

# Louisiana Morbidity Report



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## Wildlife And Agricultural Animal Diseases: A Reminder Of Potential Hazards To Hunters - Louisiana, 2013

Gary Balsamo, D.V.M., M.P.H.&T.M.; Rusty Berry, D.V.M.

Ongoing studies conducted by the Louisiana Department of Wildlife and Fisheries (LDWF) serve as a reminder to hunters to exercise caution in handling, dressing and processing wild animals. Physicians should also be prepared to consider zoonotic disease diagnoses when treating patients who hunt or handle wild game.

Several Louisiana veterinarians who also enjoy hunting recently voiced concerns about a perceived decrease in the number of white-tailed deer present in the northwest corner of the state. Veterinarians from LDWF also received anecdotal reports of retained placentas, a frequent sign of *Leptospira* infection in many mammalian species, in hunter-killed deer. Interestingly, decreased calving percentages and increased abortions in cattle in nearby areas have also been reported. A few of the tissue samples submitted from affected cattle production facilities were tested, and results indicate *Leptospira* organisms as a potential cause. Although sufficient evidence does not presently exist to confirm a problem, LDWF has initiated a monitoring program, testing hunter-killed and LDWF-collected deer for leptospirosis, an important abortifacient in cattle and an organism experimentally proven to cause abortion in white-tailed deer. LDWF is also assisting United States Department of Agriculture Wildlife Services (USDA WS) in collecting samples from white-tailed deer for toxoplasmosis testing.

Much research remains to be done. It is possible that there is no true reduction in deer, and/or the relationship of the perceived dearth of deer and the problems in cattle may not exist. If the problems are verified, however, several interesting theories of causation have been presented.

Other non-zoonotic etiologies could explain a reduction in deer population. Epizootic hemorrhagic disease virus and bluetongue virus have been detected and routinely observed in the past year in Louisiana deer. LDWF presently conducts surveillance for both of these diseases.

One of the more interesting theories involves a third species that, to date, has not directly been implicated in the possible outbreak - swine, and in particular, feral swine. Feral hogs are a very popular target for hunters, but rates of introduction and multiplication of wild swine may be proving problematic in many areas of the United States. Once these animals reach sexual maturity, feral swine have very few natural predators and low rates of early natural mortality. Combined with a fairly prolific birth rate, (average litter size is four to six under harsh conditions, but can reach 10 to 12 under optimal circumstances), the populations of these animals seems to be outpacing hunter control rates in some areas.

Feral hogs are a concern for transmission of diseases not only to livestock, but also to man; the LDWF and USDA WS are also testing these animals for evidence of leptospirosis and toxoplasmosis. Important infectious diseases of feral swine with zoonotic potential include: brucellosis, *Cryptosporidium* infections, giardiasis, influenza viruses, rabies, salmonellosis and trichinosis, in addition to leptospirosis. If feral swine can be linked to reported occurrences of abortion, retained placentas, and other factors causing reduction of reproductive efficiency in domestic cattle and wild white-tailed deer, suspicions of the potential infectious disease dangers of feral hogs will be confirmed. However, in the absence of evidence, hunters should still exercise caution when harvesting both deer and feral swine.

Routes of transmission of leptospirosis and other zoonotic agents include entry through abrasions or cuts in the skin, and exposure to the conjunctiva of potentially contaminated bodily fluids or tissues. For this reason hunters are advised to follow simple precautions to avoid contact with infectious agents:

- Wear rubber gloves while handling or butchering wild game, especially if lesions exist on the hands or arms of the hunter.
- Hunters should also consider wearing some type of eye protection. Eyeglasses or goggles should provide adequate protection.
- Immediate washing of cuts or scratches obtained during butchering is always a necessity, and hands should be washed thoroughly after field dressing or butchering.
- Additionally, hunters should avoid contact with animal carcasses found in the environment.

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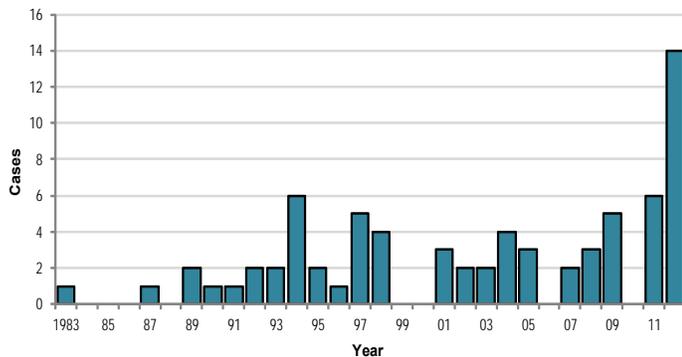
# Louisiana, 2012: A Big Year For *Vibrio fluvialis*

Erin Delaune, M.P.H.

