

Louisiana Morbidity Report



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Trichinellosis - Region 3* Louisiana, 2010-2011

Melissa Brown, MPH

In March of 2011, the Louisiana Office of Public Health, Infectious Disease Epidemiology Section, confirmed the first case of trichinellosis in the state since 1983. Trichinellosis, also called trichinosis, is a disease transmitted by consuming raw or undercooked meat from animals infected with the microscopic parasitic roundworm *Trichinella*.

In this particular case, the infected patient presented to his primary care physician with complaints of severe muscle aches, fever and general lethargy. After discovering that the patient was an avid hunter who routinely consumed wild game, the patient was referred to an infectious disease specialist. The patient subsequently tested positive for *Trichinella* antibodies in a convalescent serum sample. The reservoir for this particular case was suspected to be either home prepared venison sausage or commercial pork; however, no samples of either meat product were available for testing and no other individuals who consumed the meat products in question became ill.

Many different omnivores and carnivores can serve as host species for *Trichinella*. Although many different species can be infected with *Trichinella*, humans remain the only species to display a clinical infection. Hosts for *Trichinella* include, but are not limited to, swine, dogs, cats, horses, rats, foxes, wolves, bears, moose, mountain lions, polar bears, wild boar, hyenas, jackals, lions, leopards, deer, cougar, walrus and seals.

Humans become infected with trichinellosis by ingesting undercooked or raw meat from the host animals that contains the en-

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UV Exposure Cluster-Regions 4 and 5* - Louisiana, 2011

Farida Hussain, BS; Pamela Kreyling BSN, MPH;
Caroline Holsinger, MPH CPH

Background:

On February 9, 2011, from 8:00 a.m. to 12:30 p.m., 26 schools attended a Family, Career and Community Leaders of America conference, held at a nearby facility. Later that afternoon, upon returning to School A, it was brought to the principal's attention that the majority of the school's students/adults who had participated in the conference received "burns" to their arms, faces and eyes. One of the students sought care at a local emergency department due to severe pain from the burn sites.

On February 10, 2011, the principal from School A notified the local parish sanitarians in Region 5 of a possible UV exposure cluster. Regions 4 and 5 sanitarians worked closely together to conduct inspections at various locations that were pertinent to the investigation. These locations in Region 5 included the designated meeting area at the school, which was utilized prior to leaving the school, and the bus used during transportation to the conference. The locations in Region 4 included the facility where the conference was held, and the local restaurant (Restaurant #1) where the students and adults from School A had lunch.

On February 15, 2011, light meter readings at the conference facility were obtained by Region 4 sanitarians; readings ranged from 46 foot-candles to 101 foot-candles. Readings of 95 and 101 foot-candles were obtained in the area where School A was seated. There was also an area receiving direct sunlight through the windows, which had a reading of 1400 foot-candles. The facility was also found to be using 400 watt metal Halide lamps.

During the investigation, it was reported to the Region 5 Disease Surveillance Specialist that there were students and adults from School B who had symptoms similar to "burns" that became noticeable after leaving the conference as well. These students and adults had lunch at a different restaurant (Restaurant #2). The decision was then made to obtain a list of all schools that were in attendance at the conference and to actively survey each school to locate any additional symptomatic cases. Through active surveillance, two additional persons from School C reported symptoms.

Investigation/Analysis:

Questionnaires regarding symptoms and seating arrangements were administered to the three schools that had students and adults who became symptomatic:

- 40 out of 40 (100%) questionnaires were completed from School A.

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* Map of Regions on Page 7

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- seven out of nine (77.8%) questionnaires were completed from School B. Of the seven participants who responded, 100% of them sat directly behind School A at the conference.

- 18 out of 18 questionnaires were completed from School C. Two of the respondents (11.1%) reported "burns." All 18 persons sat across the aisle southeast of School A. All of these participants also had lunch at a different location than either School A or School B.

