



Bobby Jindal  
GOVERNOR

STATE OF LOUISIANA  
DEPARTMENT OF HEALTH AND HOSPITALS



Alan Levine  
SECRETARY

# 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>

January-February 2008

Volume 19 Number 1

## Mercury Levels in Seafood: Caught vs. Bought Louisiana, 2007

*Adrienne Katner, MS; Shannon Soileau, MS; Dianne Dugas,  
MSW MPH; Raoult Ratard, MD MPHTM MS FACPM*

Mercury (Hg) can pose a significant risk to human health, particularly to unborn children and women who are pregnant or of childbearing age. While it is acknowledged that seafood consumption is the primary route of Hg exposure, awareness of Hg-based seafood consumption advisories is low among women of childbearing age. In this paper "seafood" refers to all commercially and recreationally-obtained finfish, shellfish and mollusks - freshwater or saltwater.

This is a problem in a state where recreational fishing and seafood consumption is a culturally important pastime. Louisiana residents typically consume twice the amount of seafood than the average American. This problem was highlighted when a survey of Louisiana residents, conducted by Louisiana State University Health Sciences Center in 2000, indicated that commercial anglers and residents eating fish at least once a week had significantly higher blood Hg levels.

While contaminated fish can pose health risks, there is also no doubt that regular consumption of seafood is important to maintaining a healthy heart and promoting normal growth and development. This is primarily due to the fact that seafood contains high-quality protein and other essential nutrients, is low in saturated fat and is a primary source for omega-3 fatty acids. In fact, exclusion of seafood from the diet has been associated with excess coronary heart disease and suboptimal neurodevelopment in children. Thus the chal-

lenge in advisories is to caution against consumption of select species high in contaminants, while encouraging regular consumption (two meals per week) of a variety of other species, particularly those high in essential omega-3 fatty acids.

This report compares Hg levels found in seafood caught statewide with Hg levels found in commercially purchased seafood. By comparing average fish-tissue Hg levels in statewide recreationally-obtained seafood to levels in national market-obtained seafood, consumers will be able to put local fish-tissue Hg levels into a wider context. This report also attempts to clarify the various advisory recommendations and presents all the relevant information necessary for maximizing the benefits from an individual seafood diet.

Fish-tissue Hg data collected by the Louisiana Department of Environmental Quality (DEQ) from various waterbodies throughout the state were compiled and compared to fish-tissue Hg data collected by the U.S. Food and Drug Administration (FDA) from the U.S. seafood market. Fish-tissue mercury concentrations (mg/kg) were converted to potential exposure doses (mg/kg/day) under the assumption that consumption of the average Hg level in a species occurs over seventy years (a lifetime). Evaluation of the relative risk of potential lifetime exposure doses is aided by calculation of a Margin of Exposure (MOE), a ratio of potential exposure dose to the EPA's Hg Reference Dose (RfD). (Reference Doses are health-based exposure dose standards (in mg/kg/day) developed to assess non-carcinogenic or systemic disease risks.) An MOE greater than 1.0 is used to identify species for which a daily chronic exposure dose exceeds an acceptable chronic exposure dose. MOEs were calculated and an MOE greater than 2.0 was used to identify the species of primary concern (statewide and from the U.S. seafood market). Species evaluated included: bass, buffalofish, carp, catfish, crab, crawfish, croaker, flatfish, mackerel, mullet, oyster, sheepshead, shrimp, snapper, swordfish, trout, tuna. It is of interest to note that the most frequently consumed species among recreational Louisiana anglers, according to a recent survey conducted by the Harvard School of Public Health, are shrimp, speckled trout and crab. These species were included in this study.

### Based on this evaluation:

1) the species of primary concern from Louisiana waters is king mackerel. King mackerel is a migratory saltwater species found off of the coast of Louisiana in the Gulf of Mexico, primarily near Grand Isle, Cameron, Venice and the Leeville / Fourchon area. It ranks among the top five species sought after by recreational fishers in the Gulf region (others are spotted seatrout, red drum, snook and red snapper).

