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GOVERNOR

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=306

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SECRETARY

September-October 2006 **Volume 17 Number 5**

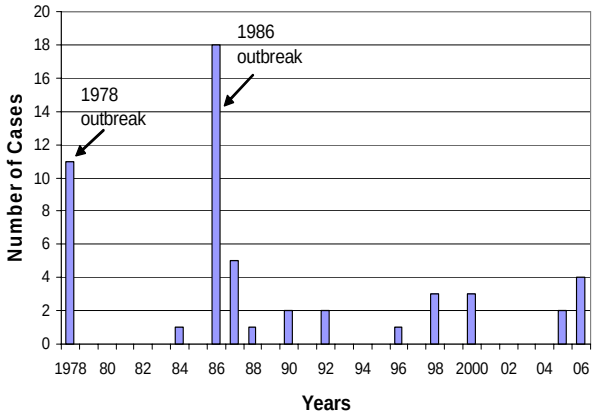
Vibrio, Summer and Seafood

Annu Thomas, MPH MSc

Four sporadic cases of *Vibrio cholerae* O1 were reported to the Louisiana Office of Public Health, June 2006. Although no common source has been identified, three cases were attributed to the consumption of crabs harvested along the coast of Louisiana while the third case consumed other cooked seafood.

Studies show that toxigenic *V. cholerae* serotype Inaba O1 biotype El Tor persists in the Gulf coast. (Figure 1)

Figure 1: Cholera cases, 01 toxigenic – Louisiana, 1978-2006



This particular strain can survive in cooked shellfish if not cooked properly and can multiply rapidly at an ambient temperature.

Louisiana reported two cases of *V. cholerae* O1 in October, 2005. The cases in 2005 were related to consumption of crab and shrimp that were inadequately cooked or cross-contaminated with the raw product.

In 1978, the *V. cholerae* O1 outbreak in Louisiana was attributed to inadequate cooking or improper handling in home-prepared crustacean (crab) meals.

Twelve cases of *V. cholerae* O1 were identified in Louisiana in the summer of 1986. A common source was not identified, although the majority of these cases were attributed to the ingestion of inadequately cooked or improperly handled crab or shrimp.

Most people boil crabs until the shell is red, which usually takes no longer than five minutes. However, studies suggest that crabs should be boiled for no less than ten minutes. *V. cholerae* O1 has been shown to survive in crabs boiled for eight minutes, but not in crabs boiled for ten minutes or steamed for at least thirty minutes.

Cookbooks recommend that seafood not be overcooked, hence seafood products are consumed in various ways, i.e., raw, lightly cooked, seared on the outside and raw in the middle, thoroughly cooked. For example, some cookbooks suggest that shrimp should be cooked until the shell is pink and the flesh is pearly opaque, which usually takes approximately three to four minutes. This may not be long enough to render organisms like Vibrio, as non-viable.

It is also a good idea to wash seafood thoroughly before cooking. Raw seafood can become contaminated with pathogens from various sources, including the environment and from unsanitary practices in food facilities and homes. The National Advisory Committee on Microbiological Criteria for foods is in process of determining cooking parameters necessary to ensure the safety of seafood.

The incubation period for *V. cholerae* O1 is usually one to three days. The disease is characterized by painless voluminous diarrhea without abdominal cramps or fever. Stools usually contain high concentrations of essential electrolytes, such as sodium, potassium, chloride and bicarbonate. In case fluid losses are not replaced, dehydration can occur in four to twelve hours. Most people infected with *V. cholerae* O1 have either no, or mild, symptoms. Less than five percent of cases have severe symptoms. People with underlying conditions, such as liver disease and diabetes, may present a more severe bout of symptoms.

Severe symptoms include metabolic acidosis or hypovolemic shock. Coma, seizures and hypoglycemia can also occur, particularly in children. Oral or parenteral rehydration therapy is the most important treatment and should be initiated as soon as the diagnosis is suspected. Antimicrobial treatment should be considered for people who are moderately to severely ill.

In case of a clinically suspected case, a stool specimen should

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be obtained and sent to the State Bacteriology Laboratory in Amite, for serogrouping. For more information, go to http://www.dhh.louisiana.gov/offices/page.asp?id=249&detail=6481 or call Annu Thomas at (504)219- 4547 or email aethomas@dhh.la.gov.