Vibrios are bacteria naturally found in the Gulf of Mexico and other salt and brackish bodies of water. Vibrios can cause gastroenteritis and wound infections both ranging from mild to severe. A person can become infected by consuming raw or undercooked seafood, or seafood that has been contaminated after cooking, or by exposing wounds to salt or brackish water. There are many *Vibrio* species capable of causing illness in humans. The most common are *Vibrio parahaemolyticus* and *Vibrio vulnificus*. *Vibrio fluvialis* is a less common species. Since its identification in 1975, *V. fluvialis* has been isolated from natural water sources, seafood, human and animal feces, and sewerage. *V. fluvialis* can cause diarrhea and vomiting, symptoms similar to *Vibrio cholerae*. Worldwide, *V. fluvialis* has also been reported to cause bloody diarrhea, wound infections and primary septicemia in immune-compromised individuals. The rates of infection are higher in countries with poor sanitary conditions and low water quality.

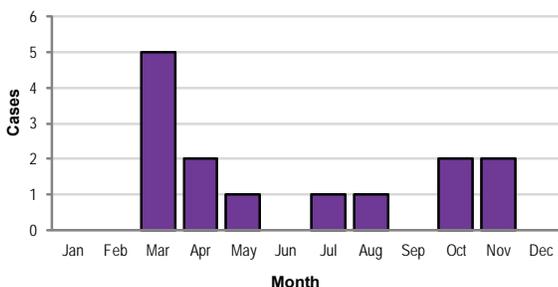
Between 1983 and 2011, a total of 58 cases of *V. fluvialis* were reported in Louisiana. The average number of cases reported per year was two, with six being the most cases reported in a single year (1994 and 2011). In 2012, 14 cases were reported in Louisiana, 12 of which were confirmed by the Department of Health and Hospitals (DHH) State Public Health Laboratory (Figure 1).

Figure 1: *Vibrio fluvialis* Cases by Year – Louisiana, 1983-2012



There was a spike of cases in March, and a steady number of cases reported the remainder of the year (Figure 2).

Figure 2: *Vibrio fluvialis* Cases by Month – Louisiana, 1983-2012



Of the *V. fluvialis* cases reported in 2012, over half were male (57%). The median age for cases was 60 years, with a range of six (Continued on Page 6)

# Influenza Update

Julie Hand, M.S.P.H.

During the fall, flu activity continued to increase in the United States, with high levels of activity in the South Central and South-eastern regions, including Louisiana. In Louisiana, Influenza-like illness (ILI) activity steadily increased from the beginning of November through the end of the year and showed much higher numbers than previous years during the same week (Table).

Table: Percentage of ILI by Week, Beginning of Flu Season - Last Week of Calendar Year- Louisiana, 2010-2013

Week	Month	2010-2011	2011-2012	2012-2013
40	Oct.	2.4	2.9	2.3
41		2	3	2.6
42		2.6	2.6	2.6
43		2.1	2.4	3.1
44	Nov.	3	2.6	3.3
45		2.2	3.1	3.7
46		2.8	3	3.8
47		3.2	2.6	4.7
48	Dec.	2.9	3.1	4.8
49		2.6	3.1	5
50		3.6	3.6	6.4
51		3.8	2.8	7.7
52		5.6	2.9	8.5

The percent of positive samples from sentinel laboratories and the Department of Health and Hospital’s (DHH) State Public Health Laboratory also increased since the beginning of the 2012-2013 season with 26.7 percent of specimens testing positive the last week in December. All influenza A samples subtyped at the state laboratory so far this season are influenza A/H3. All samples submitted to the Centers of Disease Control and Prevention from Louisiana match the A/H3 component of the 2012-2013 Northern Hemisphere vaccine. As of December 29, 2012, Louisiana did not report any cases of influenza-associated pediatric mortality; however, there were 18 pediatric deaths reported nationwide.

For more information, please go to the DHH Infectious Disease Epidemiology’s Influenza webpage, <http://new.dhh.louisiana.gov/index.cfm/page/842>, or please contact Julie Hand at (504)568-8298 or email to [julie.hand@la.gov](mailto:julie.hand@la.gov).

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# A Review of Adult Asthma Morbidity and Mortality Louisiana, 2006-2010

Jocelyn Lewis, Ph.D.; Michelle Lackovic, M.P.H.

Asthma, an obstructive lung disorder characterized by wheezing and shortness of breath, is commonly caused or exacerbated by exposure to airborne allergens. In the U.S., at least 18.7 million adults currently have asthma. Allergens or asthmagens include particulates, chemicals or biological agents. As people become sensitized to asthmagens, they may develop asthma or exacerbate pre-existing asthma. An estimated 10 to 20 percent of new-onset adult asthma cases and 40 percent of pre-existing asthma episodes may be attributed to workplace exposures, designating asthma as the most prevalent, yet preventable, work-related disease. Common work-related asthmagens include: environmental tobacco smoke, wood dusts, natural rubber latex, fungi, chemicals, cleaning agents, fumes and animal by-products.

Approximately 11 million workers are regularly exposed to at least one asthmagen. Industries where asthmagens are prevalent nationally, and in Louisiana, include: refineries, chemical and petrochemical production, construction, bakeries and restaurants, agriculture, beauty care (hair and nail salons), fishing, mining and janitorial services. The Louisiana Asthma Callback Survey 2009-2010, a component of the Behavioral Risk Factor Surveillance Survey, found that 211 of 501 Louisiana participants reported that their asthma was exacerbated or related to work. It is difficult to distinguish work-related asthma (WRA) from non-WRA, but typically symptoms associated with WRA worsen during the workweek and may be alleviated during the weekend.