2) the species of primary concern from the U.S. seafood market

(Continued on page 3)

### Contents

Mercury Levles in Seafood: Caught vs. Bought - Louisiana, 2007.....	1
Group A Streptococcal Infections in a School-Based Health Clinic - Louisiana, 2003-2007.....	2
Calculation of HIV/AIDS Case Rates Using Population Date Adjusted for Population Migration - Louisiana, 2005-2006.....	4
Injury in Louisiana, 2004.....	5
Announcements .....	6

# Group A Streptococcal Infections in a School-Based Health Clinic Louisiana, 2003-2007

In a school-based health clinic (SBHC), the number of Group A Streptococcal (GAS) infections was considered to be very high. The number of visits remained fairly constant from 2003 to 2007 at about 6,000 visits for 860 students, or seven to eight visits per student in a school year.

Although the number of visits remained fairly constant (between 5,500 and 6,600) the number of students tested almost quadrupled at the start of the 2004-2005 school year and the number of positive GAS followed the same pattern. The proportion of patients tested for GAS per 1,000 visits went from twenty percent to approximately eighty percent. The proportion of positive GAS test results remained fairly constant at about fifty percent to seventy percent of patients tested.

The distribution throughout the year for the high GAS period (2004-2007) did not show any definite seasonal pattern. There was no obvious different pattern of distribution by age group for the period prior to the 2004-2005 school year or after the 2004-2005 school year.

During the school year 2005-2006, the total number of streptococcal sore throat and scarlet fever cases (ICD 9 code 034) was 814 for forty-one SBHCs, of which 491 (60.3%) came from one single SBHC. (The proportion of GAS pharyngitis diagnosed throughout the SBHCs was fairly constant.) That one SBHC stood out as very different from the rest of SBHCs.

The screening test used was the 'QuickVue® In-line Strep A' test from the Quidel Corporation which is deemed to be able to detect 500,000 GAS organisms. In a study of 537 throat swabs collected on patients with pharyngitis, sixty-one were positive on culture versus fifty-seven for the QuickVue®. The specificity was calculated to be 94% (CI 91%-97%), and the test sensitivity 87% (CI 78%-95%).

Testing is usually performed for diagnosis of GAS pharyngitis. Clinical criteria used to suspect GAS pharyngitis are:

- Sore throat, pain on swallowing
- Pharyngeal erythema with exudate
- Fever
- Enlarged nodes (submandibular)
- No cough

A review of charts showed that patients were screened for a wide variety of conditions: mild throat erythema, rhinitis/pharyngitis, sinusitis/pharyngitis, congestion, upper respiratory infection, allergic rhinitis /pharyngitis with mild erythema, no exudates. The absence of exudate and scarcity of fever indicate that most of the patients screened did not meet criteria for suspicion of GAS pharyngitis. Testing was often repeated.

Recommendations from the American Academy of Pediatrics Committee on Infectious Diseases (Redbook 2006), specify that testing should be limited to diagnosis of GAS pharyngitis.

- 1-Children with manifestations highly suggestive of viral infection, such as coryza, conjunctivitis, hoarseness, cough, anterior stomatitis, discrete ulcerative lesions, or diarrhea are unlikely to have GAS as the cause of their pharyngitis and generally should not be tested for GAS (Red Book 2006).
- 2-Recovery of GAS from the pharynx does not distinguish patients with true streptococcal infection from streptococcal carriers who have an intercurrent viral pharyngitis (Red Book 2006).
- 3-Children with acute onset of sore throat, fever, headache, pain on swallowing, abdominal pain, nausea, vomiting and enlarged tender anterior cervical lymph nodes are more likely to have GAS as the cause of their pharyngitis and should have a rapid antigen test or throat culture performed (Red Book 2006).
- 4-Post treatment or repeat testings are not indicated: Post-treatment throat swab cultures are indicated only for patients at particularly high risk of rheumatic fever. Repeated courses of antimicrobial therapy are not indicated for asymptomatic patients who remain GAS positive after appropriate antimicrobial therapy (Red Book 2006). Patients in whom repeated episodes of pharyngitis occur at short intervals with GAS documented by culture or antigen detection test present a special problem (Red Book 2006).
- 5- GAS carriage is very common: In schools, child care centers, or other environments in which a large number of people are in close contact, **the prevalence of GAS pharyngeal carriage in healthy children can be as high as fifteen percent** in the absence of an outbreak of streptococcal disease. **Therefore, classroom or more widespread culture surveys are not indicated routinely and should be considered only if multiple cases of rheumatic fever, glomerulonephritis, or severe invasive GAS disease have occurred** (Red Book 2006).
- 6- Antimicrobial therapy is not indicated for most GAS pharyngeal carriers (Red Book 2006).

