



# Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section

P.O. Box 60630, New Orleans, LA 70160 - Phone: (504) 219-4563

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

Infectious Disease Epidemiology Main Webpage

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



May-June 2009

Volume 20 Number 3

## Meningococcal Disease Region 7\*, Louisiana February, 2009

*Grace Ejigiri, MPH*

In February 2009, the Office of Public Health (OPH) identified a cluster of four cases of meningococcal disease in Region 7. Meningococcal disease is an invasive infection caused by the *Neisseria meningitidis* bacteria. Meningococcal disease usually manifests as meningitis and or meningococcemia. *N. meningitidis* are part of normal respiratory flora and colonize mucosal surfaces of the nasopharynx. The majority of carriers are asymptomatic. In some carriers the bacteria can overwhelm immune responses and enter the bloodstream leading to systemic disease.

Meningococcal bacteria are transmitted through direct contact with large droplet respiratory secretions from patients or asymptomatic carriers. The infection can progress rapidly and result in shock, coma and/or death. The U.S. case fatality rate is reported to be between ten percent and fourteen percent. Of those that recover, eleven percent to nineteen percent have serious sequelae including, hearing loss, neurological symptoms, or loss of limbs.

The incidence rate of meningococcal disease in Louisiana ranges from one to two cases per 100,000 population per year and cases usually peak during the first quarter of the year (January to March). There are thirteen serogroups of *N. meningitidis*; serogroups B, C and Y are most commonly reported in Louisiana. All four cases described in this summary were serogroup C *N. meningitidis*.

### Investigation

OPH was initially notified when a health unit nurse reported

*Continued on page 2*

\* Map of Regions - page 7

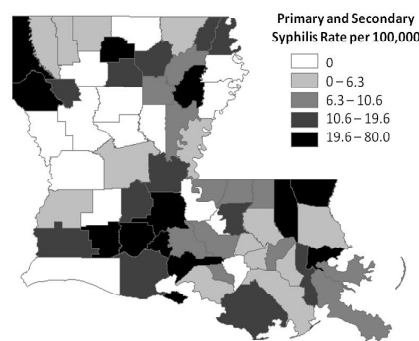
## Sexually Transmitted Disease Update - Louisiana, 2007-2008

*Lisa Longfellow, MPH*

Sexually Transmitted Disease (STD) rates in Louisiana consistently rank among the highest in the nation\*\*. The state holds the highest rate in the country for primary and secondary syphilis at 533 cases in 2007, with a rate of 12.4 per 100,000 population. The national rate was 3.8 per 100,000 population. The report also ranks the sixty-one counties within the nation with the largest number of cases for 2007. Several Louisiana parishes (counties) were included: Orleans, twenty-third (117 cases); East Baton Rouge, thirty-eighth (70 cases); Lafayette, forty-fifth (56 cases); Tangipahoa, fifty-third (42 cases); Jefferson, fifty-ninth (36 cases).

Louisiana also holds the highest rate in the country for congenital syphilis at thirty-six cases, with a rate of 55.1 per 100,000 live births. The national rate is 10.5 per 100,000 live births. In 2008, primary and secondary syphilis cases reported in Louisiana increased to 707 and congenital syphilis cases decreased to twenty-six. (Figure 1)

**Figure 1:** Primary and secondary syphilis case rates by parish - Louisiana, 2008



In 2007, the state rose to have the second highest rate in the country (from third place in 2006) for gonorrhea at 11,137 cases, with a rate of 259.7 per 100,000 population. The national rate was 118.9 per 100,000 population. Among the sixty-nine counties in the U.S. with the highest number of cases, Orleans was in forty-ninth place (1,529 cases), Caddo in fifty-first place (1,496 cases), and East Baton Rouge in sixty-second place (1,229 cases).

*Continued on page 2*

\*\* Excerpted from the Center for Disease Control and Prevention (CDC) 2007 STD Surveillance Report. The full report may be found at [http://www.cdc.gov/nchstp/std/Reports\\_Publications/pub\\_and\\_rpts.htm](http://www.cdc.gov/nchstp/std/Reports_Publications/pub_and_rpts.htm)

### Contents

Meningococcal Disease Region 7* - Louisiana - February, 2009 .....	1
Sexually Transmitted Disease Update - Louisiana, 2007-2008 .....	1
Examining the Burden and Mortality of Asthma Among Adult Racial Groups - Behavioral Risk Factor Survey - Louisiana, 2006 .....	3
Announcements .....	4
First Analysis of Birth Defects Monitoring Network Surveillance Data - Louisiana, 2005 .....	4
Louisiana Fact .....	6

