Kathleen Babineaux Blanco
GOVERNOR

Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 (504) 568-5005
www.oph.dhh.state.la.us/infectiousdisease/index.html

Department of HEALTH and HOSPITALS
Frederick P. Cerise, M.D., M.P.H.
Secretary

July-August 2004 **Volume 15 Number 4**

Cholera: Forgotten, But Not Gone

Erin Brewer, MD MPH

While Louisiana currently is spared the massive cholera epidemics that befall some other parts of the world, our state does have endemic *Vibrio cholerae,* the transmission of which can be prevented only through knowledge of the epidemiology of cholera and public education regarding risk of contracting the disease. From 1817 to the present, *V. cholerae* has caused seven pandemics, characterized by hundreds of thousands of cases and thousands of deaths in a given year. While these epidemics are worldwide, we in Louisiana do not experience such dramatic cholera outbreaks. Here, between 1980 and 2001, there was an annual average of thirty to sixty cases of disease caused by all *Vibrio* species. *V. cholerae* serotype O1 biotype El Tor, (similar but not identical to the current pandemic strain), caused less than 3% of all Vibrio cases or, one to two cases per year. More importantly, *V. cholerae* non-O1, non-O139 caused 23% of all Vibrio cases or, seven to fourteen cases per year - during that same period of time. Most of these cases are reported in parishes in the southern half of the state. (The state public health laboratory confirms all reported *Vibrio* cases with cultures.)

We have known since the 1970's that *V. cholerae* serotype O1 biotype El Tor is endemic to Louisiana waters. Indeed, it is endemic to the Gulf of Mexico of the United States of America. We also know that *V. cholerae* non-O1, non-O139 is endemic to Louisiana. Our natural environment is the perfect breeding ground for the proliferation of these organisms as the surface waters are above 20°C

(Continued on page 4)

Content

Are There More Deaths Due to Invasive Staphylococcal Infection?

Theresa M. Sokol, MPH

Community-associated strains of methicillin-resistant *Staphylococcus aureus* (MRSA) became increasingly prevalent during the 1990s. Community-associated MRSA is sensitive to more antibiotics than the hospital-associated strains; however, CA-MRSA is thought to be more virulent. Outbreaks of CA-MRSA are now very common in settings as diverse as families, day care centers, schools, sports teams, offices and prisons. In addition, severe infections and even fatalities related to CA-MRSA have been reported in the medical literature (MMWR 48(32); 707-710, 1999 Centers for Disease Control and Prevention).

Mortality causes listed on death certificates are coded according to the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD 10). These ICD 10 classifications include codes for severe infections due to *Staphylococcus aureus* and other Staphylococci. MRSA fatalities would be included in these codes.

The causes of death related to Staphylococci are presented in Table 1.

Table 1: Number of deaths caused by Staphylococci
Louisiana 1999-2002

Cause of Death	1999	2000	2001	2002
Cutaneous abscess, furuncle and carbuncle	0	2	5	2
Pneumonia due to Staphylococcus	42	36	24	16
Septicemia due to Staphylococci (aureus& other)	28	24	17	21
Staphylococcal infection, unspecified	10	1	3	6
Total	80	63	49	45

There is no apparent increase in mortality over the past four years. The Infectious Disease Epidemiology Section will continue monitoring the causes of mortality to detect any trend towards increasing mortality due to Staphylococci.

Louisiana Birth Defects Monitoring Network: The New Birth Defects Surveillance System for the State of LA

L. Kay Webster, MPH

The Louisiana Birth Defects Monitoring Network (LBDMN) is a new program of the Office of Public Health (OPH) that is in the early stages of implementation. LBDMN is housed in the OPH central office in New Orleans and operates within Children's Special Health Services (CSHS).