**Methods:**

Asthma hospitalization data from 2006 to 2010 were extracted retrospectively from the Louisiana Hospital Inpatient Discharge Data (LAHIDD), and were limited to Louisiana residents aged 15 years and older with a primary diagnosis of asthma (International Classification of Diseases, 9th revision, Code 493). Data were stratified by: 1) 10-year age groups; 2) race - African-American/Black and Caucasian/White; 3) sex; 4) parish of residence. Mortality data were included for the period from 2006 to 2010 from the Louisiana Department of Health and Hospitals (DHH) Vital Records death file. Records were selected for primary Cause of Death (ICD-10) asthma code (J459). Two-sample t tests for sex and race were conducted with SPSS. Statistical significance was set at  $p < .05$ .

**Results/Discussion:**

In Louisiana, average annual age-adjusted asthma morbidity and mortality counts were 3,609 hospitalizations and 34 deaths. The age-adjusted rates per 100,000 were 103 hospitalizations and 1.0 mortality compared with national rates of 137 and 1.4, respectively. Hospitalization rates fluctuated slightly for the five-year period, with a peak rate of 111 hospitalizations in 2009. Age-adjusted death rates per 100,000 Louisiana residents predictably increased with age. Age groups 45-years and older had the highest hospitalization (185) and death (3) rates.

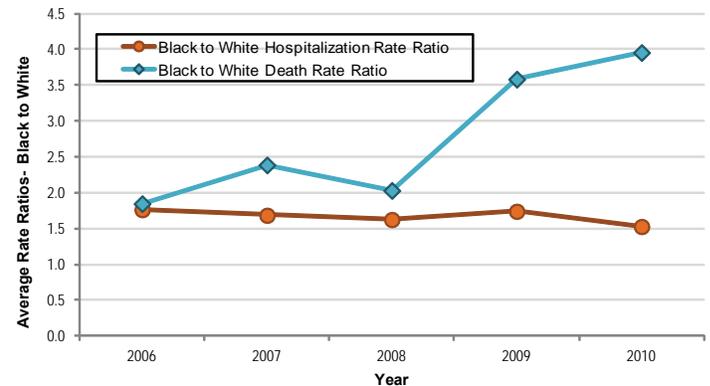
Females were hospitalized for asthma twice as often as males, with a slight increase in rates during 2009 and 2010. Females also died from asthma more often than males, with the exception of 2008, when males had asthma listed as the primary cause of death 1.2 times as often. Sex-specific hospitalization rates were significantly different, but the death rates were not (Figure 1).

Figure 1: Asthma Morbidity and Mortality Sex Rate Ratios - Females to Males – Louisiana, 2006-2010



In Louisiana, age-adjusted race hospitalization and death rates were significantly higher among Blacks than Whites throughout the five-year period. Although the asthma-related death rates for both races declined in 2008, the sudden spike in the death rate ratio was because of a sharper decline in White deaths (by half from 2008 to 2009) compared to Blacks (Figure 2).

Figure 2: Asthma Morbidity and Mortality Race Rate Ratios- Blacks to Whites – Louisiana, 2006-2010



Asthma varied by geography within the state. LaSalle and Concordia parishes in Department of Health and Hospitals, Office of (Continued on Page 6)

(Wildlife and Agricultural ... Continued from Page 1)

- Hunters should bone out the meat and minimize handling of brain and spinal tissue. Never eat brain, spinal cord, eyes, spleen, tonsils or lymph nodes of wild game.
- Never kill or eat wild game that appears ill prior to harvest.
- Of course, all wild game should be cooked thoroughly.

Hunters should consider consulting with a medical care provider if an illness occurs, especially a febrile illness, within 30 days of processing an animal carcass for consumption. Hunters should inform the physician of contact with an animal.

For more information, please contact Dr. Balsamo at (504)568-8315 or email to [gary.balsamo@la.gov](mailto:gary.balsamo@la.gov).

# Blood Lead Surveillance in Children and Adults - Louisiana, 2012

Adrienne Kater M.S., D. Env.; Colleen Clarke, M.S.; Eman Williams, M.P.H.

Protecting children from exposure to lead is important to lifelong good health. Even low levels of lead in blood have been shown to affect IQ, ability to pay attention and academic achievement.

In January 2012, a committee of experts recommended that the Centers for Disease Control and Prevention (CDC) change its blood reference level for children. Until recently, children were identified as exceeding the blood reference level if the test result is 10 or more micrograms per deciliter ( $\mu\text{g}/\text{dL}$ ) of lead. The new recommended blood lead level of concern for those five years and younger is 5  $\mu\text{g}/\text{dL}$ . The new level of concern does not change the recommendation that chelation therapy be considered when a child is found with a test result of greater than or equal to 45  $\mu\text{g}/\text{dL}$  of lead in blood. The new value does mean that more children will be identified as having lead exposure earlier and parents, doctors, public health officials and communities can take action earlier.

Prior to the change in blood lead levels of concern, only 0.4 percent of all blood tests were considered elevated ( $\geq 10 \mu\text{g}/\text{dL}$ ). After the change, 20.9 percent of all tests are now considered “elevated”

( $\geq 5 \mu\text{g}/\text{dL}$ ). Table 1 presents the results of childhood blood lead testing in Louisiana from 2002 to 2007. All cases presented were confirmed with a second blood test.