Culturing For Vibrio

Since routine culture for Vibrios is not common, even in areas of high prevalence, it is important that physicians alert the laboratory of the possibility of Vibrio infection by relaying relevant information from the clinical history of the patient. Such information should include: whether the patient has consumed any seafood; whether the seafood eaten was in or from coastal Louisiana; history of marine, marine-associated, or brackish water penetrating injuries; aquatic activity.

TCBS (Thiosulfate Citrate Bile Salt Agar) is the most widely used medium for isolating Vibrio strains from human clinical specimens. Vibrio grow well on Blood plates and MacConkey agar, but do not grow well on more selective plating media for enteric organisms.

Oxidase screening of colonies appears to be a cost-efficient method for detecting Vibrio isolates from cultures of stool.

CDC/NCID* Laboratory Methods for the Diagnosis of *Vibrio cholerae***

Fecal specimens should be collected in the early stages of any enteric illness, when pathogens are usually present in the highest numbers and before antibiotic therapy has been started.

* *Centers for Disease Control and Prevention/National Center for Infectious Diseases*

**www.cdc.gov/NCIDOD/DBMD/DISEASEINFO/cholera/complete.pdf

Worker Health Alert – Bronchiolitis Obliterans Among Food Manufacturing Workers

Michelle Lackovic, MPH

Recent diagnoses of bronchiolitis obliterans in several food manufacturing workers has prompted Health Department officials in Louisiana and other states to notify businesses, workers and healthcare providers about this uncommon and often misdiagnosed occupational disease. Bronchiolitis obliterans is a serious, disabling and sometimes fatal lung disease that has been linked to exposure to diacetyl, a butter flavoring ingredient. The following information provides details on diacetyl and the symptomology and diagnosis of work-related bronchiolitis obliterans.

Diacetyl is a food flavoring ingredient that is usually mixed with other ingredients to produce butter flavoring in a variety of foods. Flavorings are composed of various natural and manmade substances and may consist of a single substance or complex mixtures of several substances. Though considered safe to eat, diacetyl and other food flavoring ingredients may be harmful to breathe in the forms and concentrations to which workers may be exposed. Case studies have shown that exposure can occur when workers mix dry powders to make various products or work close to where the mixing occurs. Occupational exposure guidelines have been developed for only a small number of the thousands of ingredients used in flavorings. For example, Occupational Safety and Health Administration (OSHA) permissible exposure limits (PELs) and/or NIOSH recommended exposure limits (RELs) have been established for only forty-six (<5%) of the 1,037 flavoring ingredients considered by the flavorings industry to represent potential respiratory hazards due to possible volatility and irritant properties.

To determine if a patient works with diacetyl, ask the patient for the Material Safety Data Sheets (MSDSs) for the chemicals at work. Diacetyl should be listed under Hazardous Ingredients, Section 2 of the MSDS, by the CAS number 431-03-8. Synonyms include biacetyl, 2,3-Butanedione and 2,3-Butadione.

Bronchiolitis obliterans causes inflammation and scarring in the smallest airways of the lung and can lead to severe and disabling shortness of breath. The main respiratory symptoms experienced by diacetyl-exposed workers affected by bronchiolitis obliterans include cough (usually without phlegm) and shortness of breath on exertion. Respiratory symptoms typically do not improve when the worker returns home at the end of the workday or on weekends and vacations. Respiratory symptoms are usually gradual in onset and progressive, but severe symptoms can suddenly occur. Some workers may experience fever, night sweats and weight loss. Case studies indicate that affected workers generally notice a gradual reduction or cessation of cough years after they are no longer exposed to diacetyl and other flavoring vapors, but shortness of breath on exertion may persist. Workers exposed to flavorings may also experience eye, nose, throat and skin irritation. In some cases, chemical eye burns have required medical treatment.

Often workers presenting with symptoms of bronchiolitis obliterans are initially suspected of having conditions such as asthma, chronic bronchitis, chronic obstructive pulmonary disease, or pneumonia. Additional diagnostic studies should be performed on

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diacetyl-exposed workers to accurately diagnose bronchiolitis obliterans.