A total of 62 questionnaires were completed and returned to the Office of Public Health from the three schools. A database was created utilizing Epi-Info (Tables 1, 2 and 3).

Table 1: Activity and Risk Ratios for Attendees from School A Louisiana, 2011

Activity		Burns?		Relative Risk
		Y	N	
Ate at Restaurant #1	Y	29	3	2.4 (0.98-5.95)*
	N	3	5	
Sat with Group	Y	27	1	3.9 (1.16-12.83)
	N	2	6	
Rode Bus	Y	28	4	4.4 (0.75-25.38)*
	N	1	4	
Went to Restroom	Y	21	8	4.4 (0.75-25.38)*
	N	8	0	
Concession Stand	Y	17	5	0.97 (0.069-1.36)*
	N	12	3	
Voting Room	Y	2	7	0.23 (0.07-0.78)
	N	27	1	

*Not significant

Relative Risk is used in this instance because all attendees from School A were interviewed. It illustrates the ratio of the probability of the event occurring in the exposed group versus the non-exposed group. Eating at Restaurant #1 did not generate a statistically significant relative risk, therefore it can potentially be ruled out as a possible exposure. Additionally, riding the bus and going to the restroom were not significant. When using the voting room and concession stand, there was less risk of outcome. The only statistically significant activity was sitting with the group in the conference facility. Those that sat with the group had a 3.9 times higher risk of having burns.

Table 2: Activity and Odds Ratios for Attendees from Schools A, B & C Louisiana, 2011

Activity		Burns?		Odds Ratio
		Y	N	
Sat in School A/B Section	Y	34	1	195.5 (20.52-1862.90)
	N	4	23	
Went to Restroom	Y	26	18	0.72 (0.23-2.28)*
	N	12	6	
Concession Stand	Y	19	8	2.0 (0.69-5.78)*
	N	19	16	
Voting Room	Y	4	9	0.20 (0.05-0.74)
	N	34	15	

*Not significant

Table 3: Respondants Answering Location of Burn - Louisiana, 2011

Body Areas	Percentage
Cheeks	76.3
Eyes	63.2
Forehead	44.7
Forearm	36.8
Neck	34.2
Chest	18.4
Upper Arm	15.8
Legs	13.2
Hands	10.5
Scalp	5.3

An odds ratio was used in this instance because additional schools were surveyed which did not reflect the total population of those exposed. Odds ratio can closely estimate relative risk. Those students that sat in, or near the School A section, were 195.5 times more likely to have a worse outcome than those that did not sit in this section. Going

to the restroom, concession stand or voting room did not result in an increased risk.

Theory:

There are two types of 400 watt metal Halide lamps: type "T" self-extinguish within 15 minutes of the outer bulb being broken; type "R" do not self-extinguish. Even a small opening in the outer bulb of a Type "R" can result in UV skin burns and eye inflammation. The Food and Drug Administration has issued warnings, last updated in 2009, for schools and gymnasiums to use Type "T" bulbs due to the risk of bulbs being cracked and/or broken during athletic activities.

As a result of this information, the Region 4 sanitarian re-visited the facility and found that the M59-S Type "R" bulbs were used, covered by wire grids. Twelve lights over the area where the affected students were sitting were checked; there were no cracks or breakage in any of the bulbs. No bulbs have been replaced since this incident occurred.

The inspections of the conference facility revealed that the lighting in the area where Schools A and B were sitting had a light meter reading that was considerably higher than the surrounding area lights. The sanitarian that inspects tanning bed facilities was present during all of the facility inspections in Region 4 and theorized that sunlight through the windows could have contributed to the skin/eye irritation.

The schools had brought their own stage rather than utilizing the facility's stage and used a seating arrangement different than

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the arrangement generally used for meetings in the facility. The height of the windows would not expose those chairs closest to the wall, in the usual conference seating arrangement, for as long a time as the section in which School A and B students sat. In the

usual conference seating arrangement, attendees' backs are to the windows and often there is no seating in the area at all due to the distance from the permanent stage (Figure).