Table 1. Cases by Blood Lead Level - Louisiana, 2002-2007

Blood Lead Level ( $\mu\text{g}/\text{dL}$ )	Number of Cases	Percent of Total
<5	113249	76.7
5-9	30303	20.5
10-14	484	0.3
15-19	160	0.1
20-24	76	<0.1
25-29	40	<0.1
30-34	27	<0.1
35-39	7	<0.1
40-44	3	<0.1
45-49	3	<0.1
50-54	1	<0.1
55+	0	<0.1

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## Announcements

**Updates: Infectious Disease Epidemiology (IDEPI) Webpages**

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

**ANNUAL REPORTS:** *E. coli* O157:H7; *Haemophilus influenzae* (Invasive Disease); Streptococcal Invasive Disease, Group A; Summary-Past Three Years

**EPIDEMIOLOGY MANUAL:** Group B Streptococcal Newborn Investigation Report; Guidelines for Infection Control in Dental Health-Care Settings-2003-

(MMWR); MRSA Public Information; Norovirus

**HAI:** Winter 2012 Newsletter

**INFLUENZA:** Early Estimates of Seasonal Influenza Vaccine Effectiveness-U.S., January 2013 (MMWR); Weekly Report

**LOUISIANA MORBIDITY REPORT:** Indices 1993-1994

**VETERINARY:** Common Veterinary Infections, Third Quarter, 2012-Canine

**WEST NILE VIRUS:** Weekly Report

## Trends in Mortality and Causes of Death Among Louisiana Residents Living with HIV, 1999-2009

Antoine D. Brantley, B.S., M.P.H. Candidate

The Department of Health and Hospital’s Office of Public Health STD/HIV Program’s (SHP) HIV/AIDS Surveillance Program actively collects demographic, risk, and laboratory data for persons diagnosed with HIV throughout the state. SHP conducts matches between the HIV surveillance database and three death databases (Louisiana’s vital statistics database, the Social Security Death Index, and the National Death Index) to verify the vital status of all persons with an HIV diagnosis. Additional information, including the underlying and secondary cause of death, is extracted from the respective death certificate and entered in SHP’s surveillance database.

Since the advent of Highly Active Antiretroviral Therapy (HAART) after 1995, the mortality rate due to HIV in the U.S. HIV population has decreased approximately 80 percent from 1996 to 2008. Observational studies and surveillance data from the U.S. and Western Europe have shown that ongoing HAART treatment, with appropriate initiation and adherence, can prevent the onset of AIDS and greatly increase survival time in persons living with HIV. Additionally, these studies found that HAART-treated patients who did die were less likely to have died from HIV-related causes, such as opportunistic infections and HIV-related malignancies, and more likely to die from non-HIV-related causes such as cardiovascular disease and liver disease.

Previous data have shown that the HIV population in Louisiana has also seen a significant decrease in overall mortality since the introduction of HAART. The number of deaths in the HIV population de-

creased by approximately 50 percent between 1995 and 1999. Since 1999, the number of deaths has stayed relatively stable. During the same period, the prevalence of people living with HIV has steadily increased, and the incidence of new HIV cases has remained relatively stable. Taken together, these trends suggest that the HIV population in Louisiana is living longer than before and mortality rates are continually decreasing. Nonetheless, the same data has highlighted significant disparities in mortality between races, transmission risk groups and geographic location, despite statewide increases in access to HIV testing and treatment.

SHP has recently conducted an analysis of mortality in Louisiana’s HIV population to describe the trends and distribution of causes of death reported from 1999 to 2009. The underlying cause of death (coded per ICD-10 guidelines) from all deaths occurring in the HIV population during this period was extracted and grouped into one of 20 categories: six HIV-related categories (i.e., opportunistic infections, AIDS defining malignancies) and 14 non-HIV-related categories (i.e., liver disease, cardiovascular disease, accidents). These groups were chosen based on groupings used in similar studies. The categories were further condensed into two groups: HIV-related deaths and non-HIV-related deaths.

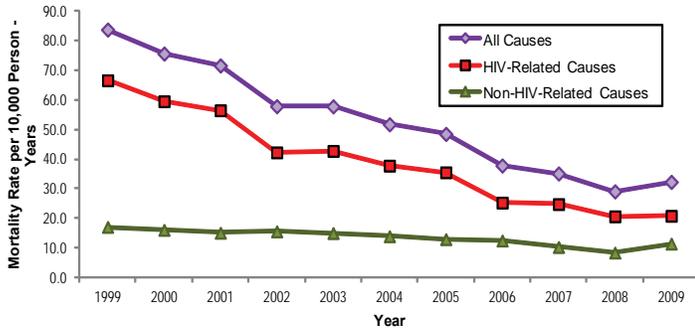
Retrospective follow-up began January 1, 1999 and ended December 31, 2009. People included in the analysis could have been diagnosed with HIV anytime since 1980. Pediatric cases were not

included in the analysis. Mortality rates were calculated and took into account person-years after HIV diagnosis; the denominator represents person years for all individuals in a given time period.