Medical testing may reveal several of the following findings:

- Spirometry most often shows fixed airways obstruction and sometimes shows restriction
- Lung volumes may show hyperinflation
- Diffusing capacity of the lung (DLCO) is generally normal, especially early in the disease
- Chest X-rays are usually normal but may show hyperinflation
- High-resolution computerized tomography scans of the chest at full inspiration and expiration may reveal heterogeneous air trapping on the expiratory view as well as haziness and thickened airway walls
- Lung biopsies may reveal evidence of constrictive bronchiolitis obliterans (i.e., severe narrowing or complete obstruction of the small airways). An open lung biopsy, such as by thoracoscopy, is more likely to be diagnostic than a transbronchial biopsy. Special processing, staining and review of multiple tissue sections may be necessary for a diagnosis.
- A poor FEV1, especially in a young non-smoker, requires immediate follow-up

For further information, references, or to report a suspected case, contact Michelle Lackovic by phone at (504)219-4518 or email mlackovi@dhh.la.gov.

Changes for the Louisiana Public Health Laboratory System

Stephen Martin, Ph.D D(ABMLI)

The last year has been unusually challenging for the Louisiana Public Health Laboratory System. When Hurricane Katrina flooded the city of New Orleans on August 29, 2005 the basement of the New Orleans State Office Building (Region 1) was flooded displacing the Office of Public Health (OPH) Central Lab besides all of the other OPH Programs. Additionally, the Amite Laboratory was temporarily closed due to power and communication outages in Region 9 (Figure 1).

Figure 1: Louisiana regions

Hurricane Rita forced the closure of the Lake Charles Laboratory (Region 5) due to power and communications outages on September 20, 2005. As power was restored, the Amite and Lake Charles Laboratories were rapidly put back into service. However, the same was not true for the New Orleans Central Laboratory.

Immediately after Hurricane Katrina, it was clear that the New Orleans Laboratory would be un-usable for an extended period of time. The OPH Laboratory staff was forced to begin the relocation of testing to the Shreveport (Region 7) and later to the Amite Laboratories as well as finding other laboratories to assist OPH with testing. The damage caused by Hurricane Rita to the Lake Charles area, limited the use of the Lake Charles Laboratory because housing was unavailable for staff. The loss of the lab in New Orleans meant that OPH had lost over seventy percent of its laboratory testing capacity. Worse, the only OPH labs capable of performing Newborn Screening, Environmental Chemistry, Radiation testing for drinking water, Genetic/DNA analysis and Biological and Chemical terrorism testing were located in New Orleans. Additionally, forty-five percent of the New Orleans Lab staff resigned, retired or were unable to return to their positions working in the New Orleans Lab.

The first testing to be sent to another laboratory was Newborn Screening. Babies born with metabolic disorders need to be tested in the first few days of life to allow for proper care to be given. Even brief delays can lead to serious morbidity and mortality. The OPH Laboratory used an emergency management assistance compact (EMAC) agreement to request the assistance of other public health laboratories in providing this testing. The University of Iowa Hygienic Laboratory (UHL) agreed to perform newborn screening testing until the OPH Laboratory was back in service. The increased workload, more than doubled Iowa's usual testing volume. Taking on this increased workload required a monumental effort on the part of staff at the UHL in Iowa. Iowa had to hire and train additional staff, make changes to the testing panel, (since Iowa and Louisiana had used different procedures), and develop a data processing system that allowed immediate transfer of lab data to both the OPH Laboratory and Genetics Program staff. The staffs at the UHL in Iowa, the OPH Lab and Genetics Program were able to address these issues and restore testing in just over a week.

In addition to Newborn Screening, the OPH Laboratory has been forced to outsource many other tests due to lack of laboratory capacity. Currently the LSU Health Sciences Center Labs in Shreve-

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Evaluation of the Louisiana Pregnancy Risk Assessment Monitoring System and the Effects of Hurricane Katrina

Ashley Chin, PhD, MPH, MA

The Louisiana Pregnancy Risk Assessment Monitoring System (La PRAMS) is an on-going population-based risk factor surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. The goal of La PRAMS is to reduce infant mortality, morbidity and low birth weight by impacting maternal behaviors during pregnancy and early infancy.