## Sexually Transmitted... Continued from page 1

Louisiana had the seventh highest rate in the country for chlamydia at 19,362 cases, with a rate of 451.6 per 100,000 population. The national rate was 370.2 per 100,000 population. No Louisiana parishes were listed among the top fifty-three counties ranked in the report. In 2008, gonorrhea cases reported in Louisiana decreased to 9,455 and chlamydia cases increased to 22,659. (Figures 2 and 3)

Figure 2: Gonorrhea case rates by parish - Louisiana, 2008

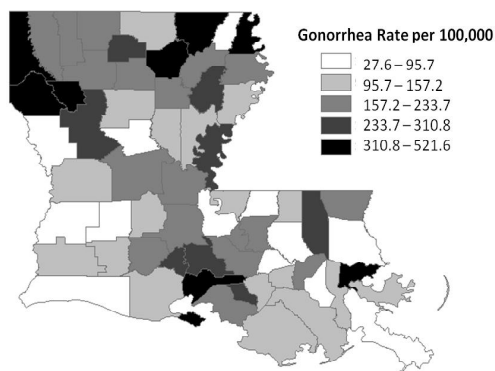
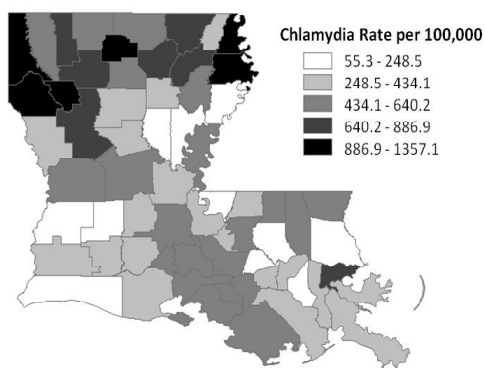


Figure 3: Chlamydia case rates by parish - Louisiana, 2008



This may be an indicator that although screening decreased following Hurricane Katrina, it has improved in the last two years. Because most people with chlamydia do not have symptoms, screening programs are very important in its detection. Before Hurricane Katrina in August 2005, Louisiana was the third highest for chlamydia with the greatest number of cases usually from the New Orleans area. In 2006, the state's rank dropped to thirteen. The decrease may have been because of a combination of the following two reasons:

- People were not screened either in New Orleans or wherever they had relocated - in many cases out-of-state.
- There were not enough providers doing screening in the New Orleans area; for example the STD clinic did not reopen until September, 2006 and the Family Planning clinic did not reopen until December, 2007.

Over twenty percent of adults in Louisiana have not graduated from high school and 19.3% are living in poverty. In addition, many areas of the state are designated as health professional shortage areas. A report by Louisiana State University's Public Policy Research Lab estimated that the number of uninsured residents in Louisiana as of autumn, 2006 was 657,027. Without improvements in social determinants of health including poor access to health care, stigma, discrimination, homophobia and poverty, it will be very difficult to decrease STD rates in the state.

For more information, please contact Ms. Longfellow at (504) 219-4470 or email [lisa.longfellow@la.gov](mailto:lisa.longfellow@la.gov).

## Meningococcal Disease... Continued from page 1

to the Region 7 Epidemiologist that she had received a call about possible meningitis cases among students at a local school. Region 7 OPH began the investigation and identified four confirmed cases. Pulse Field Gel Electrophoresis (PFGE) was performed by the OPH Central Laboratory to further characterize the serogroup strain. PFGE patterns of the four isolates were identical.

### Case 1

A twenty-one year-old Region 7 resident was admitted to a local hospital after several days of fever, chills, myalgia and cough. The patient was treated and discharged after a three-day hospital stay with no further complications. The disease onset was the earliest of the four, however the clinical presentation was mild and not that of typical meningitis. It took five days for a slow growing culture to confirm the diagnosis of *N. meningitidis*.

### Case 2

An eighteen year-old student that had complained of fever, back pain and headache, (petechial rash was later noted), was rushed by ambulance to local hospital where he expired shortly after arrival. The patient experienced fulminant disease and the cause of death was Waterhouse-Friderichsen syndrome due to *N. meningitidis*.

### Case 3

A thirteen year-old student and contact of Case 2 was admitted to the Pediatric Intensive Care Unit after complaints of muscle pain, dizziness, fatigue and rash. The patient had attended a church sleepover a few days prior to symptom onset. The patient experienced infection-related sequelae, but recovered and was eventually released from the hospital. CSF and blood cultures confirmed *N. meningitidis*.