Figure: Seating Arrangement at Conference - Louisiana, 2011



Conclusion:

Symptoms of UV overexposure include a burning or painful sensation in the eye or skin, sensitivity to light and a sunburn appearance on the skin. Symptoms usually develop over the course of several hours after overexposure has occurred.

This investigation concludes that the suspected cause of sunburn-like symptoms is through prolonged sunlight exposure through the conference facility's windows or exposure to UV rays from undetected breaks in bulbs.

The Region 4 regional sanitarian recommended that the facility address the issue by: covering the windows with materials such as a UV blocking tint; not allowing prolonged seating in the area; utilizing a curtain to shield the windows on the south wall of the building; replacing all Type "R" bulbs with Type "T" bulbs.

For more information, please contact Caroline Holsinger at (504) 568-8307 or email to caroline.holsinger@la.gov.

An Assessment of the Future Practice of Medicine in Louisiana

Jude Haney, MPH

In an effort to increase overall health outcomes and prepare the state for major changes in health care delivery resulting from the Affordable Health Care Reform Acts, the Department of Health and Hospitals (DHH), held a meeting on February 16, 2011 in Baton Rouge, Louisiana. A total of 174 participants attended the meeting, 112 physicians and 62 non-physicians. The attendees completed questionnaires, pre- and post-meeting to determine the impact on participant's knowledge of proposed changes. The meeting's goal was to gain insight into Louisiana's health care providers' concerns and questions, and to share information specifically related to the current and future health care challenges to the state's practice of medicine.

Proposals from the meeting included transforming Medicaid from the current fee-for-service system to Coordinated Care Networks (CCNs) and incentivizing the use of electronic health records systems. Budget challenges and its impact on changes in the delivery of care were emphasized, as well as an overall review of the Health Care Reform bill, health information technology and grant opportunities, and surveillance of reportable diseases.

Currently, according to the 2010 United Health Foundation's America's Health Rankings, Louisiana is ranked 49th overall, down from 47th in 2009. Also, according to a more comprehensive 2009 report by the Trust for America's Health, Louisiana is ranked in the top 10 nationally for some major health indices: rates of Chlamydia -eighth, syphilis -second, rates of pre-term births, infant mortality, and low birth weight -third.

DHH has proposed that transitioning from the current fee-

for-service Medicaid program to a system that more effectively coordinates an enrollee's health care, will lead to better access, more choices and improved health for patients. Also, through electronic health records, providers can: enhance care coordination and patient safety; reduce paperwork; improve efficiency; establish faster, more effective lines of communication across providers, payers and state lines. These changes will affect all providers of health care services and the populations that they serve. Further dialogue and input from providers, legislators, stakeholders, health advocates, potential Community Care Networks, and the public can assist in DHH's development of an improved proposal to make the necessary changes to Medicaid. For further information about changes to Medicaid, please go to website: www.making-medic-aid-better.com.

Forty-four percent (n=76) of the participants completed both pre- and post-questionnaires. SPSS version 18.0 was used for the following analysis. On average, participants had a higher score during the post-test (M=13, SE=0.34), than the pre-test (M=8, SE=0.28). This difference was found to be statistically significant [t-test= -6.70 (n=75), p<0.05] showing that meetings such as this can have a significant impact on participant's knowledge of changes in the delivery of care, the Health Care Reform bill, health information technology, and surveillance of reportable diseases in Louisiana.

For more information about the assessment, please contact Mr. Haney at (504) 361-6838 or email to jude.haney@la.gov.

cysted larvae of the parasite, *Trichinella*. After exposure to human digestive juices, the nonencapsulated larvae invade the mucosa of the small intestine where the larvae develop into adult worms. After the male and female parasites copulate in the small intestine, the female *Trichinella* release newborn larvae into the lymphatic system. The newborn larvae then travel to the striated muscles via the lymphatic system where they begin to encyst (Table 1).