Objectives and Methods

The objective of this evaluation was to determine the overall usefulness of the La PRAMS and assess each of the system attributes. Additionally, this evaluation sought to determine the impact of Hurricanes Katrina and Rita on the surveillance system operations. The Centers for Disease Control and Prevention's (CDC) Updated Guidelines for Evaluation of Public Health Surveillance Systems was used to conduct the evaluation. Stakeholders met to focus the evaluation and prioritize the system attributes for evaluation. Information was gathered using key informant interviews, observation of the system's operation and review of the results of the operational evaluation program 'OPAL'. (OPAL is a SAS operational evaluation program that CDC uses to evaluate mail and phone operations.) Results were used to determine the overall usefulness of the system and to identify areas for possible improvement.

Results

The stakeholders prioritized the following key attributes for evaluation:

Timeliness: An evaluation of the timeliness of the system revealed that the system's actual timeline is somewhat longer than that outlined in the protocol. A group of one hundred to two hundred mothers sampled from the birth certificate file each month comprises a batch. In a review of the most recent available batches (pre-Katrina and Rita), the actual number of days a batch was in the system was eighty-three to eighty-four. The protocol number of days is from forty-six to eighty-one. Batches remained open longer than eighty-one days in order to achieve adequate response rates.

The Louisiana Vital Records Registry, from which the sample is drawn, also contributes to the timeliness of the data collection system. The batch size submitted to La PRAMS each month varies, as the amount of data entry fluctuates. This inhibits further streamlining of mail operations in that inconsistent batch sizes are more difficult to plan for. Vital Records also contributes to the timeliness of the system in that the CDC cannot weigh the data until receipt of the annual birth file. Currently the birth file is submitted in December of the following year, meeting the CDC deadline.

Cleaned and weighted data are received from CDC approximately eight months after submission of the state birth file. Data sets are made available to internal and external researchers upon receipt. The surveillance report is posted to the La PRAMS website approximately four months after receipt of weighted data.

Data quality: In 2003, between fifteen percent and fifty percent of the surveys are double entered as a quality assurance check for data entry errors. There were less than one percent errors for all batches submitted in 2003. Percent missing is calculated for each La PRAMS question. In 2002 (2003 data not available), the percent missing ranged from 0.2% - 11%, with the mean (and median) of 3.2% (mode=5%). The question with the lowest response rate (11% missing data) was "What was the total income for the people living in your household during the twelve months before your delivery?" Prior to Hurricanes Katrina and Rita, response rates varied from 68.8-72.7%. (Table 1)

Table 1: Unweighted response rates - Louisiana Prams, 2000-2003

	Unweighted Percent Responding			
Characteristic	2000	2001	2002	2003
Overall	70.5	72.7	72.3	68.8
Stratum*				
VLBW Urban	63.1	66.2	65.7	62.7
VLBW Rural	72.2	71.7	72.4	71.0
V/NBW Urban	69.5	73.6	72.1	68.4
V/NBW Rural	75.3	77.0	75.1	71.5
Maternal Education				
0-11 years	59.7	60.9	62.4	61.0
12 years	71.1	74.6	72.4	67.1
>12 years	77.9	79.0	78.6	75.2
Maternal AGe				
<20	66.1	68.2	70.1	68.2
20-29	71.0	72.9	72.2	68.2
30 +	72.5	75.2	74.1	71.0
Maternal Race				
White	78.8	79.3	77.6	74.7
Black	63.1	66.5	66.8	62.6
Other	59.0	69.2	69.1	58.3
Mode of Participation				
Mail 1	36.2	35.8	36.7	50.2**
Mail 2	7.4	7.9	8.1	
Mail 3	3.4	3.6	3.4	
Other Mail	0.9	0.3	1.0	
Phone	22.5	25.1	23.1	18.6

* VLBW - Very low birth weight, L/NBW - Low/Normal Birth weight.
**Percent response for all mailings.

In March 2006 a trial batch was initiated to test the data collection operations and the Louisiana state postal system. The Louisiana Vital Records Registry provided a sample of 151 births from the fourth quarter of 2005 for the test batch. At eighty-one days, the response rate was 48.3%. This response rate is lower than that prior to the hurricanes and is lower than the seventy percent needed for valid statistical analysis. Data collection for a second trial batch began May 22nd. The batch was closed August 14th (80 days) with an overall response rate of 63.3%, a large improvement over the first trial batch.