## Louisiana Morbidity Report

Volume 19 Number 1

January-February 2008

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*

With a population of 800 and prevalence of fifteen percent, there are about 120 students infected. With an average of 7.7 visits per student at a clinic, one would expect that 925 (120 x 7.7) visits were made by students who are carriers of GAS. With a testing rate of 300 tests per 1,000 visits one would expect 280 infections ( $[300/1000] \times 925$ ). The actual observed number of GAS infections in the 2005-2006 school year was 384. This high number is explained by the GAS pharyngitis + GAS carriers + repeat tests on any GAS infection detected.

In summary it appears that the high numbers observed are the result of the extensive testing being done rather than a true increase in incidence of GAS pharyngitis.

For references or more information, please call (504) 219-4563 or email [rratard@dhh.la.gov](mailto:rratard@dhh.la.gov).








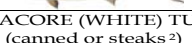
*(Mercury Levels....Continued from page 1)*

are king mackerel and swordfish. It is interesting to note that approximately twenty-six percent of the continental U.S. commercial catch that ends up in the U.S. seafood market comes from Louisiana waters. Swordfish caught commercially from Louisiana waters are primarily available locally around the areas of Dulac, Leesville / Fourchon and Venice. Of commercial landings in Louisiana, king

mackerel annually ranks in the top twenty in the state, averaging at a rate of 800,000 pounds per year. Swordfish also typically ranks high in terms of in-state commercial landings, averaging approximately 600,000 pounds per year.

National (FDA/EPA) and/or statewide (LA-DHH) advisories already exist for these species. Meal limit recommendations for species of concern, including those not evaluated in this analysis, are presented in Table 1.

**Table 1:** DHH- and EPA-Recommended Seafood Consumption Limits: Statewide (Louisiana - DHH) vs. U.S. (EPA/FDA)

Fish Species	Statewide Advisories for Fish Caught from LA Waters		National Advisories for Fish Bought on the U.S. Market	
	Women of Child-bearing Age and Young Children (meals /month)	General Public (meals /month)	Women of Child-bearing Age and Young Children (meals /month)	General Public (meals /month)
KING MACKEREL 	No Consumption (> 39 inches)	2 (≤ 39 inches)	No Consumption	NA <sup>1</sup>
SWORDFISH 	NA <sup>1</sup>	NA <sup>1</sup>	No Consumption	NA <sup>1</sup>
SHARK 	NA <sup>1</sup>	NA <sup>1</sup>	No Consumption	NA <sup>1</sup>
TILEFISH 	NA <sup>1</sup>	NA <sup>1</sup>	No Consumption	NA <sup>1</sup>
BLACKFIN TUNA 	1	4	NA <sup>1</sup>	NA <sup>1</sup>
COBIA 	1	4	NA <sup>1</sup>	NA <sup>1</sup>
GREATER AMBERJACK 	1	4	NA <sup>1</sup>	NA <sup>1</sup>
ALBACORE (WHITE) TUNA (canned or steaks <sup>2</sup> ) 	NA <sup>1</sup>	NA <sup>1</sup>	4	NA <sup>1</sup>

**Notes:** 1. NA - Not applicable, but state advisories should always be reviewed to identify potential site-specific advisories.  
2. No advisory exists for canned "light" tuna - see story text.

It should be emphasized that this assessment is limited to an evaluation of potential exposures to average mercury concentrations estimated for select species from predefined sources. However, individuals typically consume a variety of species originating from variable sources. Individual fish within a diet will also vary substantially in contaminant makeup and concentration. Popular species not evaluated here are amberjack, bowfin (choupique), cobia, crappie, drum (gaspergou or redfish), gar, grouper, shad, shark,

tilefish, wahoo and warmouth. These species did not have comparable average fish-tissue mercury levels at the national level, thus comparisons were not possible.

It is important to raise awareness among local anglers and those that consume their catch regarding statewide and site-specific seafood advisories. Meal limit recommendations for seafood caught from specific Louisiana waterbodies (Figure 1) are listed in Table 2.