### Case 4

A fifteen year-old relative of Case 3 was identified as a close contact and prescribed antibiotic prophylaxis (that the patient had not started taking) when symptoms developed. The patient was seen in an Emergency Department with fever and vomiting, treated and discharged the same day. Blood culture later confirmed *N. meningitidis*.

## Public Health Intervention

All cases had either a social or familial relationship. Anti-

### Louisiana Morbidity Report

Volume 20 Number 3

May-June 2009

The Louisiana Morbidity Report is published bimonthly by the Infectious Disease Epidemiology Section of the Louisiana Office of Public Health to inform physicians, nurses, and public health professionals about disease trends and patterns in Louisiana. Address correspondence to Louisiana Morbidity Report, Infectious Disease Epidemiology Section, Louisiana Department of Health and Hospitals, P.O. Box 60630, New Orleans, LA 70160.

Assistant Secretary, OPH

M. Rony Francois, MD MSPH PhD

State Epidemiologist

Raoult Ratard, MD MPH

Editors

Susanne Straif-Bourgeois, PhD MPH  
Theresa Sokol, MPH  
Rosemarie Robertson, BS MT(C) CNMT

Layout & Design

Ethel Davis, CST

otic prophylaxis was recommended for all close contacts of each case. (Close contacts include household members, child care center contacts and intimate social contacts or healthcare workers who were exposed to oral secretions. Household and other close contacts have a higher risk for carriage and these persons should receive antibiotic prophylaxis to eliminate carriage. Antibiotic prophylaxis is given to reduce the risk of developing disease, but does not prevent contacts from acquiring the infection nor does it treat current infection. Contacts are told to be aware of symptoms of meningococcal disease and see their health care provider if they develop symptoms.) Antibiotic prophylaxis was also recommended for attendees of the church sleepover. (Two of the confirmed cases attended the sleepover.) Additionally, because three of the cases in this cluster were students at the same school, a decision was made to conduct an immunization campaign for the students of the school.

Quadrivalent meningococcal conjugate vaccine (MCV4) is recommended for routine vaccination against meningococcal disease

for all persons eleven to eighteen years of age and persons two to fifty-five years of age who are at increased risk for meningococcal disease. The vaccine is effective against *N. meningitidis* serogroups A, C, Y and W-135. A total of 158 vaccinations were given at the school. Additionally, OPH convened a town meeting to provide information about meningococcal disease, address residents' concerns and answer questions.

Immediate identification of cases and subsequent notification of close contacts is critical so that proper control measures can be implemented. When OPH was notified of these cases, intervention was rapid and complete. Within twenty-four hours, contact prophylaxis was underway, a town meeting was held and an immunization campaign was planned. Communication about the risk of disease among close contacts was well-understood and caused the relative of one of the cases to seek medical attention early and avoid complications.

For references or more information, please contact Grace Ejigiri at [ogechigrace.ejigiri@la.gov](mailto:ogechigrace.ejigiri@la.gov) or call (504) 219-4544.

## Examining the Burden and Mortality of Asthma Among Adult Racial Groups - Behavioral Risk Factor Survey - Louisiana, 2006

Todd Griffin MSPH

### Introduction

Asthma is a chronic illness which is a significant health burden for the residents of Louisiana and the United States. The cause of asthma is unknown and a cure currently does not exist. The appropriate management of asthma can prevent symptoms and attacks, reduce the time missed from work or school and allow unrestricted participation in physical activities. According to the Centers for Disease Control and Prevention (CDC) asthma surveillance report, African-Americans within the U.S. were two to six times more likely to die from an asthma related event when compared to Caucasians. The purpose of this report is to compare the results of the Adult Asthma History Module from the 2006 Behavioral Risk Factor Surveillance System (BRFSS) for differences in self management and burden of asthma among racial groups within the state of Louisiana.

### Methodology

The BRFSS is a randomized telephone survey of adults aged eighteen years and above. Established in 1984 by the CDC, it is a state-based system of health surveys that collects information on health risk behaviors, preventive health practice and health care access primarily related to chronic disease and injury. In 2006, Louisiana elected to incorporate the Adult Asthma History optional module within the BRFSS.