Table 1. Progressive Symptoms of Trichinellosis

Post Consumption Time Frame	Stage of Infection	Symptoms
2-7 days	Larvae are released from cysts and migrate into blood vessels by way of the intestinal mucosa	Abdominal discomfort, nausea, vomiting, diarrhea
1-6 weeks	Larvae migrate from blood vessels into striated muscles where they encyst	Fever, myalgia, periorbital edema, urticarial rash, conjunctival and subungual hemorrhages, myocarditis in 5% to 20% of cases
6 weeks – 6 months	Adult females cease to release larvae; established larvae complete their development in muscle cells; Encysted larvae begin to calcify	Progressive disappearance of signs and symptoms; some chronic muscle pain may persist

Symptoms of trichinellosis are variable and clinical illness is highly dependent on the number of encysted larvae ingested. Consuming only a few encysted parasites can cause subclinical infections in which the infected individual would experience mild symptoms or no symptoms at all.

Figure: Larvae of *Trichinella* Liberated From Bear Meat (CDC)



Infectious doses of *Trichinella* typically cause gastrointestinal symptoms within one week of consuming raw, or undercooked meat from a *Trichinella*-infected animal. The stage at which the parasites are invading the intestinal mucosa is often called the intestinal stage. The intestinal stage is followed by the muscular stage of the disease, in which the newborn larvae reach the striated muscles and actively penetrate the muscle cells (Figure).

Fever, orbital edema, myalgias and eosinophilia are hallmark signs and symptoms of the muscular stage, and will begin to develop one to six weeks after ingesting the infected meat. If the parasite burden is high, infected individuals may experience neurological, cardiac and respiratory issues. In severe cases, death due to myocardial failure can occur.

Laboratory confirmation of infection is made either by a positive serologic test for *Trichinella*-specific antibody, or by identification of *Trichinella* larvae in tissue obtained by muscle biopsy. Skeletal muscle biopsy will show encysted larvae 10 days after ingestion; serological testing will typically test positive by the third week of infection. Individuals with Trichinellosis typically develop eosinophilia between week two and week five post-infection, with few exceptions. It is also possible to identify larvae in leftover suspect meat in order to aid in diagnostic testing. Once the larvae have become established in skeletal muscle cells, usually by three to four weeks post-infection, treatment may not completely eliminate the infection and associated symptoms. If trichinellosis is diagnosed within three to four weeks of the initial infection, treatment with antiparasitic drugs can help prevent the progression of the disease by killing the adult worms and so preventing further release of larvae.

During the late 1940s, when the U.S. Public Health Service began counting cases of trichinellosis, approximately 400 cases were reported each year. The overall number of cases reported in the U.S. has since decreased dramatically due to improved pig-raising practices in the pork industry and public awareness of the danger of eating raw or undercooked meat products. Over the past 40 years, few cases of trichinellosis have been reported in the United States; the risk of this disease from commercially raised and properly prepared pork remains very low. For each of the years, between 2002 to 2007, on average, 11 U.S. cases were reported to the Centers for Disease Control and Prevention (CDC). Although the likelihood of becoming infected with trichinellosis due to ingestion of commercial pork remains low, eating undercooked wild game, particularly bear meat, puts one at risk for acquiring this disease.

Curing, drying, smoking or microwaving meat alone does not consistently kill *Trichinella* parasites. Homemade jerky and sausage have been the cause of the majority of cases of trichinellosis cases reported to the CDC in recent years. In order to prevent infection, it is important to cook all meats thoroughly, especially pork products and wild game. Internal temperatures must reach at least 71°C (160°F) in order to kill encysted *Trichinella* larvae. Freezing temperatures maintained throughout the mass of infected meat are also effective in inactivating trichinae. Holding pieces of meat, up to 15 cm thick, at a temperature of -15°C (5°F) for 30 days or -25°C (-13°F) or lower for 10 days will effectively destroy all common types of trichinae cysts. Thicker pieces should be held at the lower temperature for at least 20 days.