Stability of the system: Prior to Hurricanes Katrina and Rita, the La PRAMS system was very stable. Operations had continued

without fail since the initiation of the system in 1997. Data collection, analysis and reporting activities functioned well and information generated by the system was used to support the Title V Block grant application, inform program planners and evaluate the impact of program efforts.

In August and September 2005, Hurricanes Katrina and Rita devastated the entire southern portion of the state. La PRAMS data collection operations, which are conducted from New Orleans, were shut down from August 26, 2005 to March 6, 2006. Analysis and dissemination activities resumed in November, 2005. Two of the three primary La PRAMS staff members (data manager and assistant data manager) did not return to New Orleans after the storm. These two positions were merged into one new position, the data operations technician. The La PRAMS Project Coordinator has remained in the position and is currently handling all system operations.

Conclusions and Recommendations

Timeliness: The timeliness of the system is hindered by low response rates, slow receipt of weighted data and inconsistent batch sizes received from Vital Records. Priority should be given to improvement of response rates, which will reduce the amount of time each batch is in the data collection system and, more importantly, improve data quality. Faster receipt of weighted data from CDC would expedite dissemination. Continued improvements in Vital Records staffing will facilitate consistent batch sizes and faster completion of the annual birth file.

Data quality: The foremost threat to data quality is low response rates overall and among certain groups. Focus groups should be used to determine what types of incentives and/or rewards would motivate increased participation, especially among groups least likely to respond. Additionally, focus groups can inform La PRAMS staff regarding how participants would like to receive results.

Stability: The system remains stable despite the devastating hurricanes of 2005. New requirements for the data operations technician position should contribute to better retention in this position, contributing to the continued stability of the system.

For references or more information, please email acchin@dhh.la.gov or call (504) 219-4567.

Changes for the Louisiana Public Health Laboratory (Continued from page 3)

port are performing many blood bank and serological tests; the state of Texas is performing tuberculosis testing, the states of Arkansas and Texas and the EPA Lab in Houston are assisting in performing chemistry testing on drinking water.

Since the storm the OPH Laboratory equipment and supplies housed on the eighth floor at 325 Loyola in New Orleans have been unreachable due to the lack of elevators and electricity. The Department of Health and Hospitals recently was able to lease a building at 3101 West Napoleon Avenue in Metairie to temporarily house an OPH Laboratory in the New Orleans area. Arrangements are currently being made to move the OPH Laboratory equipment to the West Napoleon building from downtown New Orleans and to make changes needed to the leased building to accommodate a laboratory. A construction elevator is being installed to allow retrieval of the lab equipment from the Loyola location. The OPH Laboratory is scheduled to move into our temporary building November 1, 2006 and will start testing as soon as possible thereafter.

Figure 2: Renovated laboratory with added BSL-3 required airstacks Shreveport, Louisiana

There have been a few bright spots in the past year:

- Renovations to the Shreveport Laboratory have been completed. Shreveport now has a fully functional BSL-3 Laboratory suite that has received CDC and USDA approval. This will allow OPH to resume tuberculosis testing and biological terrorism testing. (Figure 2)
- The construction on a new permanent OPH Laboratory is scheduled to resume this fall.
- Two initiatives that were underway pre-Katrina have continued. The OPH Laboratory and OPH Genetics Program with the help of the Iowa Laboratory have expanded newborn screening from ten diseases to twenty-seven diseases as of July 1, 2006.
- The OPH Laboratory is continuing the installation a of statewide laboratory information system (LIMS). This system will allow tracking of specimens throughout the state and insure that all lab tests performed are billed to Medicaid or other payers. One important advantage of this system will be that OPH Clinics and Programs will be able to go online and retrieve information regarding the patients to whom they are providing care. Clinic staff will be able to view most lab reports as soon as the tests are finished. This should reduce turn around time and greatly reduce problems caused by lost or delayed lab reports.

For more information, phone Dr. Martin at (504) 219-4470 or email sjmartin @dhh.la.gov.