The mission of LBDMN:

- begin ongoing collection of data on birth defects in all Louisiana children under age three
- establish a central birth defects registry for the state
- provide information to the families of children identified as having birth defects on the available social, educational and medical services in their area
- analyze the data to determine if certain geographic regions in the state have a higher concentration of disabilities due to birth
- use the results of data analysis to guide birth defects education and prevention efforts

In June of 1999, Senate Concurrent Resolution No. 29 was passed, creating an eighteen-member task force to investigate the feasibility of birth defects surveillance in Louisiana. In July of 2000, OPH was awarded a three-year Centers for Disease Control and Prevention (CDC) grant to design and implement a birth defects surveillance program in the state. After almost two years of research and planning, the Birth Defects Task Force presented a report to the legislature in March of 2001 that indicated the need for birth defects surveillance in Louisiana. In May of 2001, Senate Bill 229 was signed into law by Governor Foster as Act 194 of 2001, officially establishing the Louisiana Birth Defects Monitoring Network. As required by the new law, in February 2002 a nine-member advisory board made up of consumers, physicians and public health professionals was appointed to advise OPH and guide the implementation of LBDMN.

Over the past two years the LBDMN Advisory Board and program coordinator have been working on rules and regulations that outline operational procedures for the surveillance system, particularly regarding such issues as access to information, privacy and confidentiality. The final rule will be published in the June 2004 issue of the *Louisiana Register*. When the rule takes effect on July 1, 2004, health care facilities that will be affected by this surveillance system will be contacted and procedures fully explained and clarified before OPH staff begins record review.

LBDMN is planning an active, population-based surveillance system. Rather than relying on data on reported conditions, this type of system will employ dedicated staff to find cases using active methods — a more accurate and comprehensive approach to

Table 1: Code List for Congenital Anomalies and Developmental Disorders

Diagnosis	ICD-9-CM Codes	CDC/BPA Codes
Central Nervous System		
Anencephalus	740.0–740.1	740.00–740.10
Spina bifida w/out anencephalus	741.0, 741.9 w/out 740.0–740.10	741.00–741.99 w/out 740.0–740.10
Hydrocephalus w/out spina bifida	742.3 w/out 741.0, 741.9	742.30–742.39 w/out 741.00–741.99
Encephalocele	742.0	742.00–742.09
Microcephalus	742.1	742.10
Eye		
Anophthalmia/ microphthalmia	743.0, 743.1	743.00–743.10
Congenital cataract	743.30–743.34	743.32–743.326
Aniridia	743.45	743.42
Ear		
Anotia/microtia	744.01, 744.23	744.01, 744.21
Cardiovascular		
Common truncus	745.0	745.00–745.01
Transposition of the great arteries	745.10, .11, .12, .19	745.10–745.19
Tetralogy of Fallot	745.2	745.20–745.21, 746.84
Ventricular septal defect	745.4	745.40–745.490 (excluding 745.498)
Atrial septal defect	745.5	745.50–745.59 (excluding 745.50)
Endocardial cushion defect	745.60, .61, .69	745.60–745.69
Pulmonary valve atresia and stenosis	746.01, 746.02	746.00–746.01
Tricuspid valve atresia and stenosis	746.1	746.10 (excluding 746.105)
Ebstein's anomaly	746.2	746.20
Aortic valve stenosis	746.3	746.30
Hypoplastic left heart syndrome	746.7	746.70
Patent ductus arteriosus (Include only if weight =>2500 grams or note if unable to exclude <2500 gram infants.)	747.0	747.00
Coarctation of aorta	747.10	747.10–747.19
Orofacial		
Cleft palate w/out cleft lip	749.0	749.00–749.09
Cleft lip w/ and w/out cleft palate	749.1, 749.2	749.10–749.29
Choanal atresia	749.0	748.00