**Overall Trends in Causes of Death**

The mortality rate attributed to all causes has decreased 65 percent from 1999 to 2008, with a slight 10 percent increase from 2008 to 2009. During the same period, the mortality rate of HIV-related causes declined 67 percent. In 2009, HIV-related causes accounted for 65 percent of deaths compared to almost 80 percent of deaths in 1999 (Figure 1).

Figure 1: Cause-Specific Mortality Rates in Persons with HIV Infection Louisiana, 1999-2009

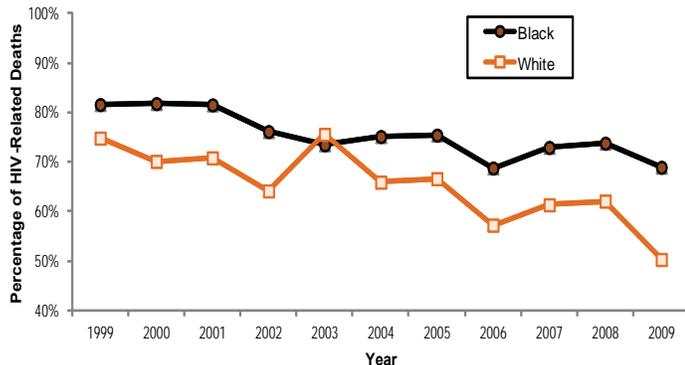


These data confirm that the mortality rate in Louisiana’s HIV population is continuing to decrease and that the impact of HIV-related causes of death on mortality in this population is waning.

**Disparities in Cause-Specific Mortality**

Blacks who are living with HIV are disproportionately affected by mortality. During the study period, Blacks were significantly more likely than Whites to die from HIV-related causes for nine of the 11 years in the study period. In 2009, 70 percent of deaths among Black HIV-infected persons were due to HIV-related causes, compared to 50 percent among White HIV-infected persons (Figure 2).

Figure 2: Percentage of Deaths attributed to HIV-Related Causes by Race Louisiana, 1999-2009



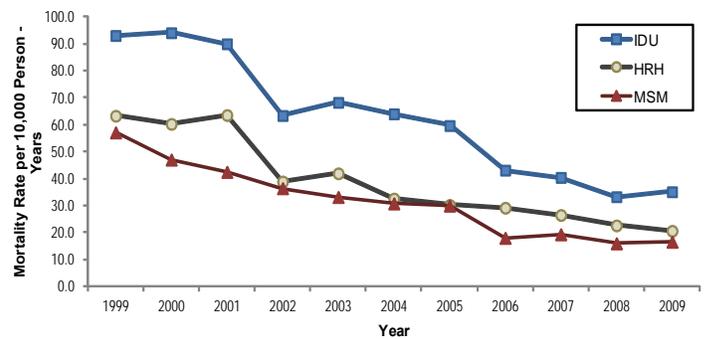
Furthermore, while Blacks accounted for 72 percent of all deaths occurring in the HIV population in 2009, they accounted for more than 77 percent of deaths from HIV-related causes and only 62 percent of deaths from non-HIV-related causes.

Mortality from HIV-related and non-HIV-related causes has decreased for both Whites and Blacks during the study period; however, the HIV-related mortality rate in Whites has decreased at a faster pace than that in Blacks. In 1999, Blacks had a rate of mortality from

HIV-related causes that was twice that of Whites. In 2009, the same rate was almost three times that of Whites. The rate of mortality from non-HIV-related causes has been similar between Whites and Blacks. These data show that HIV-related causes greatly influence the disparity in mortality between Black and White HIV-infected persons.

Currently, injection drug users (IDU) are disproportionately affected by mortality in the HIV population. While mortality rates have decreased overall for each transmission risk group during the study period, IDU have consistently had the highest rates of mortality from HIV-related causes and non-HIV-related causes. MSM (men who have sex with men) have consistently had the lowest rates of mortality from HIV-related causes. In 2009, IDU had an HIV-related mortality rate that was more than twice the HIV-related mortality rate in MSM and almost twice the HIV-related mortality rate in high-risk heterosexuals (HRH) (Figure 3).

Figure 3: Trends in Mortality due to HIV-Related Causes in Persons with HIV Infection by Transmission Risk - Louisiana, 1999-2009



Historically, the New Orleans (NO) and Baton Rouge (BR) regions have been disproportionately affected by HIV and have had the highest mortality rates. In 2009, 62 percent of deaths occurred in these two regions, while in the same year, these two regions constituted only 56 percent of people living with HIV. HIV-related causes have the biggest impact on mortality in BR, whereas non-HIV-related causes have the biggest impact on mortality in NO. BR accounted for 27 percent of all deaths from HIV-related causes, while only accounting for 24 percent of all deaths in the population. NO accounted for more than 35 percent of deaths attributed to non-HIV-related causes, while accounting for only 29 percent of all deaths.

All regions experienced declines in rates of mortality from HIV-related causes during the study period. BR, NO, and the Lake Charles regions experienced the greatest declines. From 1999 to 2007, BR had the highest rates of mortality from HIV-related causes. From 2008 to 2009, the mortality rate from HIV-related causes in the Alexandria, Shreveport, and Monroe regions surpassed that of BR. Additionally, the proportion of all HIV-related deaths attributed to the latter three regions has experienced the greatest increase during the study period compared to the other regions.