*(Continued on page 4)*

Figure 1. Louisiana Waterways under Mercury Fish Consumption Advisory (in Red)

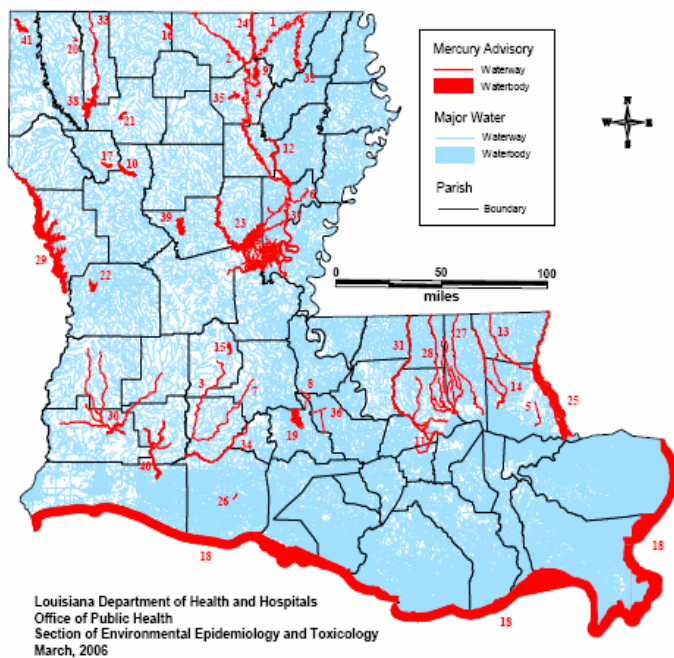


Table 2: Louisiana Waterways under Mercury Fish Consumption Advisory (in Red in Figure 1)

LOCATION	Site #	LOCATION	Site #
Amite River Drainage Basin	31	Cheniére Lake	35
Bayou Bartholomew	1	Chicot Lake	15
Bayou Bonne Idee	32	Corney Lake	16
Bayou Chene and Bayou Lacassine	40	Grand Bayou Reservoir	17
Bayou De Loutre and Assoc. Lakes	2	Gulf of Mexico	18
Bayou des Cannes	3	Henderson Lake Area	19
Bayou DeSiard	4	I-10 Canal and Work Canal	36
Bayou Dorcheat	33	Iatt Lake	39
Bayou Liberty	5	Ivan Lake	20
Bayou Louis and Lake Louis	6	Kepler Creek Lake	21
Bayou Plaquemine Brule	7	Lake Bistineau	38
Bayou Queue De Tortue	34	Lake Vernon	22
Big Alabama Bayou	8	Little River/Catahoula Lake Area	23
Black Bayou Lake (Caddo)	41	Ouachita River	24
Black Bayou Lake (Ouachita)	9	Pearl River	25
Black Lake	10	Seventh Ward Canal	26
Blind River	11	Tangipahoa River	27
Boeuf River	12	Tew Lake	37
Bogue Chitto River	13	Tickfaw River Drainage Basin	28
Bogue Falaya and Tchefoncté Rivers	14	Toledo Bend Reservoir	29
Calcasieu River Drainage Basin	30		

In summary, modest but regular consumption (two 8 ounce meals per week) of select species high in omega-3 fatty acids (such as salmon, mackerel, halibut, sardines and herring), and species low in Hg (such as light canned tuna, shrimp, salmon, pollack and farm-raised catfish), is advised to promote optimal fetal development and cardiovascular health. Consumption of species high in Hg such as shark, swordfish, king mackerel, tilefish, or albacore tuna, should be restricted, especially by women of childbearing age, pregnant and nursing mothers and children. In the case of recreationally-caught fish, consumers should contact the state health department to inquire about waterbody-specific advisories within the state.

For further information about the risks of mercury in fish and shellfish available on the U.S. market call the FDA's food informa-

tion line toll-free at 1-888-SAFEFOOD or visit FDA's Food Safety website [www.cfsan.fda.gov/seafood1.html](http://www.cfsan.fda.gov/seafood1.html). For further information about the safety of locally caught fish and shellfish, visit the EPA's Fish Advisory website [www.epa.gov/ost/fish](http://www.epa.gov/ost/fish); LA DEQ's Mercury Monitoring Program website at: <http://www.deq.state.la.us/portal/tabid/1631/Default.aspx>; or LA DHH's Fish Consumption Advisories Program at: <http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749>. Louisiana's seafood advisories are published online and are also available from LA DWF in their annual fishing regulation brochures. Site-specific listings of species of concern from these waterbodies (and applicable meal limits) are listed on DHH's Fish Consumption Advisory Program website at: <http://www.dhh.louisiana.gov/offices/page.asp?ID=205&Detail=6532>. For references or more information, please contact Adrienne Katner at (504)219-4784, or email at [ALkatner@dhh.la.gov](mailto:ALkatner@dhh.la.gov).