For more information, please contact Ms. Brown at (504) 568-8318 or email to melissa.brown2@la.gov.

Effects of Family Environment On Alcohol Use and Prosocial Family Involvement on Adolescent Alcohol Consumption Louisiana, 2006

Cassandra Davis, MPH; Tri Tran MD MPH; Gary Asmus, PhD

Background:

Alcohol use is of great importance in public health because of the serious adverse health outcomes associated with its abuse. Evidence has shown that there are certain factors that increase an adolescent’s risk of consuming alcohol, such as parental alcoholism, poor family management practices, high levels of family conflict, parental and sibling attitudes that are more favorable toward alcohol or drug use, and parental and sibling involvement in alcohol or drug use. This purpose’s study was to examine the association between adolescent alcohol use in Louisiana within the last 30 days (before taking the survey), and parental attitudes favorable toward alcohol use, sibling drinking behavior and chances to participate in fun activities with their parents, controlling for school sector (public and private), and students’ characteristics and behaviors including age, sex, race, gang involvement, involvement in after school activities, student’s grades, and friend’s drinking behaviors.

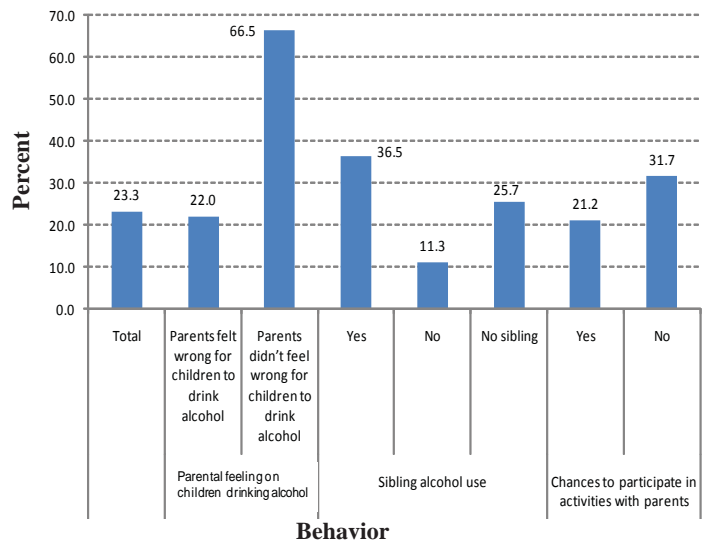
Methods:

The 2006 Louisiana Caring Communities Youth Survey (CCYS) data were analyzed. Alcohol use was questioned as ‘On how many occasions (if any) have you had beer, wine or hard liquor to drink during the past 30 days?’ The study population included students in grades 6th, 8th, 10th and 12th in Louisiana public and private schools. Students, who were non-Hispanic, White and African-American, and whose answers were classified as honest were included in the study; schools with less than 20 students were excluded. Answers were classified as ‘honest’ if answered with an answer of ‘I was very honest’ or ‘I was honest most of the time’ when answering the question, ‘How honest were you in filling out this survey?’ A total of 93 922 among 126 132 students who completed the survey were left for analysis. Multilevel logistic regression was conducted to determine association of adolescent alcohol use within the last 30 days with parental attitudes favorable toward alcohol use, sibling drinking behavior and chances to participate in fun activities with their parents.