Gastrointestinal		
Esophageal atresia/tracheoesophageal fistula	750.3	750.30–750.35
Rectal and large intestinal atresia/stenosis	751.2	751.20–751.24
Pyloric stenosis	750.5	750.51
Hirshsprung's disease (congenital megacolon)	751.3	751.30–751.34
Biliary atresia	751.61	751.65
Genitourinary		
Renal agenesis/hypoplasia	753.0	753.00–753.01
Bladder exstrophy	753.5	753.50
Obstructive genitourinary defect	753.2, 753.6	753.20–.29 – 753.60–.69
Hypospadias and epispadias	752.61, 752.62	752.600–752.627 (excluding 752.621)
Musculoskeletal		
Reduction defect, upper limbs	755.20–755.29	755.20–755.29
Reduction defect, lower limbs	755.30–755.39	755.30–755.39
Gastroschisis	756.79	756.71
Omphalocele	756.79	756.70
Congenital hip dislocation	754.30, .31, .35	754.30
Diaphragmatic hernia	756.6	756.610–756.617
Chromosomal		
Trisomy 13	758.1	758.10–758.19
Trisomy 18	758.0	758.00–758.09
Trisomy 21 (Down syndrome)	758.2	758.20–758.290
Other		
Fetus or newborn affected by maternal alcohol use	760.71	760.71
Amniotic bands	No code	658.80
Inborn error (yes/no)	No code	No code
Developmental disability (w/ or w/out birth defect)	No code	No code

public health surveillance. LBDMN staff will obtain information on suspected cases from various sources, including hospital discharge summaries, unit logs (e.g. neonatal intensive care unit, or NICU), surgery logs, and vital records. Currently, LBDMN is preparing to hire three birth defects investigators (BDIs) who will find cases of birth defects for the registry.To meet the case definition for inclusion as an entry in the registry, all of the following criteria must be met:

1. *There must be a major structural, functional, or genetic birth defect*. Major defects are generally those that can adversely affect the child's health and development. Children that have minor defects that pose no significant social burdens or health consequences will be excluded.
2. *The mother's state of residence at the time of the child's birth must be Louisiana*. Residence will be determined by the mother's hospital records, or if still in question, by vital records. The birth need not have occurred in Louisiana.
3. *The diagnosis must be made before the child's third birth day*.
4. *The child's gestational age at birth must be at least twenty weeks by the best available measure*. In the absence of such an estimate, the infant must have a birth weight of at least 350 grams.

Initially, LBDMN will collect data on a limited number of conditions and diagnoses (Table 1). These include the forty-five diagnoses that are commonly reported to the CDC, plus two additional data items for inborn error and developmental disabilities.

Why does Louisiana need a special program to monitor birth defects? Birth defects are the leading cause of infant death in the United States.

- One in 33 babies in the United States is born with a birth defect
- Birth defects account for roughly 1 out of every 5 infant deaths each year

Louisiana's infant mortality rate (IMR) is 10.2 per 1,000 live births, which is one and a half times the national figure of 6.8 per 1,000 live births. The rate of infant deaths can be reduced if birth defects are prevented.

In addition, tracking birth defects in Louisiana will help to determine how many of our children will have special health care needs and require special services as they grow and mature. At present, approximately 16% of children in Louisiana have special health care needs. This number is also considerably higher than the national figure, which is 13%.

Are birth defects occurring in Louisiana's children at a higher rate than in the United States overall? With a birth defects surveillance system in Louisiana, we can begin to collect the data that will help us answer this very important question.

For more information please contact Kay Webster, Program Coordinator, Louisiana Birth Defects Monitoring Network at (504) 568-8871 or kwebster@dhh.la.gov.

Louisiana Morbidity Report
Volume 15 Number 4 **July-August 2004**

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 ***Sharon Howard, MSW***

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***

Cholera: Forgotten, But Not Gone (Cont. from page 1)

(68°F) for much of the year, especially in the summertime. Predictably, the incidence of both types of cholera increases during the warm summer months. We see sporadic cholera cases in this state instead of large outbreaks.