## Calculation of HIV/AIDS Case Rates Using Data Adjusted for Population Migration Louisiana, 2005-2006

William Robinson, Ph.D.; Deborah Wendell, MPH;  
DeAnn Gruber, Ph.D.; M. Beth Scalco, MPA, LCSW

Hurricane Katrina and the ensuing levee failure adversely impacted many public health activities within Louisiana. In addition to the disruptions caused by the loss and damage to office infrastructure, Katrina affected some ways in which basic disease surveillance may be conducted. For example, for many chronic diseases such as HIV, monitoring current disease prevalence is a high

priority. With the large emigration out of and migration within the New Orleans area, accurately describing the number of persons living with HIV/AIDS became problematic and required the development of new methodologies. Similarly, the calculation of a disease incidence rate was affected as well, due to the massive and rapid changes in the population of the New Orleans area.

A disease incidence rate is defined as the number of new cases of a disease within a given period of time divided by the person-time at risk of exposure. Under normal circumstances, midyear population estimates such as those provided by the U.S. Census provide adequate estimates of the number of person-years at risk of exposure. While changes during each year do occur, they are assumed to take place at a regular rate and therefore these midyear estimates should represent the average person-years of exposure. Because of the massive shifts in population during 2005 and 2006 due to Katrina, however, these estimates do not adequately capture this denomina-

## INJURY IN LOUISIANA, 2004

Mona Doshani, MD, MPH

In Louisiana, injuries are the leading cause of death and lifelong disability among persons one to forty-four years of age. In 2004, there were 41,942 fatalities among Louisiana residents, of which 3,498 were due to injuries. (Table 1)

**Table 1:** The Ten Leading Causes of Death by Age Group - Louisiana, 2004

Rank	Age Groups (Years)										
	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Short Gestation 134	Unintentional Injury 50	Unintentional Injury 37	Unintentional Injury 50	Unintentional Injury 389	Unintentional Injury 350	Unintentional Injury 380	Malignant Neoplasms 981	Malignant Neoplasms 1,801	Heart Disease 8,258	Heart Disease 10,852
2	Congenital Anomalies 128	Congenital Anomalies 14	Malignant Neoplasms 10	Malignant Neoplasms 8	Homicide 218	Homicide 189	Heart Disease 296	Heart Disease 859	Heart Disease 1,337	Malignant Neoplasms 6,234	Malignant Neoplasms 9,434
Kmm kmm m,3	SIDS 66	Heart Disease 7	Congenital Anomalies 8	Suicide 6	Suicide 86	Suicide 98	Malignant Neoplasms 282	Unintentional Injury 356	Diabetes Mellitus 287	Cerebro-vascular 1,973	Cerebro-vascular 2,489
4	Unintentional Injury 38	Malignant Neoplasms 7	Benign Neoplasms 2	Congenital Anomalies 4	Malignant Neoplasms 35	Malignant Neoplasms 74	HIV 147	Cerebro-vascular 160	Cerebro-vascular 246	Chronic Low. Respiratory Disease 1,352	Unintentional Injury 2,300
5		Homicide 6	Cerebro-vascular 1	Cerebro-vascular 3	Heart Disease 23	HIV 65	Suicide 110	Diabetes Mellitus 153	Unintentional Injury 185	Alzheimer's Disease 1,255	Diabetes Mellitus 1,717
6	Respiratory Distress 24	Influenza & Pneumonia 5	Heart Disease 1	Homicide 3	HIV 14	Heart Disease 61	Homicide 78	HIV 117	Chronic Low. Respiratory Disease 177	Diabetes Mellitus 1,191	Chronic Low. Respiratory Disease 1,615
7	Placenta Cord Membranes 16	Septicemia 3	Homicide 1	Septicemia 3	Influenza & Pneumonia 10	Cerebro-vascular 21	Cerebro-vascular 73	Suicide 113	Nephritis 136	Nephritis 847	Alzheimer's Disease 1,267
8	Bacterial Sepsis 15	Four Tied 1	Influenza & Pneumonia 1	Anemias 2	Cerebro-vascular 8	Diabetes Mellitus 18	Diabetes Mellitus 66	Liver Disease 95	Septicemia 105	Influenza & Pneumonia 752	Nephritis 1,110
9	Circulatory System Disease 12	*Four Tied 1	Peptic Ulcer 1	Chronic Low. Respiratory Disease 2	Chronic Low. Respiratory Disease 6	Septicemia 15	Liver Disease 41	Nephritis 83	Liver Disease 99	Septicemia 625	Influenza & Pneumonia 913
10	*Three Tied 11	*Four Tied 1	Septicemia 1	HIV 2	Complicated Pregnancy 6	Complicated Pregnancy 11	Nephritis 25	Chronic Low. Respiratory Disease 57	Influenza & Pneumonia 65	Unintentional Injury 465	Septicemia 837