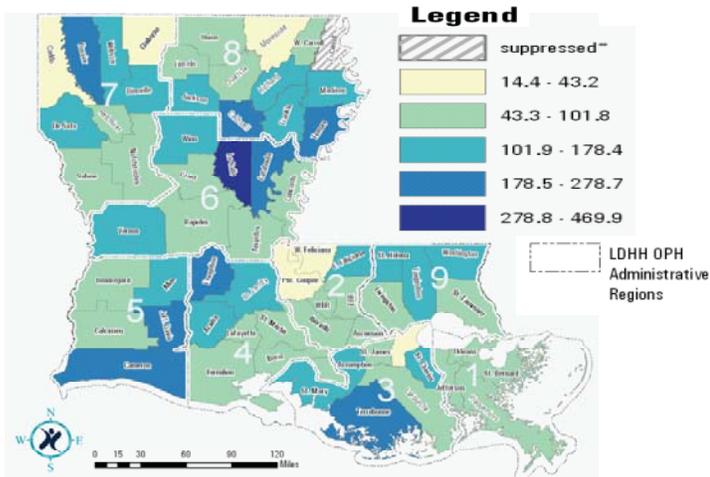
Overall, the HIV population in Louisiana has seen a significant decline in mortality from HIV-related causes after widespread use of HAART treatment; however, significant disparities in HIV-related mortality exist regarding race, transmission risk and region. Increased HIV testing, linkage to care and adherence to treatment are all critical to further reducing HIV-related mortality and eliminating disparities.

For references or more information, please contact Jessica Fridge at (504)568-5566 or email to [jessica.fridge@la.gov](mailto:jessica.fridge@la.gov).

(A Review of Adult Asthma ... Continued from Page 3)

Public Health Region 6 had the highest hospitalization (470) and death (7.4) rates, respectively, per 100,000 residents. Region 6 had both the highest average annual hospitalization (189) and death (13.1) rates (Figure 3).

Figure 3: Average Annual Age-adjusted Asthma Morbidity Rate by Parish per 100,000 Population - Louisiana, 2006-2010



Note: Map prepared January 10, 2013 by the Louisiana DHH which cannot guarantee the accuracy of the information contained on this map and expressly disclaims liability for errors and omissions in its contents.

**Conclusion:**

Asthma hospitalization and death rates for Louisiana residents predictably increased with age. Sex and race-specific data were consistent with the Centers for Disease Control and Prevention’s National Asthma Surveillance data, with females and Blacks generally having the highest hospitalization and death rates.

Based on national estimates, the work environment is an important contributor to the development and exacerbation of asthma. Work history should be routinely collected by health care providers (HCPs) as part of the demographic history. It is imperative that HCPs receive adequate training in recognizing WRA cases and obtaining a thorough environmental exposure/work history for all patients. Workers must be educated about the exposure risks for known asthmagens in the constantly evolving list of high-risk industries and occupations. Asthmatics who smoke typically have worsened and more frequent symptoms than non-smokers. Early diagnosis of potentially work-related respiratory symptoms may prevent further development of asthma and help detect those with other pre-existing health conditions who may be at risk. Early assessments would also assist in identifying more WRA cases.

The Louisiana Occupational Health and Injury Surveillance Program, housed in DHH Office of Public Health’s Section of Environmental Epidemiology and Toxicology, focuses on identifying workers at high risk for occupational morbidity or mortality and providing the data to reduce occupational injuries and diseases through targeted preventive measures. This report reflects a first step in addressing the burden of work-related asthma in Louisiana. It has several limitations: inclusion of all asthma hospitalizations, not individuals; difficulty identifying work-related cases; and incomplete reporting by hospitals to LAHIDD. Approximately 80 percent of licensed, acute-care hospitals provided data to LAHIDD between 2006 and 2010. In addition, inconsistencies and errors in both cod-

ing and reporting may introduce data gaps. Such data limitations should be noted if conducting exploratory ecological studies with these data. Next steps include analyzing data by combined sex and race and co-morbidities, and partnering with the Louisiana Asthma Management and Prevention Program to identify strategies targeting occupational asthma.

For additional information, please contact Dr. Jocelyn Lewis at (504) 568-8159 or email to [jocelyn.lewis@la.gov](mailto:jocelyn.lewis@la.gov).

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to 84 years. Fifty percent of the cases were from Region 3\*, the remaining cases were from Regions 1, 4, 7 and 9. Over half of the cases were hospitalized (57%). Two cases were wound infections; the remaining 12 were gastroenteritis cases. Symptoms reported by gastroenteritis cases were diarrhea (92%), nausea (75%), abdominal cramps (75%), vomiting (58%), bloody stools (33%), and fever (33%). Over half (57%) of the cases had at least one more pathogen isolated from the same source as *V. fluvialis*. Other pathogens isolated were *Plesiomonas shigelloides* (2), *Aeromonas* (2), MRSA, Group B Streptococcus, *Proteus mirabilis*, *Edwardsiella*, *Clostridium difficile* and Algae.