Announcements

Updates: Infectious Disease Epidemiology Webpage
http://www.dhh.louisiana.gov/offices/page.asp?id=249

INFLUENZA SURVEILLANCE (Under Featured Services)
ANNUAL REPORT: Blastomycosis
http://www.dhh.louisiana.gov/offices/page.asp?id=249&detail=6479
ANTIBIOGRAMS:
http://www.dhh.louisiana.gov/offices/reports.asp?ID=249&Detail=330
Antibiotic Conparison 2002 is the result of a summer project carried out by a LSU MPH student. The purpose was to compare the antibiotic sensitivity patterns of several common Louisiana human bacterial pathogens with similar bacteria from other states.
WEST NILE VIRUS LOUSIANA, 2006:
http://www.dhh.louisiana.gov/offices/?ID=253

Training

The Hepatitis C Support Project (HCSP) is sponsoring a Train-the-Trainer Workshop on November 2, 2006 in Benton, Louisiana. This workshop is targeted to health educators, HIV/STD counselors & testers, medical providers, substance abuse counselors, case managers, support group leaders, patients and other health professionals who will provide education, support and advocacy for people and populations affected by hepatitis C. Registrants that complete and successfully pass this program will be certified as HCV Basic Educators by the HCSP. The program, which runs from 8:30 AM to 4 PM, is free of charge but registration is required. For more information please contact Betty Taylor at (504) 219-4563 or http://www.dhh.louisiana.gov/offices/?id=249 under the Events section.

IDRIS – A New Infectious Disease Reporting System

The Office of Public Health (OPH), Infectious Disease Epidemiology Section (IDES) successfully negotiated the purchase of a new web based system based on the National Electronic Disease Surveillance System (NEDSS) and the Public Health Information Network (PHIN) architecture. The Infectious Disease Reporting Information System (IDRIS) will replace IDES' current application, the Reportable Disease Database (RDD) and will enhance efficiency and allow much greater flexibility in routine disease surveillance and reporting. IDRIS also includes functionality for Electronic Laboratory Reporting (ELR) data transmission, both from hospital/reference laboratories and the Louisiana State Public Health Laboratory. Overall, IDRIS will provide an improved infrastructure for the detection and response to established infectious disease priorities as well as emerging threats to public health. Statewide, implementation of IDRIS is expected during 2007.

Louisiana 's Infectious Disease Rapid Response Team Meeting – August 8-10, 2006 New Orleans

Louisiana Regional Epidemiologists and Disease Surveillance Specialists in Group Discussion

Wayne Dupree, Louisiana Laboratory Manager Presents 'Lab Sampling Methods' to the Team

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

July - August, 2006

Table 1. Disease Incidence by Region and Time Period

DISEASE		HEALTH REGION 1	2	3	4	5	6	7	8	9	TIME PERIOD Jul-Aug 2006	Jul-Aug 2005	Jan-Aug Cum 2006	Jan-Aug Cum 2005	% Chg
Vaccine-preventable															
Hepatitis B	Cases	0	1	0	0	0	0	0	0	2	3	15	30	55	-45.5
	Rate[1]	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.1	0.3	0.7	1.3	NA
Measles		0	0	0	0	0	0	0	0	0	0	2	0	0	NA*
Mumps		0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	2	7	NA*
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	1	NA*
Pertussis		0	1	0	0	0	0	0	0	0	1	15	13	42	-69.0
Sexually-transmitted															
HIV/AIDS	Cases[2]	9	7	1	3	3	2	3	5	1	34	158	438	767	-43
	Rate[1]	0.9	1.2	0.3	0.6	1.1	0.7	0.6	1.4	0.2	0.8	3.6	10	17.5	NA
Gonorrhea	Cases	149	225	60	186	64	55	276	108	75	1198	1923	5661	7571	-1910
	Rate[1]	14.4	37.3	15.6	33.9	22.6	18.2	52.8	30.5	17.1	26.8	43.0	126.7	169.4	NA
Syphilis (P&S)	Cases	14	26	2	5	2	0	1	0	12	62	62	156	192	-36
	Rate[1]	1.4	4.3	0.5	0.9	0.7	0.0	0.2	0.0	2.7	1.4	1.4	3.5	4.3	NA
Enteric															
Campylobacter		0	4	1	2	1	3	0	2	3	16	23	69	91	-24.2
Hepatitis A	Cases	0	0	0	1	0	0	0	0	1	2	16	8	48	-83.3
	Rate[1]	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.0	0.4	0.2	1.1	NA
Salmonella	Cases	2	10	18	39	10	10	3	10	28	130	257	386	597	-35.3
	Rate[1]	0.2	1.8	4.8	7.6	3.7	3.3	0.6	2.8	7.3	3.0	6.0	8.9	13.8	NA
Shigella	Cases	0	1	0	23	0	2	0	3	2	31	42	82	108	-24.1
	Rate[1]	0.0	0.2	0.0	4.5	0.0	0.7	0.0	0.9	0.5	0.7	1.0	1.9	2.5	NA
Vibrio cholera		0	0	0	1	0	0	0	0	0	1	0	2	0	NA*
Vibrio, other		0	1	0	1	0	0	0	0	1	3	11	13	27	-51.9
Other															
H. influenzae (other)		0	0	0	0	1	0	0	0	0	1	3	11	30	-63.3
N. Meningitidis		0	0	0	1	0	0	0	0	0	1	1	29	28	NA*