- Unintentional Injuries
- Intentional Injuries (Homicides)
- Intentional Injuries (Suicides)

Produced By: Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (CDC) from WISQARS™ (Web-based Injury Statistics Query and Reporting System)

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

Prepared By: Louisiana Office of Public Health- EMS/Injury Research and Prevention Program

Death certificates are the primary data source used to assemble this table. The data was analyzed using the statistical software SAS version 9.1 and SPSS version 11.0.

Causes of death are classified in accordance with the Tenth Revision of the International Classifications of Diseases (ICD-10), a coding structure developed by the World Health Organization. In this table, injuries are mainly categorized by the manner of intent, which is broken down into unintentional and intentional injuries. Unintentional injuries are injuries that are preventable; intentional (homicide and suicide) involves acts where there is intent to harm.

For more information on injury and violence prevention, please contact the EMS/Injury Research Prevention Program at (504) 599-1080 or email [madoshan@dhh.la.gov](mailto:madoshan@dhh.la.gov).

## Injury in Louisiana, 2004 (Continued from page 4)

tor. For example in Orleans Parish the population on July 1, 2005 was estimated to be 454,863 by the U.S. Census Bureau in 2007; however, the city was under a mandatory evacuation order during the latter part of the year and many people were not able to return to their homes immediately following the disaster. This midyear estimate therefore overestimates the number of person-years of exposure, which in turn produces underestimates of a disease rate. Similarly the return of the New Orleans population during 2006 may not have occurred at a linear pace, meaning that a single midyear point estimate of population is not adequate for rate calculations.

A number of different estimates of the population of Orleans Parish and the surrounding region have been produced during the period following Katrina (e.g. [www.gnocdc.org](http://www.gnocdc.org) or [www.popest.org](http://www.popest.org)). These estimates range from under 150,000 residents in early 2006 to current estimates approaching 300,000 persons. In a recent issue of the American Journal of Public Health, Vanlandingham outlined a

method for approximating the true number of person-years of exposure. This method extrapolated several of these point estimates taken at different time periods to construct a trajectory of the returning population throughout the entire year. This approximation of the number of person-years of exposure was then used to accurately calculate the annual and quarterly New Orleans murder rate for 2005 and 2006.

HIV/AIDS rates for Orleans Parish cases were computed using these estimated person-years of exposure as well as the available U.S. Census 2005 and 2006 parish point population estimates. Table 1 presents the annual number of new HIV/AIDS cases reported for the years 2004 to 2006, as well as the U.S. Census and person-year population estimates. The rates for each of the post-Katrina years have been calculated using both population estimates and are also presented in Table 1.

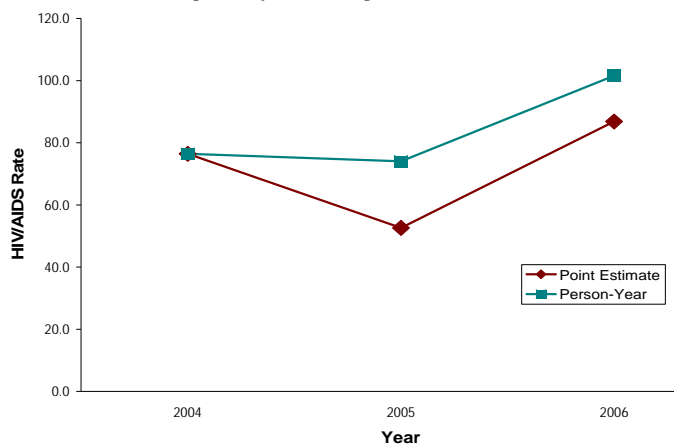
**Table 1:** HIV/AIDS rates (per 100,000) calculated with unadjusted population data from Census population and adjusted person-year estimates Louisiana, 2004-2006