Exposure information was obtained on nine of the 14 cases. Of the gastroenteritis cases with known exposure, 70 percent reported consuming raw oysters either alone or with other seafood prior to onset, and 30 percent reported consuming seafood other than oysters.

Non-cholera Vibrio is a Class C disease and should be reported to the State Health Department within five business days. In the laboratory setting, *V. fluvialis* exhibits a similar characteristic to *Aeromonas*. There is a potential to misidentify *V. fluvialis* as *Aeromonas*, or vice versa. Hospital and private laboratories are encouraged to send suspect *V. fluvialis* isolates to the DHH State Public Health Laboratory for confirmation.

For more information, Erin Delaune can be reached at (504)568-8316 or email to [erin.delaune@la.gov](mailto:erin.delaune@la.gov).

\* Map of Regions on Page 7

(Blood Lead Surveillance ... Continued from Page 4)

The best way to protect children is to prevent lead exposure in the first place. The source of most lead poisoning in children is dust and chips from deteriorating lead paint on interior surfaces. The U.S. Department of Housing and Urban Development, Office of Healthy Homes and Lead Hazard Control recently released an updated version of the pamphlet "Protect Your Family from Lead in Your Home". The new pamphlet is available at [http://www.hud.gov/offices/lead/library/enforcement/pyf\\_eng.pdf](http://www.hud.gov/offices/lead/library/enforcement/pyf_eng.pdf).

Children can be exposed to lead via take-home exposure, which occurs when workers transport lead on shoes and work clothes into their homes or automobiles. Most adult exposure to lead occurs in the workplace. The Department of Health and Hospitals, Office of Public Health, Section of Environmental Epidemiology and Toxicology’s Adult Lead Program, has developed several fact sheets addressing adult lead exposure. These fact sheets can be downloaded from <http://www.dhh.louisiana.gov/biomonitoring>.

To learn more about preventing lead exposure, visit CDC’s Web site at <http://www.cdc.gov/nceh/lead/>.

For more information, please contact Adrienne Katner at (504) 568-8156 or email to [adrienne.katner@la.gov](mailto:adrienne.katner@la.gov).

Table: Communicable Disease Surveillance, Incidence by Region and Time Period, November-December, 2012

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Nov-Dec 2012	Nov-Dec 2011	Jan-Dec Cum 2012	Jan-Dec Cum 2011	Jan-Dec % Chg*	
<b>Vaccine-preventable</b>															
Hepatitis B Cases	0	0	1	1	0	0	0	0	1	3	18	44	62	-29.0	
Hepatitis B Rate <sup>1</sup>	0	0	0.3	0.2	0	0	0	0	0.3	0.1	0.4	1.0	1.4	NA*	
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Mumps	0	0	1	0	0	0	0	0	0	1	0	1	0	NA*	
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Pertussis	0	2	1	0	0	0	2	0	1	6	4	59	24	145.8	
<b>Sexually-transmitted</b>															
HIV/AIDS Cases <sup>2</sup>	43	23	11	15	2	6	7	4	8	119	206	1168	1249	-6.5	
HIV/AIDS Rate <sup>1</sup>	4.3	4.0	2.8	2.8	0.7	2.0	1.4	1.1	1.8	2.7	4.7	26.7	28.6	NA*	
Chlamydia Cases <sup>3</sup>	477	173	77	229	73	59	255	217	97	1,657	6,784	23,964	31,614	-24.2	
Chlamydia Rate <sup>1</sup>	57.1	26.1	18.9	39.2	24.9	19.0	46.9	61.0	17.9	36.6	149.7	528.6	697.4	NA*	
Gonorrhea Cases <sup>3</sup>	106	31	17	83	27	10	92	93	18	477	2,016	7,781	9,169	-15.1	
Gonorrhea Rate <sup>1</sup>	12.7	4.7	4.2	14.2	9.2	3.2	16.9	26.1	3.3	10.5	44.5	171.6	202.3	NA*	
Syphilis (P&S) Cases <sup>3</sup>	11	3	0	3	0	3	15	0	0	35	78	316	447	-29.3	
Syphilis (P&S) Rate <sup>1</sup>	1.3	0.5	0	0.5	0	1.0	2.8	0	0	0.8	1.7	7.0	9.9	NA*	
<b>Enteric</b>															
Campylobacter Cases	1	5	2	0	1	3	7	2	1	22	27	178	197	-9.6	
Hepatitis A Cases	0	1	1	1	0	0	0	0	0	3	3	7	5	NA*	
Hepatitis A Rate <sup>1</sup>	0	0.2	0.3	0.2	0	0	0	0	0	0.1	0.1	0.2	0.1	NA*	
Salmonella Cases	8	21	12	37	17	16	22	8	27	168	174	1552	1442	7.6	
Salmonella Rate <sup>1</sup>	0.8	3.7	3.2	7.2	6.3	5.2	4.3	2.3	7.0	3.9	4.0	36.0	33.4	NA*	
Shigella Cases	3	8	1	12	8	2	0	2	6	42	77	214	487	-56.1	
Shigella Rate <sup>1</sup>	0.3	1.4	0.3	2.3	3.0	0.7	0	0.6	1.6	1.0	1.8	5.0	11.3	NA*	
Vibrio cholera Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Vibrio, other Cases	1	0	0	1	0	0	1	0	0	3	5	52	54	NA*	
<b>Other</b>															
<i>H. influenzae (other)</i>	1	3	0	0	0	0	0	1	0	5	8	57	53	NA*	
<i>N. Meningitidis</i>	1	0	0	0	0	0	0	0	0	1	3	4	14	-71.4	

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

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

<sup>3</sup> = Preliminary data.