On a worldwide basis, O1 cholera tends to cause epidemics or pandemics and non-O1, non-O139 cholera tends to be a slightly milder disease seen in individuals. Non-O1, non-O139 cholera does not have the same propensity to cause outbreaks. Because of this important public health difference, non-O1 cholera is often referred to as "gastrointestinal *Vibrio* disease" so as not to confuse it with the devastating disease classically known as cholera and caused by *V. cholerae* serotype O1. Of note, the endemic O1 cholera disease we see in Louisiana tends to occur sporadically similar to the non-O1 disease rather than in widespread fashion like the pandemic strain. Individuals at high risk of contracting either gastrointestinal disease include those who eat seafood, especially raw or undercooked oysters, shrimp, crabs or other shellfish, harvested from local waters and those who have recreational or occupational exposures to local waters.

Clinically, both types of cholera have a similar presentation - severe diarrheal disease with loss of large amounts of fluid containing sodium, bicarbonate and potassium. Usually, symptom onset begins a few hours to five days after ingestion of contaminated food or water. The infectious dose is thought to be high - 10^8 organisms, but can be lower - 10^5 organisms, if the host has decreased stomach acidity. Affected individuals are typically afebrile and often have the classic "rice-water" stool. Toxigenic strains tend to cause more severe clinical symptoms than do non-toxigenic strains. Besides gastroenteritis that comprises 70% of non-O1 cholera disease, *V. cholerae* non-O1, non-O139 also cause sepsis (20% of cases) and wound infections (10% of cases).

Proper treatment includes oral or intravenous rehydration with electrolyte replacement and is associated with a less than 1% case-fatality rate. Without treatment, the fatality rate is 50%. Appropriate antibiotic therapy, such as tetracycline, doxycycline or trimethoprim-sulfamethoxazole, can decrease the duration of symptoms as well as shedding of the organism. Antibiotic resistance to these medications as well as chloramphenicol, streptomycin and fluoroquinolones has been reported.

Diagnosis of cholera is made using stool culture. Thiosulfate-citrate-bile salts-sucrose (TCBS) agar is the best selective culture medium for isolating *V. cholerae*. Carey-Blair transport medium or alkaline-peptone water-enrichment medium can be used if sample processing will be delayed. The state public health laboratory also tests specimens for toxin production.

Health care providers who see patients with gastroenteritis, especially in the warm summer months, should attempt to elicit a history of shellfish consumption and/or occupational or recreational exposure. As with many food-borne illnesses, prevention plays an important role in disease control. A killed vaccine was developed in the late 1800's but protection lasted only about six months and the vaccine did not prevent the spread of cholera. New oral vaccines are more effective at preventing disease spread but are not available in this country. Given this, educating our patients about endemic cholera as the summer season begins, is our major means of prevention.

When There is a Suspicious Substance in the Mail……

Stephen J. Martin, Ph.D, Stacy Hall, MSN

Since October, 2001 there have been 1,315 samples tested for potential bioterrorism (BT) agents in the Office of Public Health Laboratories. Samples received from October 2001 through December 2002 comprise the majority of samples received (1,239 samples) – anthrax being the disease tested during that time frame. From January 2003 to May 2004, seventy-six samples were tested. Tests were carried out for anthrax, brucella, *Yersinia pestis*, ricin and tularemia on the samples, none which showed positive results. All isolates and/or environmental samples identified as presumptive positive for a BT agent would be reported within the Department of Health and Hospitals to law enforcement agencies.

All samples tested for BT agents had been collected via a law enforcement agency. At times, law enforcement has requested a suspension of testing by the laboratory after the specimen was received. This was usually because law enforcement received additional information that a BT agent is not involved (hoaxes).

A chain of custody form, as well as proper shipping forms, must be sent with the sample. (The chain of custody starts with the person collecting the specimen and must include everyone else who handles the specimen. There can be no gaps in the chain, ie, time periods unaccounted for in the documentation. Also the specimen must be kept under lock and key when stored.)