	2004			2005			2006						
	New Cases HIV/AIDS	Census Population	Rate	New Cases HIV/AIDS	Census Population	Rate	Person-Years Population	Rate	New Cases HIV/AIDS	Census Population	Rate	Person-Years Population	Rate
Orleans	351	459,048	76.5	238	452,170	52.6	321,351	74.1	194	223,388	86.8	190,971	101.6
Region I* Total	443	1,005,600	44.1	328	997,269	32.9	866,450	37.9	266	692,775	38.4	660,358	40.3

\* See map on page 7

Rates calculated using the Census point estimate dropped from 76.5 in 2004 to 52.6 in 2005 and rose to 86.8 in 2006. The 2005 rate which remained steady at 74.1 (using the person-years of exposure denominator), however, rose to 101.6 in 2006 after Katrina. Figure 1 displays both rate calculations for the three-year period.

**Figure 1:** Orleans Parish HIV/AIDS rates calculated using point population estimates and person-years of exposure - Louisiana, 2004-2006



Because population estimates for the surrounding three Region I parishes were not produced as frequently during 2006, these data were not adjusted. Therefore estimated HIV rates for the entire region may not represent the true rate and require further study.

Use of the 2005 population point estimate likely underestimated that year's HIV/AIDS case rate. Adjusting for the drop in population after August 29, 2005 yields rates that are consistent with previous annual HIV/AIDS rates. There was also an observed in-

crease in rates during 2006 using either denominator. This observed increase could be due to a number of factors including a true increase in HIV incidence, increases in HIV risk behaviors, such as unprotected sex and substance use which have historically been observed in post-disaster environments, immigration of previously infected individuals into Orleans Parish from outside the state, or underestimation of the true population denominator. These findings underscore the need for continued HIV/AIDS prevention interventions in the New Orleans area as well as the need to carefully monitor the effects of a rapidly changing population on disease surveillance.

For references or more information, please contact Dr. Robinson at (504) 568-5200 or email [brobinso@dhh.la.gov](mailto:brobinso@dhh.la.gov).

## Announcements

### Updates: Infectious Disease Epidemiology Webpage

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

**ANNUAL REPORT/INFECTIOUS DISEASE SURVEILLANCE REPORTS:** Brucellosis; Enteric Viral Infections (Norovirus, Rotavirus); Gonorrhea; Hantavirus; Hepatitis E; Leptospirosis; Lyme Disease; Staphylococcal Disease; Syphilis; Tuberculosis

**EPIDEMIOLOGY MANUAL:** Acinetobacter; Hepatitis A Summary; Meningococcal Meningitis; Scabies

**PUBLIC INFORMATION:** Staphylococcus (MRSA) in Day Care

**VETERINARY INFORMATION:** Antimicrobial Classes; Canine, Feline and Equine Common Infections; MultiDrug Resistance Surveillance; Rabies Compendium 2008; Rabies in Louisiana Map 1996-2007