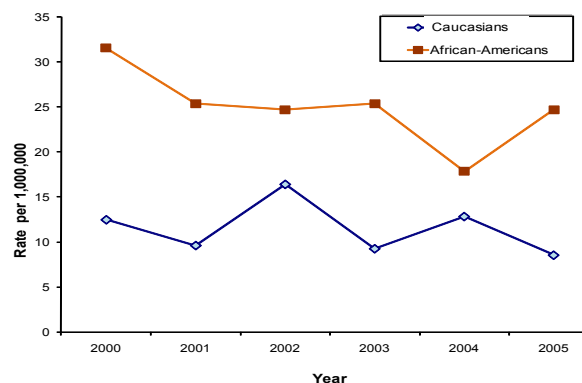
The Adult Asthma History module comprises a series of questions for respondents who have indicated that they have been diagnosed with asthma by a healthcare professional at some point in their lives. The questions within the module cover sleep deprivation, asthma attacks within the year, use of inhalers, physical activity limitations, age of asthma diagnosis, emergency department (ED) visits and urgent care. The prevalence of current asthma was calculated based on the results of the 2006 BRFSS results in Louisiana.

The mortality rates for asthma-related events for the years 2000 to 2005 were also included in this study to compare for differences in racial groups. The mortality rates were calculated using the death records provided by the Louisiana Center for Health Statistics. This study analyzed data from the 2006 BRFSS and 2000-2005 death records using SAS version 9.1.3 software.

### Results

When comparing the mortality rates for African-Americans and Caucasians for the years 2000-2005, African-Americans were more likely to die from an asthmatic event when compared to Caucasians. (Figure 1)

Figure 1: Asthma mortality rates by race, BRFSS - Louisiana, 2000-2005\*



\* Rates based on the cause of death as specified by the ICD-10 Codes (asthma, predominately allergic asthma, non-allergic asthma, mixed asthma, unspecified asthma & asthmaticus).

There were no differences between current asthma and asthma diagnosis prevalence for African-Americans and Caucasians. The  
*Continued on page 4*



## Examining the Burden and Mortality... Continued from page 3

diagnosis prevalence for African-Americans and Caucasians. The distribution of ED visits and urgent care due to asthma-related events among racial groups show that African-Americans were more likely to visit the ED and receive urgent care for asthma when compared to Caucasians. (Table 1)

**Table 1:** Asthma burden and clinical factors by race\* - BFRSS Louisiana, 2006

Asthma Burden	Race	
	Caucasian	African-American
Asthma Diagnosis	10.9%	10.6%
Current Asthma	6.1%	5.8%
At least One Visit to ED / Year	16.3%	32.9%
Urgent Care / Year	32.8%	41.8%
Asthma Check up / Year	59.8%	57.4%
Asthma Attack / Year	56.9%	38.1%
<b>Use of Inhaler / Month</b>		
1-14 Times	37.2%	33.7%
15-59 Times	13.6%	12.7%
60-99 Times	1.6%	0.4%
100 or More Times	0.1%	2.6%
None	47.2%	51.6%
<b>Asthma Medication / Month</b>		
1-14 Days	21.2%	24%
15-30 Days	38%	30%
None	40.6%	45.8%
<b>Sleep Deprivation / Month</b>		
1-10 Days	33%	51%
>10 Days	6.7%	10.2%
None	60.2%	38.6%
Mean Number of Days of Limited Physical Activity / Year	6.6	12.1

\* Results are based on respondents that indicated that he or she either had been diagnosed with asthma at some point in their life by a healthcare professional or currently has asthma; percentages are based on weighted estimates and specific for each category.

### Conclusions:

Although there were virtually no differences in the prevalence of asthma among Caucasians and African-Americans within the state, African-Americans are more likely to die from an asthma related event when compared to Caucasians. Asthma is not within the top ten leading causes of death within the state of Louisiana but can still have a significant impact on the number of days missed from school or work for children and adults. African-Americans were more likely to report having problems with sleep and missing more days of work or school. There were some observed differences when comparing the ED visits and seeking asthma-related treatment from a healthcare provider for the worsening conditions (urgent care). Caucasians were more likely to report to having an asthma attack within the year when compared to African-Americans.

One of the goals of the Healthy People 2010 initiative is to reduce deaths due to asthma. The total number of deaths from asthma for Louisiana residents for the six-year period from 2000 to 2005 was 415 (an average of 69 per year). Based on the results of this report, it is difficult to determine the reasons why Louisiana residents have died from asthma. A future recommendation would be to collect information that focuses more on the recognition of symptoms and the knowledge of what can trigger asthma attacks in children and adults. Also information pertaining to asthmatics that have not received disease self-management training could be collected.

For references or more information, contact Todd Griffin at (225) 342-2027 or email [todd.griffin@la.gov](mailto:todd.griffin@la.gov)

## Announcements

June 25, 2009

### New Date for "1 in 4" Hepatitis Awareness Project

<http://www.dhh.louisiana.gov/offices/miscdocs/docs-249/hepatitis/Hep%20Test%20Day1.pdf>

The Sentinel Provider Network (SPN) in Louisiana is part of the Centers for Disease Control and Prevention (CDC) Influenza Surveillance System. We are currently recruiting physicians to participate in Outpatient Illness Surveillance. For more information or to become a Sentinel Site, please contact Julie Hand at (504)219-4542 or email [julie.hand@la.gov](mailto:julie.hand@la.gov).