Results:

In general, the prevalence of alcohol use within the last 30 days was 23.3%. The prevalence was 66.4% among adolescents whose parents did not feel it was wrong for them to drink alcohol versus 22.1% if parents felt it was wrong for them to drink alcohol; 31.7% among adolescents whose parents didn’t provide fun activities with their children versus 21.2% if parents provided fun activities with their children; 36.4% among adolescents whose siblings drank alcohol versus 11.3% if siblings didn’t drink; 25.7% if students did not have siblings. (Figure)

Figure: Prevalence of Adolescent Alcohol Use Within the Last Thirty Days Louisiana CCYS, 2006



Adolescents whose parents did not feel it was wrong for them to drink (odds ratio [OR]: 2.4, CI: 2.2, 2.7), and whose siblings drank alcohol (OR: 2.3, CI: 2.2, 2.4) were more likely to consume alcohol in the last 30 days. The data did not show any statistical association between students’ chances to participate in fun activities with the parents and their alcohol use within the last 30 days.

Conclusions:

This study suggested that the family environment was strongly associated with adolescent alcohol consumption. Parents and siblings should be the first layer of intervention efforts to help develop strong home strategies that foster a family environment conducive to reducing underage drinking. Furthermore, interventions aimed at creating schools and communities that promote alcohol abstinence among adolescents coupled with family interventions, may help to successfully reduce the risk of alcohol use among adolescents and help students improve their academic success and other health and social behaviors.

For more information, please contact Dr. Tran at (504) 568-3519, or email to tri.tran@la.gov.

Announcements

Updates: Infectious Disease Epidemiology (IDES) Webpages
<http://www.infectiousdisease.dhh.louisiana.gov>

ANNUAL REPORTS: Blastomycosis; Brucellosis; Cryptococcus; Disease Listing By Year, 1990-2010; Encephalitis, Other; *E. coli* O157:H7; *Haemophilus influenzae*; Shigella; Reportable Condition Summary-Past Three Years; Viral (Aseptic) Meningitis

EPIDEMIOLOGY MANUAL: Botulism; Campylobacter; Cryptosporidiosis; Dengue; Disinfection and Sterilization; Drinking Water Disinfection; Glossary; Hantavirus Case Report Form-CDC; Norovirus-Updated Outbreak Guidelines-CDC; Scabies; Shigellosis; Vibrio Case Report Form-CDC; Waterborne Diseases Outbreak Report Form-CDC

HAI: HAI Newsletter Vol. 15 -CDC; Spring 2011 Newsletter

INFLUENZA: Weekly Summary

LOUISIANA MORBIDITY REPORT: 2009-2010 Index

REPORTABLE DISEASE SURVEILLANCE: Disease Report Form ; Emergency Department Disaster Surveillance Form; Sanitary Code; Shelter Disaster Surveillance Form

SCHOOL RESOURCES: Psittacosis/Birds in Schools

VETERINARY: Guidelines for Persons Purchasing and/or Caring for Aquatic Life and Amphibians; Guidelines for Persons Purchasing and/or Caring for Turtles or Tortoises; Guidelines for Persons

Purchasing and/or Caring for Birds; Microbiological Makeup of Common Veterinary Infections, First Quarter, 2011 - Canine, Equine and Feline

WEST NILE VIRUS: Louisiana Arbovirus Surveillance Summary, Final Report, 2010

Infectious Disease Field Epidemiology Training - Louisiana, 2010



Keasha Henson, Regional Epidemiologist, and Natalie Mallery, Disease Surveillance Specialist, both from Region VII, attending training in Alexandria, October 8, 2010.

Monkey Business - A Brief Summary of the Dangers of Non-human Primates As Pets

Gary A. Balsamo DVM, MPH&TM

Public health officials frequently warn that keeping non-human primates (NHPs) as pets, in addition to being illegal, is a threat to the health and well being of those persons caring for the animals. Most NHPs become quite aggressive at the time of sexual maturity, especially males, and aggressive bites to human caretakers are virtually inevitable. The response of the medical and public health community to non-human primate (NHP) bites, even relatively minor bites, is often perceived as excessive; however several health consequences, some devastating, can result.