1 = Cases Per 100,000

2=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.

* Percentages not calculated for numbers less than 10

Table 2. Diseases of Low Frequency (January-August, 2006)

Disease	Total to Date
Legionellosis	10
Lyme Disease	0
Malaria	1
Rabies, animal	3
Varicella	168

Table 3. Animal rabies (July-August, 2006)

Parish	No. Cases	Species
Calcasieu	1	Skunk

Sanitary Code - State of Louisiana
Chapter 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.

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

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)
Aseptic meningitis
Chancroid[1]
Escherichia coli, Shig-toxin producing (STEC), including *E. coli* 0157:H7
Hantavirus Pulmonary Syndrome
Hemolytic-Uremic Syndrome
Hepatitis A (acute disease)
Hepatitis B (acute illness & carriage in pregnancy)
Hepatitis B (perinatal infection)
Hepatitis E
Herpes (neonatal)
Legionellosis (acute disease)
Malaria
Mumps
Pertussis
Salmonellosis
Shigellosis
Syphilis[1]
Tetanus
Tuberculosis[2]
Typhoid Fever

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)
Blastomycosis
Campylobacteriosis
Chlamydial infection[1]
Coccidioidomycosis
Cryptococcosis
Cryptosporidiosis
Cyclosporiasis
Dengue
Ehrlichiosis
Enterococcus, Vancomycin Resistant [(VRE), invasive disease]
Giardia
Gonorrhea[1]
Hansen Disease (leprosy)
Hepatitis B (carriage, other than in pregnancy)
Hepatitis C (acute illness)
Hepatitis C (past or present infection)
Human Immunodeficiency Virus (HIV Syndrome infection)
Listeria
Lyme Disease
Lymphogranuloma Venereum[1]
Psittacosis
Rocky Mountain Spotted Fever (RMSF)
Staphylococcus Aureus, Methicillin/Oxacillin Resistant[(MRSA), invasive infection]
Staphylococcal Toxic Shock Syndrome
Streptococcal disease, Group A (invasive disease)
Streptococcal disease, Group B (invasive disease)
Streptococcal Toxic Shock Syndrome
Streptococcus pneumoniae, penicillin resistant [DRSP]), invasive infection]
Streptococcus pneumoniae (invasive infection in children < 5 years of age)
Transmissible Spongiform Encephalopathies
Trichinosis
Varicella (chickenpox)
Vibrio Infections (other than cholera)

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

Cancer
Complications of Abortion
Congenital Hypothyroidism[3]
Galactosemia[3]
Hemophilia[3]
Heavy Metal (Arsenic, Cadmium, Mercury) Exposure and/or Poisoning (All ages)
Lead Poisoning and/or Poisoning (All ages)
Pesticide-Related Illness or Injury (All ages)
Phenylketonuria[3]
Reye's Syndrome
Severe Traumatic Head Injury
Severe Undernutrition (severe anemia, failure to thrive)
Sickle Cell Disease (newborns)[3]
Spinal Cord Injury
Sudden Infant Death Syndrome (SIDS)

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 web base at *https://ophrdd.dhh.state.la.us.*
[1]Report on STD-43 form. Report cases of syphilis with active lesions by telephone.
[2]Report on CDC72.5 (f.5.2431) card.
[3]Report to the Louisiana Genetic Diseases Program Office by telephone at (504) 219-4413 or facsimile at (504) 219-4452.

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