### Updates: Infectious Disease Epidemiology Webpage

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

**ANNUAL REPORTS:** Malaria

**EPIDEMIOLOGY MANUAL:** *Clostridium difficile* in Long Term Care; Rabies Bat Euthanasia

**FOOD:** Alfalfa Sprouts and Salmonella Saintpaul; Pistachio Product Recalls; Salmonella Links; Swine Flu and Pork Products

**INFLUENZA:** Link to H1N1 (Swine Flu) Information; Weekly Report LOUISIANA MORBIDITY REPORT: Index 1983-1985

**REGIONAL INFORMATION:** Regions VI and IX Louisiana 2004 Behavioral Risk Factor Surveillance System Summary

**VETERINARY INFORMATION:** Animal Disease Reporting Form; Antimicrobial Sensitivity Profiles and Trends, Canine, Equine and Feline; Microbiological Makeup of Common Veterinary Infections - Equine; Multi-Drug Resistance Surveillance; Trichomoniasis Reporting Form

## First Analysis of Birth Defects Monitoring Network Surveillance Data Louisiana, 2005

Kay Webster, MPH; Tri Tran, MD MPH; Susan Berry, MD MPH

### Background

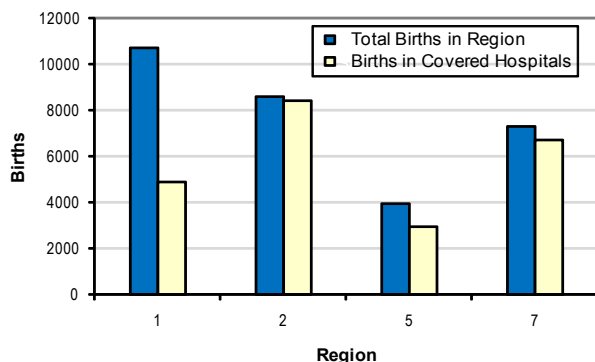
The Louisiana Birth Defects Monitoring Network (LBDMN) is a Department of Health and Hospitals (DHH) Office of Public Health program that operates within the Children's Special Health Services unit. LBDMN is a population-based surveillance system that tracks birth defects in Louisiana children from birth to two years of age. LBDMN's case definition includes major structural, functional and genetic birth defects; relatively minor conditions that pose no significant health or social burdens are excluded.

In 2005, LBDMN began active data collection in four areas of the state: DHH Region 1 (greater New Orleans); DHH Region 2 (Baton Rouge metropolitan); DHH Region 5 (Lake Charles/southwest Louisiana); DHH Region 7 (Shreveport/northwest Louisiana).

Compared to other regions, coverage of Region 1 resident births was incomplete for 2005 largely due to circumstances related to Hurricane Katrina. Many Region 1 birthing hospitals remained closed for extended periods of time, limiting LBDMN staff access to birth records. In addition, countless medical records were damaged or destroyed.

Overall, LBDMN achieved a coverage rate of 42.5% of 2005 births by birthing hospital surveillance. Information was also collected at Children's Hospital in New Orleans and from various pediatric specialty clinics located at birthing hospitals. Including these facilities, because they serve children from all over the state, further increased 2005 surveillance coverage. However, this additional amount cannot be calculated with available data. (Figure 1)

Figure 1: LBDMN Surveillance Coverage - Louisiana, 2005



### Infant and Maternal Characteristics

There were 845 case children in the 2005 dataset (62% male; 38% female). Information was collected on the following variables: maternal race and ethnicity; maternal age; low birth weight and prematurity. (Tables 1, 2 and 3)

Table 1: Maternal race and ethnicity - LBDMN, 2005

Variable	Percent
<b>Race</b>	
White	63.8
Black	33.3
Other	2.1
<b>Ethnicity</b>	
Hispanic	3.3

Table 2: Maternal age LBDMN, 2005

Age	Percent
< 20 Years	14.6
20 - 34 Years	72.8
35+ Years	12.3

Table 3: Birth weight and prematurity - LBDMN, 2005

Birth Weight/Prematurity	Percent	95% CI*
Very Low Birth Weight (< 1500 Grams)	9.7	7.7, 11.7
Low Birth Weight (1500–2499 Grams)	19.4	16.7, 22.1
Very Preterm Birth (<32 Weeks GA**)	11.2	9.1, 13.4
Preterm Birth (32–36 Weeks GA)	19.6	17.0, 22.3