In bites from Old World primates, particularly those of the genus *Macaca*, the primary concern is the transmission of B virus (*Cercopithecine herpesvirus 1*, *Herpesvirus simiae*). Transmission of this disease is particularly a risk in bites from mature macaques. B virus causes a lifelong infection characterized by periods of reactivation and shedding in the NHP, and periods of reactivation characterized by signs similar to those observed with *Herpesvirus simplex* infection in humans. In humans, however, B virus causes severe disease that often involves the central nervous system and, more often than not, leads to death. In cases reported to the Centers for Disease Control and Prevention (CDC), 79% (19/24) of people infected have died. Humans are exposed to the virus primarily through bites, but NHPs may potentially infect humans through scratches, other salivary exposures and the handling of infected tissues. Early diagnosis is imperative since antiviral therapy can save the victim if initiated soon after onset of illness. Reporting of bites is crucial. Old World primates that bite should be serologically screened so that victims may be administered prophylaxis.

NHP bites also are not exempt from rabies prevention and surveillance procedures mandated in the public health sanitary code. Many believe erroneously that monkeys and apes are resistant to infection with the rabies virus; however NHPs are no more or less susceptible to rabies than humans. NHPs are considered wild animals and, although very few cases have been reported in these animals over the past century, health officials often are required to euthanize NHPs to rule out the possibility of transmission to humans.

Wound infections from NHP bites are also a common problem. Several different bacterial species and strains have been isolated from NHP bites. Bacterial species of concern include alpha hemolytic streptococci, staphylococci, enterococci, *Haemophilus parainfluenza*, *Neisseria* species, and *Eikenella corrodens*, a facultative anaerobe known to cause extensive tissue damage.

Tuberculosis transmission, which can be a problem in illegally imported non-human primates, is also a concern. Enteric disease has been transmitted from NHPs to humans. Many of the same agents of enteric diseases in humans are present in NHPs and careless, non-hygienic handling of the animals may result in accidental exposure.

Ownership of NHP pets is illegal. Persons who illicitly harbor NHPs should surrender these animals to state wildlife officials or to one of several legally operated NHP rescue groups, where the animals are permitted to live in a safe, appropriately controlled environment.

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

Table. Communicable Disease Surveillance, Incidence by Region and Time Period, March-April, 2011

DISEASE	HEALTH REGION									TIME PERIOD				
	1	2	3	4	5	6	7	8	9	Mar-Apr 2011	Mar-Apr 2010	Jan-Dec Cum 2011	Jan-Dec Cum 2010	Jan-Dec % Chg*
	Vaccine-preventable													
Hepatitis B Cases	1	1	0	1	1	0	0	0	1	5	10	18	22	NA*
Hepatitis B Rate ¹	0.1	0.2	0	0.2	0.4	0	0	0	0.3	0.1	0.2	0.4	0.5	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	2	0	2	NA*
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis	1	0	0	0	0	0	0	0	3	4	1	12	8	NA*
Sexually-transmitted														
HIV/AIDS Cases ²	52	26	1	8	5	8	12	10	5	127	202	345	403	-14.4
HIV/AIDS Rate ¹	5.2	4.5	0.3	1.5	1.8	2.7	2.4	2.9	1.1	2.9	4.6	7.9	9.2	NA*
Chlamydia Cases ³	714	11	5	11	19	132	37	40	191	1160	4428	1830	9626	-80.9
Chlamydia Rate ¹	88.5	1.7	1.3	1.9	6.7	44.0	6.9	11.5	36.6	26.3	100.4	41.5	218.2	NA
Gonorrhea Cases ³	214	2	3	3	1	40	9	8	35	315	1096	507	2711	-81.3
Gonorrhea Rate ¹	26.5	0.3	0.8	0.5	0.4	13.3	1.7	2.3	6.7	7.1	24.8	11.5	61.5	NA
Syphilis (P&S) Cases ³	5	1	0	1	2	2	35	2	2	50	59	88	126	-30.2
Syphilis (P&S) Rate ¹	0.6	0.2	0.0	0.2	0.7	0.7	6.6	0.6	0.4	1.1	1.3	2.0	2.9	NA
Enteric														
Campylobacter Cases	2	1	2	14	1	1	3	0	3	27	35	55	63	-12.7
Hepatitis A Cases	0	0	0	0	0	0	0	0	0	0	1	1	2	NA*
Hepatitis A Rate ¹	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Salmonella Cases	11	10	12	23	7	6	4	11	10	94	145	160	224	-28.6
Salmonella Rate ¹	1.1	1.8	3.2	4.5	2.6	2.0	0.8	3.1	2.6	2.2	3.4	3.7	5.2	NA*
Shigella Cases	17	2	4	5	0	13	1	0	0	42	43	69	64	NA*
Shigella Rate ¹	1.6	0.35	1.061	1.0	0	4.3	0.2	0	0	1.0	1.0	1.6	1.5	NA*
Vibrio cholerae Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other Cases	1	0	1	1	0	0	0	0	3	6	5	8	5	NA*
Other														
H. influenzae (other)	0	3	2	0	0	0	0	0	0	5	6	22	13	69.2
N. meningitidis	0	0	0	0	0	0	1	1	1	3	3	6	9	NA*