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

Figure: Department of Health and Hospitals Regional Map

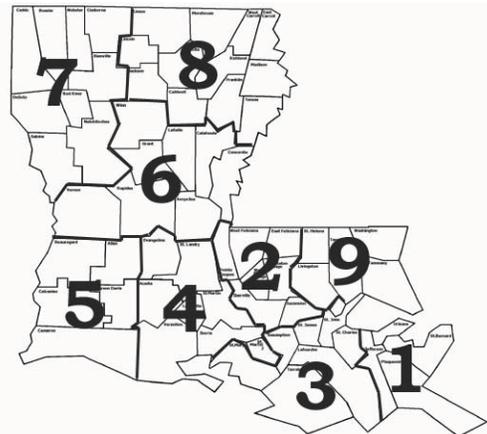


Table 2. Diseases of Low Frequency, January-December, 2012

Disease	Total to Date
Legionellosis	30
Lyme Disease	3
Malaria	12
Rabies, animal	3
Varicella	69

Table 3. Animal Rabies, November-December, 2012

Parish	No. Cases	Species
	0	

**Sanitary Code - State of Louisiana  
Part II - The Control of Disease**

**LAC 51:II.105: The following diseases/conditions are hereby declared reportable with reporting requirements by Class:**

**Class A Diseases/Conditions - Reporting Required Within 24 Hours**

*Diseases of major public health concern because of the severity of disease and potential for epidemic spread-report by telephone immediately upon recognition that a case, a suspected case, or a positive laboratory result is known; [in addition, all cases of rare or exotic communicable diseases, unexplained death, unusual cluster of disease and all outbreaks shall be reported.*

Anthrax	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)	Hepatitis A (acute disease)	Malaria
Aseptic meningitis	Hepatitis B (acute illness & carriage in pregnancy)	Mumps
Chancroid <sup>1</sup>	Hepatitis B (perinatal infection)	Pertussis
Escherichia coli, Shig-toxin producing (STEC), including E. coli 0157:H7	Hepatitis E	Salmonellosis
Hantavirus Pulmonary Syndrome	Herpes (neonatal)	Shigellosis
Hemolytic-Uremic Syndrome	Human Immunodeficiency Virus [(HIV), infection in pregnancy] <sup>2</sup>	Syphilis <sup>1</sup>
	Human Immunodeficiency Virus [(HIV), perinatal exposure] <sup>2</sup>	Tetanus
	Legionellosis (acute disease)	Tuberculosis <sup>2</sup>
		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) <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)	Streptococcus pneumoniae, penicillin resistant [DRSP], invasive infection]
Cryptococcosis	Human Immunodeficiency Virus [(HIV syndrome infection)] <sup>2</sup>	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	Hemophilia <sup>4</sup>	Severe Undernutrition (severe anemia, failure to thrive)
Carbon Monoxide Exposure and/or Poisoning <sup>5</sup>	Lead Exposure and/or Poisoning (children) <sup>4</sup> (adults) <sup>5</sup>	Sickle Cell Disease (newborns) <sup>4</sup>
Complications of Abortion	Pesticide-Related Illness or Injury (All ages) <sup>5</sup>	Spinal Cord Injury
Congenital Hypothyroidism <sup>1</sup>	Phenylketonuria <sup>4</sup>	Sudden Infant Death Syndrome (SIDS)
Galactosemia <sup>4</sup>	Reye's Syndrome	
Heavy Metal (Arsenic, Cadmium, Mercury) Exposure and/or Poisoning (All ages) <sup>5</sup>	Severe Traumatic Head Injury	

Case reports not requiring special reporting instructions (see below) can be reported by mail or facsimile on Confidential Disease Report forms (2430), facsimile (504) 568-8290, telephone (504) 568-8313, or 1-800-256-2748 for forms and instructions.

<sup>1</sup>Report on STD-43 form. Report cases of syphilis with active lesions by telephone, within one business day, to (504) 568-8374.

<sup>2</sup>Report to the Louisiana HIV/AIDS Program: Visit [www.hiv.dhh.louisiana.gov](http://www.hiv.dhh.louisiana.gov) or call 504-568-7474 for regional contact information.

<sup>3</sup>Report on CDC72.5 (f.5.2431) card

<sup>4</sup>Report to the Louisiana Genetic Diseases Program and Louisiana Childhood Lead Poisoning Prevention Programs: [www.genetics.dhh.louisiana.gov](http://www.genetics.dhh.louisiana.gov) or call (504) 568-8254.

<sup>5</sup>Report to the Section of Environmental Epidemiology and Toxicology: [www.seet.dhh.louisiana.gov](http://www.seet.dhh.louisiana.gov) or call 1-888-293-7020

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