\* CI: Confidence Interval

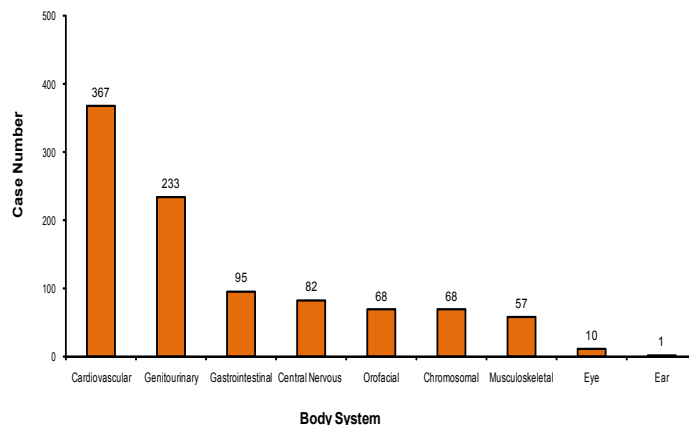
\*\* GA: Gestational Age

Information was also collected on maternal exposures and risk markers. During the index pregnancy, ten percent of mothers reported smoking, six percent of mothers had hypertension (includes both pre-existing and pregnancy related), and three percent of mothers had diabetes (includes both pre-existing and pregnancy related).

### Analysis Results

Analyses were conducted to determine the frequencies of broad categories of birth defects as well as discrete diagnoses. The categories correspond to the various body systems that are affected by birth defects. Cardiovascular malformations were by far the most common with 367 affected case children. (Figure 2)

Figure 2: Birth defect cases\* by body system - LBDMN, 2005



\*These are not unduplicated counts; children with multiple birth defects may be included in more than one category.

Thirty-three percent (19,990 live births) of total Louisiana births for 2005 were to residents of Regions 2, 5 and 7. Due to the high level of surveillance coverage for these three regions (>90%), it was possible to combine the regional data and calculate rates of specific birth defects. Birth defects data was linked with Vital Records birth certificate data for 2005 and infant death data for 2005–2006. SAS version 9.1 was used to calculate frequencies of birth defects by body system and to estimate rates per 10,000 live births with 95% confidence intervals (CI) for the most common diagnoses. (Table 4)

Table 4: Ten most common diagnoses and rate per 10,000 births of all birth defects, Regions 2, 5 and 7 - LBDMN, 2005

Rank	Diagnosis	Case Number*	Rate	95% CI
1	Atrial Septal Defect	128	64.0	52.9, 75.1
2	Ventricular Septal Defect	88	44.0	35.3, 54.2
3	Patent Ductus Arteriosus	68	34.0	26.4, 43.1
4	Hypospadias/Epispadias	61	30.5	23.3, 39.2
5	Obstructive Genitourinary Defect	57	28.5	21.6, 36.9
6	Hypertrophic Pyloric Stenosis	38	19.0	13.5, 26.1
7	Down Syndrome	25	12.5	8.1, 18.5
8	Cleft Lip With or Without Cleft Palate	25	12.5	8.1, 18.5
9	Hydrocephalus	23	11.5	7.3, 17.3
10	Microcephalus	22	11.0	6.9, 16.7
<b>All Birth Defects</b>		<b>470</b>	<b>235.1</b>	<b>213.9, 256.4</b>

\*These are not unduplicated counts; children with multiple birth defects may be included in more than one category.

National estimates of prevalence at birth are available for two of the most common diagnoses seen in LBDMN 2005 data, Down syndrome and cleft lip with or without cleft palate. (Table 5)

Table 5: National versus Region 2, 5 and 7 rates for Down syndrome and cleft lip with or without cleft palate - LBDMN, 2005

	LBDMN Regions 2, 5 and 7 Rate	National Estimate (per 10,000 Live Births)
Down Syndrome	12.51	13.65
Cleft Lip With or Without Cleft Palate	12.51	10.48

Continued on page 6

*First Analysis of Birth Defects... Continued from page 5*

Infants of White mothers were more likely to have a birth defect when compared to those of Black mothers. Also, infants of older mothers (35+ years) were more likely to have a birth defect than infants of mothers in the twenty to thirty-four year-old age group. (Table 6)

**Table 6:** Odds ratios (OR) of birth defects by maternal characteristics - LBDMN, 2005

Variable	OR	95% CI*
<b>Race</b>		
White	1.50	1.24, 1.82
Black	1.0	—
<b>Age (in Years)</b>		
Less Than 20	1.11	0.86, 1.44
20-34	1.0	—
35+	1.48	1.12, 1.97