**November - December, 2007**

**Table 1. Disease Incidence by Region and Time Period**

DISEASE	HEALTH REGION									TIME PERIOD				
	1	2	3	4	5	6	7	8	9	Nov-Dec 2007	Nov-Dec 2006	Jan-Dec Cum 2007	Jan-Dec Cum 2006	Jan-Dec % Chg*
<b>Vaccine-preventable</b>														
Hepatitis B Cases	1	0	0	0	0	0	0	1	1	3	15	91	68	33.8
Hepatitis B Rate <sup>1</sup>	0.1	0	0	0	0	0	0	0.3	0.3	0.1	0.3	2.1	1.6	NA*
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Mumps	0	0	0	0	0	0	0	0	0	0	1	1	3	NA*
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis	0	0	0	0	0	0	0	0	0	0	0	19	24	-20.8
<b>Sexually-transmitted</b>														
HIV/AIDS Cases <sup>2</sup>	15	13	3	8	1	2	4	7	4	57	168	1001	1061	-0.6
HIV/AIDS Rate <sup>1</sup>	1.5	2.3	0.8	1.5	0.4	0.7	0.8	2.0	0.9	1.3	3.8	22.9	24.3	NA*
Gonorrhea Cases	261	177	105	151	52	77	288	155	67	1333	1715	10953	10900	0.5
Gonorrhea Rate <sup>1</sup>	25.24	29.32	27.37	27.55	18.35	25.55	55.11	43.80	15.29	29.83	38.38	245.09	243.90	NA*
Syphilis (P&S) Cases	37	4	2	16	1	1	11	2	1	75	81	512	343	49.3
Syphilis (P&S) Rate <sup>1</sup>	3.58	0.66	0.52	2.92	0.35	0.33	2.11	0.57	0.23	1.68	1.81	11.46	7.68	NA*
<b>Enteric</b>														
Campylobacter	1	2	0	1	1	0	0	2	0	7	9	99	107	-7.5
Hepatitis A Cases	0	0	0	0	0	0	0	0	0	0	12	32	39	-17.9
Hepatitis A Rate <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	0.3	0.7	0.9	NA*
Salmonella Cases	8	3	8	12	12	5	8	13	33	102	169	937	1128	-16.9
Salmonella Rate <sup>1</sup>	0.8	0.5	2.1	2.3	4.5	1.6	1.6	3.7	8.6	2.4	3.9	21.7	26.1	NA*
Shigella Cases	7	4	3	4	1	1	0	0	8	28	40	471	261	80.5
Shigella Rate <sup>1</sup>	0.7	0.7	0.8	0.8	0.4	0.3	0	0	2.1	0.6	0.9	10.9	6.0	NA*
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	4	NA*
Vibrio, other	0	0	3	0	0	0	0	0	0	3	3	21	31	-32.3
<b>Other</b>														
<i>H. influenzae (other)</i>	0	0	0	0	0	0	0	0	2	2	4	8	22	-66.6
<i>N. Meningitidis</i>	0	0	1	0	0	0	0	0	0	1	2	29	36	-19.4

<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.

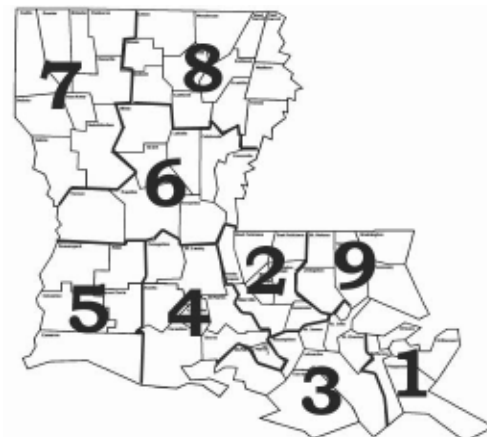
\* Percent Change not calculated for rates or count differences less than 5

**Table 2. Diseases of Low Frequency (January-December, 2007)**

Disease	Total to Date
Legionellosis	4
Lyme Disease	2
Malaria	14
Rabies, animal	6
Varicella	116

**Table 3. Animal Rabies (November-December, 2007)**

Parish	No. Cases	Species
	0	



**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	Staphylococcus Aureus, Vancomycin Intermediate or Resistant (VISA/VRSA)
Brucellosis	Poliomyelitis, paralytic	Tularemia
Cholera	Q Fever (Coxiella burnetii)	Viral Hemorrhagic Fever
Diphtheria	Rabies (animal and human)	Yellow Fever
Haemophilus influenzae (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
Escherichia coli, Shig-toxin producing (STEC), including E. coli O157: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)	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)	Streptococcus pneumoniae, penicillin resistant [DRSP], invasive infection]
Cryptococcosis	Human Immunodeficiency Virus (HIV Syndrome infection)	Streptococcus pneumoniae (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	Staphylococcus Aureus, 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)	Severe Traumatic Head Injury
Complications of Abortion	Lead Exposure and/or Poisoning (All ages)	Severe Undernutrition (severe anemia, failure to thrive)
Congenital Hypothyroidism <sup>3</sup>	Pesticide-Related Illness or Injury (All ages)	Sickle Cell Disease (newborns) <sup>3</sup>
Galactosemia <sup>3</sup>	Phenylketonuria <sup>3</sup>	Spinal Cord Injury
Hemophilia <sup>3</sup>	Reye's Syndrome	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 1-800-256-2748) or web base 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.

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

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