006 can be found on <http://www.dhh.louisiana.gov/offices/page.asp?id=249&detail=7428>

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

September - October, 2008

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Sep-Oct 2008	Sep-Oct 2007	Jan-Oct Cum 2008	Jan-Oct Cum 2007	Jan-Oct % Chg*	
<b>Vaccine-preventable</b>															
Hepatitis B	Cases	0	3	3	0	2	0	1	0	4	13	14	73	85	-14.1
	Rate <sup>1</sup>	0	0.5	0.8	0	0.7	0	0.2	0	1.0	0.3	0.3	1.7	2.0	NA*
Measles	Cases	0	0	0	0	0	0	0	0	0	0	0	1	0	NA*
Mumps	Cases	0	0	0	0	0	0	0	0	0	0	0	1	1	NA*
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis	Cases	0	0	0	5	0	1	2	1	1	10	4	61	18	238.9
<b>Sexually-transmitted</b>															
HIV/AIDS	Cases <sup>2</sup>	23	9	3	5	4	7	7	3	1	62	200	770	975	-21.0
	Rate <sup>1</sup>	2.3	1.6	0.8	0.9	1.4	2.3	1.4	0.9	0.2	1.4	4.6	17.6	22.3	NA*
Chlamydia	Cases	678	522	191	479	217	242	771	541	281	3928	3429	19077	17197	10.9
	Rate <sup>3</sup>	8.0	9.0	5.0	10.0	9.0	9.0	16.0	17.0	7.0	10.0	9.0	48.0	13.3	NA*
Gonorrhea	Cases	269	230	56	221	71	87	375	190	88	1599	1933	8125	9877	-17.7
	Rate <sup>3</sup>	3.0	4.0	2.0	4.0	3.0	3.0	8.0	6.0	2.0	4.0	5.0	20.0	221.0	NA*
Syphilis (P&S)	Cases	22	14	5	24	7	0	29	14	16	132	131	522	451	15.7
	Rate <sup>3</sup>	0	0	0	0	0	0	1.0	0	0	0	0	11.7	10.1	NA*
<b>Enteric</b>															
Campylobacter	Cases	1	2	2	2	0	0	2	2	2	13	17	76	93	-18.3
Hepatitis A	Cases	0	0	0	1	0	0	0	0	0	1	4	10	27	-63.0
	Rate <sup>1</sup>	0	0	0	0.2	0	0	0	0	0	0	0.1	0.2	0.6	NA*
Salmonella	Cases	32	23	14	46	12	6	17	22	46	218	299	898	839	7.0
	Rate <sup>1</sup>	3.1	4.0	3.7	8.9	4.5	2.0	3.4	6.3	11.9	5.1	6.9	20.8	19.4	NA*
Shigella	Cases	1	9	5	16	13	0	9	1	12	66	93	537	449	19.6
	Rate <sup>1</sup>	0.1	1.6	1.3	3.1	4.9	0.0	1.8	0.3	3.1	1.5	2.2	12.4	10.4	NA*
Vibrio cholera	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other	Cases	2	1	0	1	0	0	0	0	1	5	4	39	26	50.0
<b>Other</b>															
<i>H. influenzae (other)</i>	Cases	0	0	0	0	0	0	0	0	0	0	2	7	6	NA*
<i>N. Meningitidis</i>	Cases	1	0	0	0	0	0	0	1	0	2	2	19	26	-26.9

<sup>1</sup> = Cases Per 100,000

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

<sup>3</sup> = Cases Per 100,000 based on 2007 estimated population

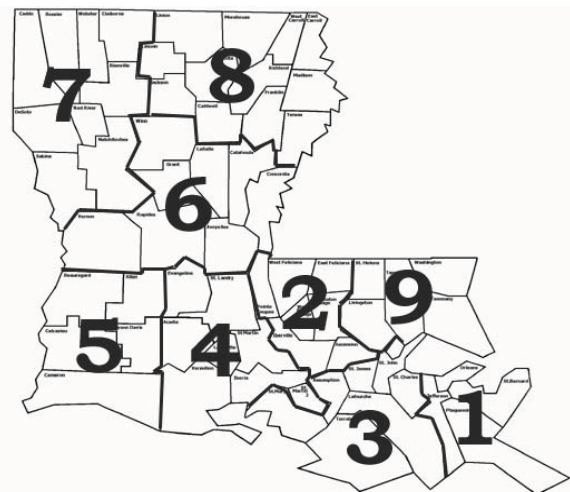
\* Percent Change not calculated for rates or count differences less than 5

Table 2. Diseases of Low Frequency (January-October, 2008)

Disease	Total to Date
Legionellosis	9
Lyme Disease	3
Malaria	3
Rabies, animal	6
Varicella	19

Table 3. Animal rabies (September-October, 2008)

Parish	No. Cases	Species
Caddo	1	Bat



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

LAC 51:11.105: 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.