ANY material containing a select agent can only be transferred to another Centers for Disease Control and Prevention (CDC) approved select-agents facility with CDC approval. (Any material deemed as 'infectious' therefore, would not go back to law enforcement directly after the testing procedure was completed.) All specimens are autoclaved (sterilized) if they are sent to be incinerated. Any material that contains personably identifiable information is shredded or obliterated.

Trends in Antibiotic Sensitivity *

Christopher DuCoin, MPH candidate

* Based on the May-June 2003 Louisiana Morbidity Report

Introduction

Antibiotic resistance is an increasing problem. The 'Antibiotic Sensitivity Active Surveillance System' began in Louisiana with the collection of aggregate data in 2000 to track the emergence of antibiotic resistant organisms. This surveillance program, which allows the state to track and evaluate antibiotic resistance trends, monitors three pathogens: Drug resistant *Streptococcus pneumoniae* (DRSP), Methicillin resistant *Staphylococcus aureus* (MRSA) and Vancomycin resistant *Enterococcus* (VRE). The primary goal of the Antibiotic Sensitivity Active Surveillance System is to estimate the proportion of selected bacteria in the state that are resistant to antibiotics by the reporting of aggregate laboratory data.

Methods

Over the past four years, forty-three hospitals have been a part of the surveillance system at some point in time. Currently, twenty-seven hospitals provide information to the surveillance system each month on a brief reporting form. Each hospital reports the total number of *S. pneumoniae*, *S. aureus* and *Enterococcus* species isolated in their lab for each month. In addition, they also report the total number of drug resistant or drug intermediate resistant isolates for each of those organisms. As duplicates are not reported, the forms contain counts on one isolate of DRSP, MRSA, or VRE per patient per hospital visit. Each report is entered into an Access database and from this database, quarterly and annual summary reports are generated for the participating hospitals.

The purpose of this analysis is primarily to determine if the rates of antibiotic resistance for *S. pneumoniae*, *S. aureus* and *Enterococcus* were significantly different over the four quarters in 2003 and secondarily to determine if there is a significant trend in the rates of antibiotic resistance for these organisms from 2000 to 2003. Since interest was in resistance as either present or not present, the resistant and intermediately-resistant variables were combined to get one variable for resistance.

For each organism of interest, a chi-square statistic was calculated to determine if the percent of resistant isolates was different from quarter to quarter in 2003. Using the annual rates, a test for trend was conducted using the Mantel-Haensel Chi Square statistic. Both of these analyses were conducted using SAS (Version 8.02; Cary, NC).

Results

The results of the analysis of 2003 quarterly counts of antibiotic susceptible and resistant isolates can be seen in Table 1.

The percentages of drug resistant *S. pneumoniae* were not significantly different from each other (x^2=3.9057, p=0.2718), ranging from 37.2% to 45.2% in 2003. The rates for Methicillin resistant *S. aureus* were significantly different throughout the year (x^2=17.5384, p=0.0005), ranging from 53.5% to 58.3%. The data from 2002 has shown an increasing trend with MRSA that proceeded up to the second quarter in 2003 where a decline is now being seen. The percentages of Vancomycin resistant *Enterococcus* (VRE) ranged from 4.3% to 7.3% in 2003. These rates were found to be significantly different from each other (x^2=9.5472, p=0.0228).

(Continued on next page)

Table 1: Analysis of Antibiotic Resistance by Quarter for *S. pneumoniae, S. aureus*, and *Enterococcus* species from the Louisiana Antibiotic sensitivity Active Surveillance System, 2003

		First Quarter	Second Quarter	Third Quarter	Fourth Quarter	X^2	p-value
S. pneumoniae	Resistant	159	84	80	109	3.9057	.2718
	Susceptible	193	142	108	161		
	% Resistant	45.17%	37.17%	42.55%	40.37%		
S. aureus	Resistant	1672	2446	3296	2297	17.5384	.0005
	Susceptible	1452	1753	2467	1753		
	% Resistant	53.52%	58.25%	57.19%	56.72%		
Enterococcus	Resistant	3	14	139	132	9.5472	.0228
	Susceptible	68	332	1763	2283		
	% Resistant	4.23%	4.05%	7.31%	5.47%		