\* CI: Confidence Interval

Infants with birth defects were more likely to be born preterm or of low birth weight and were more likely to die within their first year of life. (Table 7)

**Table 7:** Odds ratios (OR) of adverse birth outcomes for infants with birth defects versus infants without birth defects - LBDMN, 2005

Birth Outcome	OR	95% CI*
Very Preterm Birth (GA** <32 weeks)	6.09	4.51, 8.22
Preterm Birth (GA 32–36 weeks)	2.69	2.15, 3.37
Very Low Birth Weight (< 1500 grams)	5.99	4.36, 8.24
Low Birth Weight (< 2500 grams)	3.12	2.49, 3.91
Infant Death	8.77	5.90, 13.04

\* CI: Confidence Interval

\*\* GA: Gestational Age

### Limitations

Because the case definition includes children from birth to two years of age, the 2005 dataset was still preliminary when these analyses were conducted (summer 2008). “Age out” for 2005 births was December 31, 2008; at that time 2005 data were considered final. This dataset was greater than 95% complete at the time of analysis.

The data summarized in this report were collected by active surveillance of birth defects among children born in 2005 in DHH Regions 1, 2, 5 and 7. These results are descriptive of that population only and cannot be used to draw conclusions about birth defects in other areas of the state or for the state of Louisiana as a whole.

### Conclusions

Louisiana currently has one of the highest infant mortality rates in the nation (10 deaths per 1,000 live births). Vital Records data show that birth defects are the second leading cause of infant death in Louisiana, accounting for about twenty percent of all infant deaths each year. It is clear that birth defects are an important piece of the infant mortality puzzle in this state and are a significant contributor to childhood morbidity and disability as well. Further investigation is warranted; however, without a statewide surveillance system the

full impact of birth defects on Louisiana’s children and families cannot be measured. As of this writing, LBDMN covers more than seventy percent of the state and is projected to be statewide by the end of 2010.

For references or more information, please contact Kay Webster at (504) 568-8871 or email [kay.webster@la.gov](mailto:kay.webster@la.gov).

### Louisiana Fact

*Cooperation Between City, State and Federal Governments Beats The Plague – Louisiana, 1914*

*In the early 1900s the Bubonic Plague that was causing death in San Francisco, made its way to New Orleans. The existence of plague-infected rats in the wharves along the riverfront was detected by the Board of Health. As soon as the first human case was identified in June, 1914 the Orleans Parish Medical Society, in conjunction with state and federal partners, opened up a series of frank discussions about the plague and how to keep the disease under control. The United States Public Service took the lead in eradicating the infection by rat-proofing the wharves, homes and businesses. Rat catchers were baiting most of the city, labeling and transporting caught rats to labs for testing. The local newspapers gave their support by backing and printing the guidelines set forth by city, state and federal officials. The July 1, 1914 issue of the New Orleans Times-Picayune newspaper invited the public to “LET EVERY HUMAN HAND BE RAISED AGAINST RATS, THE CITY’S MENACE” giving the public a role in the destruction of this plague.*

*From June, 1914 to September, 1915 a total of twenty-eight cases occurred with ten deaths. New Orleans had no disturbance in business or commerce. The campaign against the rats continued until 1918, when the rat population was reduced to a low number.*

*The policy of publicity and cooperation between the city, state and federal government in connection with the plague led to a strong boost in confidence in public health from other states. This model of cooperation was so successful that other cities, including New York City, adopted the lessons from New Orleans.*

*For references please email [aristide.marshall@la.gov](mailto:aristide.marshall@la.gov).*