Anthrax	Measles (rubeola)	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)
Avian Influenza	Neisseria meningitidis (invasive disease)	Smallpox
Botulism	Plague	<i>Staphylococcus Aureus</i> , Vancomycin Intermediate or Resistant (VISA/VRSA)
Brucellosis	Poliomyelitis, paralytic	Tularemia
Cholera	Q Fever ( <i>Coxiella burnetii</i> )	Viral Hemorrhagic Fever
Diphtheria	Rabies (animal and human)	Yellow Fever
<i>Haemophilus influenzae</i> (invasive disease)	Rubella (congenital syndrome)	
Influenza-associated Mortality	Rubella (German measles)	

**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.

Arthropod-Borne Neuroinvasive Disease and other infections (including West Nile, St. Louis, California, Eastern Equine, Western Equine and others)	Hemolytic-Uremic Syndrome	Pertussis
Aseptic meningitis	Hepatitis A (acute disease)	Salmonellosis
Chancroid <sup>1</sup>	Hepatitis B (acute illness & carriage in pregnancy)	Shigellosis
<i>Escherichia coli</i> , Shig-toxin producing (STEC), including <i>E. coli</i> 0157:H7	Hepatitis B (perinatal infection)	Syphilis <sup>1</sup>
Hantavirus Pulmonary Syndrome	Hepatitis E	Tetanus
	Herpes (neonatal)	Tuberculosis <sup>2</sup>
	Legionellosis (acute disease)	Typhoid Fever
	Malaria	
	Mumps	

**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 (AIDS) <sup>3</sup>	Gonorrhea <sup>1</sup>	Staphylococcal Toxic Shock Syndrome
Blastomycosis	Hansen Disease (leprosy)	Streptococcal disease, Group A (invasive disease)
Campylobacteriosis	Hepatitis B (carriage, other than in pregnancy)	Streptococcal disease, Group B (invasive disease)
Chlamydial infection <sup>1</sup>	Hepatitis C (acute illness)	Streptococcal Toxic Shock Syndrome
Coccidioidomycosis	Hepatitis C (past or present infection)	<i>Streptococcus pneumoniae</i> , penicillin resistant [DRSP], invasive infection]
Cryptococcosis	Human Immunodeficiency Virus (HIV Syndrome infection) <sup>3</sup>	<i>Streptococcus pneumoniae</i> (invasive infection in children < 5 years of age)
Cryptosporidiosis	Listeria	Transmissible Spongiform Encephalopathies
Cyclosporiasis	Lyme Disease	Trichinosis
Dengue	Lymphogranuloma Venereum <sup>1</sup>	Varicella (chickenpox)
Ehrlichiosis	Psittacosis	Vibrio Infections (other than cholera)
Enterococcus, Vancomycin Resistant [(VRE), invasive disease]	Rocky Mountain Spotted Fever (RMSF)	
Giardia	<i>Staphylococcus Aureus</i> , Methicillin/Oxacillin Resistant[ (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) <sup>5</sup>	Severe Traumatic Head Injury
Carbon Monoxide Exposure and/or Poisoning (All ages) <sup>5</sup>	Lead Exposure and/or Poisoning (All ages)	Severe Undernutrition (severe anemia, failure to thrive)
Complications of Abortion	Pesticide-Related Illness or Injury (All ages) <sup>5</sup>	Sickle Cell Disease (newborns) <sup>4</sup>
Congenital Hypothyroidism <sup>4</sup>	Phenylketonuria <sup>4</sup>	Spinal Cord Injury
Galactosemia <sup>4</sup>	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)
Hemophilia <sup>4</sup>		

Case reports not requiring special reporting instructions (see below) can be reported by Confidential Disease Case Report forms (2430), facsimile (504) 219-4522, telephone (504) 219-4563, or 1-800-256-2748) or web based at <https://ophrdd.dhh.state.la.us>.

<sup>1</sup>Report on STD-43 form. Report cases of syphilis with active lesions by telephone.

<sup>2</sup>Report on CDC72.5 (f.5.2431) card.

<sup>3</sup>Report to the Louisiana Genetic Diseases Program Office by telephone at (504) 219-4413 or facsimile at (504) 219-4452.

<sup>4</sup>Report to the Louisiana HIV/AIDS Program: see [www.hiv.dhh.louisiana.gov](http://www.hiv.dhh.louisiana.gov) for regional contact information, or call 504-568-7474.

<sup>5</sup>Report to the Section of Environmental Epidemiology & Toxicology: [www.seet.dhh.louisiana.gov](http://www.seet.dhh.louisiana.gov) or 888-293-7020.

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