Table 2: Analysis of Antibiotic Resistance for *S. pneumoniae, S. aureus*, and *Enterococcus* species, 2000-2003

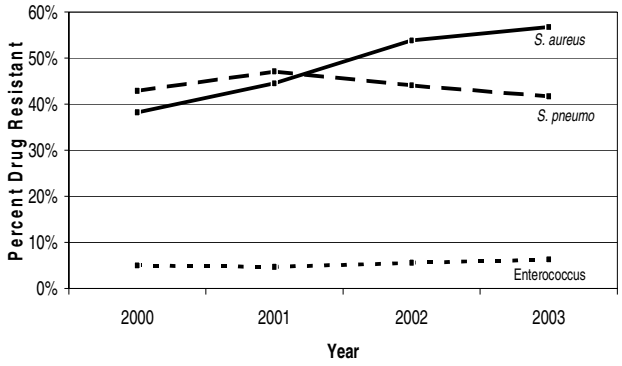
		2000	2001	2002	2003	X^2 (for trend)	p-value
S. pneumoniae	Resistant	547	662	548	432	0.8504	0.3564
	Susceptible	729	744	696	604		
	% Resistant	42.87%	47.08%	44.05%	41.70%		
S. aureus	Resistant	4560	6682	9489	9711	1192.8963	<.0001
	Susceptible	7377	8347	8152	7425		
	% Resistant	38.20%	44.46%	53.79%	56.67%		
Enterococcus	Resistant	451	496	647	288	22.0779	<.0001
	Susceptible	8577	10013	9327	4446		
	% Resistant	5.00%	4.95%	6.49%	6.08%		

(Trends in Antibiotic Sensitivity Cont.)

A trend analysis was conducted to determine if the rates of resistance were increasing over the past four years (2000, 2001, 2002 and 2003). The results can be seen in Table 2 and Figure 1.

A Mantel-Haensel chi-square statistic was calculated for each organism. The percentages of drug resistant *S. pneumoniae* have not been increasing over the past four years ($\times^2$ for trend =0.8504, p=0.3564). The percentages of methicillin-resistant *S. aureus* have increased from 2000 to 2003. These increases were highly significant ($\times^2$ for trend =1192.9, p<0.0001). Differences in percentages of Vancomycin resistant *Enterococcus* were statistically significant but of very little clinical importance. The trend appeared relatively stable over the four year time period.

Figure 1: Percent drug resistant *Streptococcus pneumoniae*, *Staphylococcus aureus* and *Enterococcus* species, 2000-2002

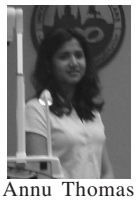


OPH Training Offerings -

VIDEOCONFERENCE COURSE

"Is It Safe to Breathe?" –An Update on Airborne Disease Epidemiology in Louisiana

The OPH Infectious Disease Epidemiology Section is offering a videoconference focusing on Airborne Diseases. This videoconference is targeted towards public health nurses, physicians, infection control professionals, disease surveillance specialists, epidemiologists, sanitarians, laboratory, pharmacists, health care providers and other public health staff. It will be accessible at nine sites throughout Louisiana on September 22, 2004 from 9:00AM to Noon. Applications have been entered for continuing education credits. *Registration Deadline is September 1st!* This course offering is free of charge but must be registered for as seating is limited in some locations. For site information, a registration form and agenda please email Ethel Davis at edavis@dhh.la.gov or call (504) 568-5005 x126.



Annu Thomas
Inf. Dis. Epi.