**Men and rat-catching equipment - New Orleans, LA.  
circa 1914-1920**



*Image From The National Library of Medicine*

## LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

March - April, 2009

Table 1. Disease Incidence by Region and Time Period

HEALTH REGION										TIME PERIOD					
DISEASE		1	2	3	4	5	6	7	8	9	Mar-Apr	Mar-Apr	Jan-Apr	Jan-Apr	%
											2009	2008	Cum	Cum	%
Vaccine-preventable															
Hepatitis B	Cases	0	0	2	1	0	0	2	0	1	6	15	14	31	-54.8
	Rate <sup>1</sup>	0	0	0.5	0.2	0	0	0.4	0	0.3	0.1	0.3	0.3	0.7	NA*
Measles		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Mumps		1	0	0	0	0	0	0	0	0	1	0	2	0	NA*
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis		0	7	0	3	4	1	0	0	4	19	3	35	4	775.0
Sexually-transmitted															
HIV/AIDS	Cases <sup>2</sup>	9	9	2	6	1	2	1	5	2	37	194	185	362	-49.0
	Rate <sup>1</sup>	0.9	1.6	0.5	1.1	0.4	0.7	0.2	1.4	2.0	0.8	4.4	4.2	8.3	NA*
Chlamydia	Cases	325	214	175	236	55	120	499	324	185	2143	3902	7029	6695	5.0
	Rate <sup>1</sup>	46.9	33.4	43.6	41.1	19.4	40.1	93.9	92.7	36.0	49.9	90.89	163.9	155.94	NA*
Gonorrhea	Cases	61	42	28	75	3	46	115	73	33	478	1254	2152	1741	23.6
	Rate <sup>1</sup>	8.8	6.6	7.0	13.1	1.1	15.4	21.6	20.9	6.4	11.1	28.1	50.2	39.0	NA*
Syphilis (P&S)	Cases	19	4	1	15	7	0	25	5	12	89	87	224	161	39.1
	Rate <sup>1</sup>	2.7	0.6	0.3	2.6	2.5	0	4.7	1.4	2.3	2.1	1.9	5.2	3.6	NA*
Enteric															
Campylobacter		0	0	0	0	0	0	0	0	3	3	8	14	23	-39.1
Hepatitis A	Cases	0	0	0	0	0	0	0	0	0	0	4	2	5	NA*
	Rate <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0.1	0	0.1	NA*
Salmonella	Cases	12	3	2	12	12	1	0	3	6	51	80	112	143	-21.7
	Rate <sup>1</sup>	1.2	0.5	0.5	2.3	4.5	0.3	0	0.9	1.6	1.2	1.9	2.6	3.3	NA*
Shigella	Cases	0	1	1	1	7	1	0	0	2	13	113	59	161	-63.4
	Rate <sup>1</sup>	0	0.2	0.3	0.2	2.6	0.3	0	0	0.5	0.3	2.6	1.4	3.7	NA*
Vibrio cholera		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other		0	0	1	0	0	0	0	0	1	2	5	2	6	NA*
Other															
<i>H. influenzae (other)</i>		1	0	0	0	1	1	0	0	0	3	3	7	5	NA*
<i>N. Meningitidis</i>		0	0	1	0	0	0	0	0	0	1	4	8	13	-38.4

<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.

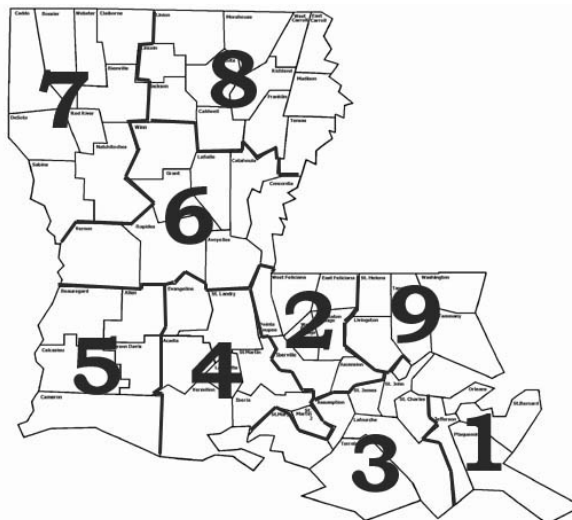
\* Percent Change not calculated for rates or count differences less than 5

Table 2. Diseases of Low Frequency (January-April, 2009)

Disease	Total to Date
Legionellosis	0
Lyme Disease	0
Malaria	0
Rabies, animal	0
Varicella	13

Table 3. Animal rabies (March-April, 2009)

Parish	No. Cases	Species
	0	





DEPARTMENT OF HEALTH AND HOSPITALS  
OFFICE OF PUBLIC HEALTH  
P.O. BOX 60630 NEW ORLEANS LA 70160

PRSRT STD  
U.S. POSTAGE  
PAID  
Baton Rouge, LA  
Permit No. 1032

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

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	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) <sup>5</sup>	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.

This public health document was published at a total cost of \$1,250.00. Seven thousand copies of this public document were published in this first printing at a cost of \$1,250.00. The total cost of all printings of this document, including reprints is \$1,250.00. This document was published by Moran Printing, Inc., 5425 Florida Blvd., Baton Rouge, LA 70806, to inform physicians, hospitals, and the public of current Louisiana morbidity status under authority of R.S. 40:36. This material was printed in accordance with the standards for printing for state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of Louisiana Revised Statutes.