¹ = Cases Per 100,000.

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

³ = Transition to a new system has delayed the morbidity reporting; Numbers may be artificially low; Per 100,000 population (2008 population estimate).

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

Figure: Department of Health and Hospitals Regional Map

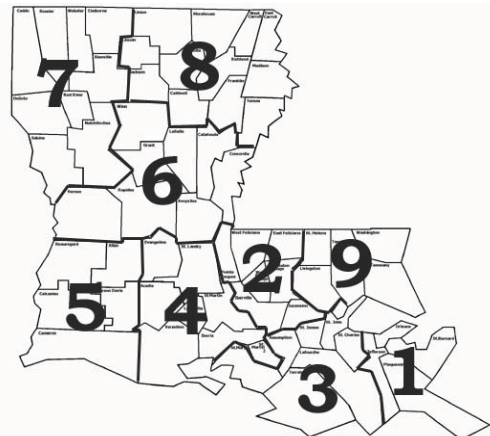


Table 2. Diseases of Low Frequency, January-December, 2011

Disease	Total to Date
Legionellosis	6
Lyme Disease	0
Malaria	0
Rabies, animal	1
Varicella	32

Table 3. Animal Rabies, March-April, 2011

Parish	No. Cases	Species
Evangeline	1	Skunk

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 ¹	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] ²	Syphilis ¹
	Human Immunodeficiency Virus [(HIV), perinatal exposure] ²	Tetanus
	Legionellosis (acute disease)	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) ³	Gonorrhea ¹	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 ¹	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)] ²	Streptococcus pneumoniae (invasive infection in children < 5 years of age)
Cryptosporidiosis	Listeria	Transmissible Spongiform Encephalopathies
Cyclosporiasis	Lyme Disease	Trichinosis
Dengue	Lymphogranuloma Venereum ¹	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 ⁴	Severe Traumatic Head Injury
Carbon Monoxide Exposure and/or Poisoning ⁵	Lead Exposure and/or Poisoning (children) ⁴ (adults) ⁵	Severe Undernutrition (severe anemia, failure to thrive)
Complications of Abortion	Pesticide-Related Illness or Injury (All ages) ⁷	Sickle Cell Disease (newborns) ⁴
Congenital Hypothyroidism ¹	Phenylketonuria ⁴	Spinal Cord Injury
Galactosemia ⁴	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)

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.

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

²Report to the Louisiana HIV/AIDS Program: Visit www.hiv.dhh.louisiana.gov or call 504-568-7474 for regional contact information.

³Report on CDC72.5 (f.5.2431) card

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

⁵Report to the Section of Environmental Epidemiology and Toxicology: www.seet.dhh.louisiana.gov or call 1-888-293-7020

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