Foodborne Disease Epidemiology Videoconference May 19, 2004 Presenters

Gary Cazauban
Milk & Dairy Program

"Bugs Are Us"
Vectorborne Disease Epidemiology Update Videoconference
June 24, 2004

Presenter
Dr Littlefield-Chabaud
Asst. State Veterinarian

Region I site attendees

Presenter
Kyle Moppert
State Entomologist

GRAND ROUNDS

The following videoconferences will be accessible in all regions of the state from Noon to 1:00 PM. For more information, please contact Gail Hollis at gahollis@dhh.la.gov or call (504) 568-7233.

Aug. 19, 2004 - John Naponick, MD, CM, MPH&TM
Monkey Pox & International Travel
Sept. 16, 2004 - Erin Brewer, MD, MPH
Depression in Women
Oct. 21, 2004 - Louis Trachtman, MD, MPH
"Adventures in Newborn Screening, Part II" (i.e., PKU, galactosemia, biotinidase deficiency)

Note these dates:

October 12, 2004 Field Epidemiology Techniques I – Full Day In-House Training

October 13, 2004 Field Epidemiology Techniques II – Full Day-In House Training

November 10, 2004, 9:00-Noon Antibiotic Resistance Update Videoconference

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

MAY - JUNE 2004

PROVISIONAL DATA

Table 1. Disease Incidence by Region and Time Period

HEALTH REGION TIME PERIOD

DISEASE		1	2	3	4	5	6	7	8	9	May-Jun 2004	May-Jun 2003	Jan-Jun Cum 2004	Jan-Jun Cum 2003	% Chg
Vaccine-preventable															
Hepatitis B	Cases	1	0	0	0	0	0	0	2	1	4	21	27	73	-63.0%
	Rate[1]	0.1	0.0	0.0	0	0	0	0	0.6	0.2	0.1	0.5	0.6	1.7	na
Measles		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mumps		0	1	0	0	0	0	0	1	0	2	0	5	0	500.0%
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pertussis		1	1	0	1	0	0	1	0	0	4	2	7	6	16.7%
Sexually-transmitted															
HIV/AIDS	Cases[2]	43	15	2	6	6	3	7	5	3	90	203	430	575	-25.2%
	Rate[1]	4.2	2.5	0.5	1.1	2.1	1	1.3	1.4	0.7	2.0	4.5	9.6	12.9	na
Gonorrhea	Cases	190	160	95	178	50	87	239	182	39	1220	2289	3949	6034	-34.6%
	Rate[1]	18.4	27	24.8	32.5	18	28.9	46	51.4	9	27.3	51.2	88.4	135.0	na
Syphilis (P&S)	Cases	20	15	0	6	0	0	0	0	5	45	22	120	56	114.3%
	Rate[1]	1.9	2.5	0.0	1.1	0	0.0	0	0.0	1.1	1	0.5	2.7	1.3	na
Enteric															
Campylobacter		1	5	1	1	1	1	0	7	5	22	13	55	48	14.6%
Hepatitis A	Cases	3	0	1	0	0	0	0	0	0	4	12	13	30	-56.7%
	Rate[1]	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	2.0	3.6	4.8	7.2	na
Salmonella	Cases	8	19	10	11	0	8	0	18	11	85	156	206	309	-33.3%
	Rate[1]	0.8	3.1	2.6	2.0	0.0	2.7	0.0	5.1	2.5	2.0	3.6	4.8	7.2	na
Shigella	Cases	6	2	3	0	0	12	5	14	0	42	79	129	250	-48.4
	Rate[1]	0.6	0.3	0.8	0.0	0.0	4.0	1.0	4.0	0.0	1.0	1.8	3.0	5.8	na
Vibrio cholera		0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vibrio, other		2	1	3	0	1	0	0	0	2	9	7	16	14	14.3%
Other															
H. influenzae (other)		0	0	0	0	0	0	0	0	0	0	3	7	14	-50.0%
N. Meningitidis		1	0	1	0	0	0	1	2	1	6	4	22	31	-29.0%
Tuberculosis															

1 = Cases Per 100,000

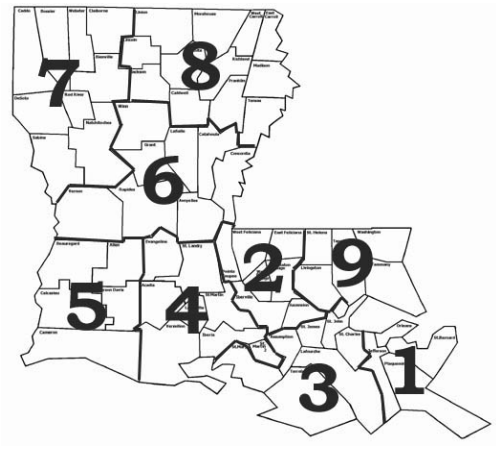
2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected.

Table 2. Diseases of Low Frequency

Disease	Total to Date
Legionellosis	4
Lyme Disease	2
Malaria	3
Rabies, animal	1
Varicella	44

Table 3. Animal rabies (Jan-Jun)

Parish	No. Cases	Species
	1	



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

2:003 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
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Haemophilus influenzae (invasive disease)
- Neisseria meningitidis (invasive disease)
- Plague
- Poliomyelitis, paralytic
- Q Fever
- Rabies (animal & man)
- Rubella (German measles)
- Smallpox
- Staphylococcus Aureus, Vancomycin Resistant
- 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.

- Aseptic meningitis
- Chancroid[1]
- E. Coli 0157:H7
- E. Coli Enterohemorrhagic (other)
- Encephalitis, Arthropod borne
- Hantavirus Pulmonary Syndrome
- Hemolytic-Uremic Syndrome
- Hepatitis A (acute disease)
- Hepatitis B (carriage)
- 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
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- Ehrlichiosis Hansen's Disease (leprosy)
- Enterococcus, Vancomycin Resistant (VRE) (invasive disease)
- Giardia
- Gonorrhea[1]
- Hansen's Disease (leprosy)
- Hepatitis B (acute)
- Hepatitis C (acute and infection)
- Human Immunodeficiency Virus (HIV infection)
- Listeria
- Lyme Disease
- Lymphogranuloma Venereum[1]
- Psittacosis
- Rocky Mountain Spotted Fever (RMSF)
- Staphylococcus Aureus, Methicillin/ Oxacillin Resistant (MRSA) (invasive disease)
- Staphylococcal Toxic Shock Syndrome
- Streptococcal disease, Group A disease)
- Streptococcal disease, Group B (invasive disease)
- Streptococcal Toxic Shock Syndrome
- Streptococcus Pneumoniae (invasive infection, penicillin resistant (DRSP))
- Streptococcus Pneumoniae (invasive infection in children < 5 years of age)
- Trichinosis
- Varicella (chickenpox)
- Vibrio Infections (other than cholera
- West Nile Fever
- West Nile Infection (past or present)

Other Reportable Conditions

- Cancer
- Complications of Abortion
- Congenital Hypothyroidism*
- Galactosemia*
- Hemophilia*
- Lead Poisoning
- Phenylketonuria*
- Reye's Syndrome
- Severe Traumatic Head Injury**
- Severe Undernutrition (severe anemia, failure to thrive)
- Sickle Cell Disease (newborns)*
- 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, phone reports, 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.

*Report to the Louisiana Genetic Diseases Program Office by telephone (504) 568-5070 or FAX (504) 568-7722.

**Report on DDP-3 form; preliminary phone report from ER encouraged (504) 568-2509. Information contained in reports required under this section shall remain confidential in accordance with the law.

This public health document was published at a total cost of $990.00. Seven thousand copies of this public document were published in this first printing at a cost of $990.00. The total cost of all printings of this document, including reprints is $990.00. This document was published by Moran Printing, Inc., 5424 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.

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