Louisiana Morbidity Report

Office of Public Health - Infectious Disease Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 - Phone: (504) 568-8313
www.dhh.louisiana.gov/LMR

Infectious Disease Epidemiology Main Webpage
www.infectiousdisease.dhh.louisiana.gov

Bobby Jindal
GOVERNOR

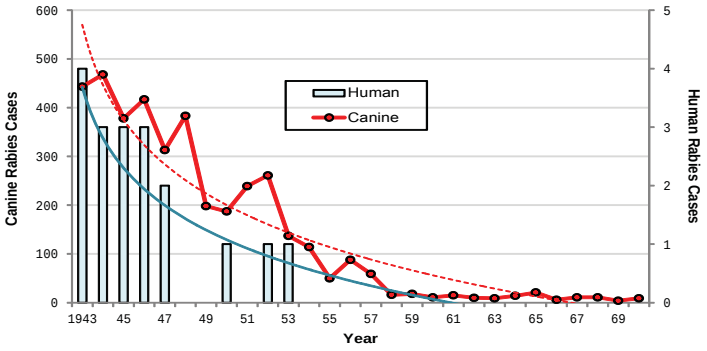
Kathy Kliebert
SECRETARY

March - April 2014 Volume 25, Number 2

Dog Rabies - From 443 in 1943 to One in 2013 Louisiana Has Come a Long Way!

Comparing case numbers between 1943 and 2013 has yielded some interesting results. Between 1943 and 1949 there were 2,603 positive dog rabies cases and 15 human cases contrasted with only one positive dog rabies case in 2013. Since 1953 there has not been a human case that was contracted within Louisiana (Figure 1).

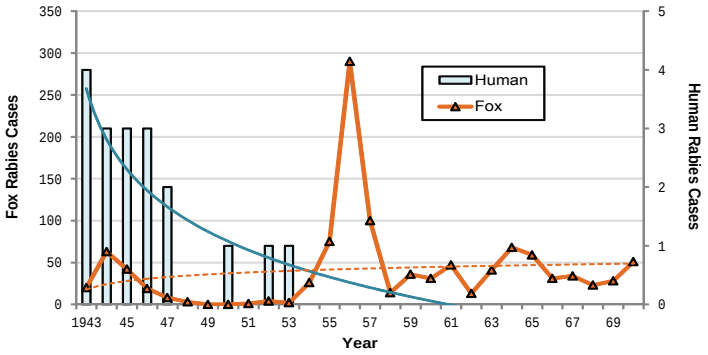
Figure 1: Canine and Human Rabies, Louisiana, 1943-1970



A further breakdown reveals that between 1950 and 1970:

- there were 14,882 dog brains examined to yield a positive rabies result in 1,287 of the specimens.
- there were three human cases.
- species besides dogs examined for rabies were cat, fox, squirrel, rat, cow, bat, skunk, equine, wolf/coyote, pig/hog, goat, bobcat, hamster, rabbit, mouse, raccoon, monkey, opossum, guinea pig, mink, nutria, bird, gopher, muskrat, mole, chipmunk, wild feline, gerbil, deer, salamander, armadillo, sheep, otter, bear, weasel, coati, shrew, woodchuck, desert rat, spider monkey and flying squirrel. Of this list, the only positive results were found in dog, cat, fox, squirrel, rat, cow, bat, skunk, equine, wolf/coyote, pig/hog, goat and bobcat. A tight correlation is not found when comparing fox rabies to human rabies during the same time frame (Figure 2).

Figure 2: Fox and Human Rabies, Louisiana, 1943-1970



Between 1961 and 1970 there were 37 cases of bat and 26 cases of skunk rabies.

Jumping ahead to the years between 1971 and 2013 yielded 47 cases of dog rabies (Tables 1a and 1b).

Table 1a: Dog Rabies Louisiana, 1971-1992

Year	Dog
1971	11
1972	7
1973	10
1974	5
1975	1
1976	0
1977	0
1978	0
1979	1
1980	0
1981	0
1982	0
1983	1
1984	0
1985	0
1986	1
1987	0
1988	0
1989	0
1990	0
1991	0
1992	0

Table 1b: Dog Rabies Louisiana, 1992- 2013

Year	Dog
1993	0
1994	4
1995	0
1996	1
1997	2
1998	0
1999	0
2000	0
2001	0
2002	0
2003	0
2004	0
2005	0
2006	0
2007	1
2008	0
2009	0
2010	1
2011	0
2012	0
2013	1

Louisiana has a budget for rabies control and a law which addresses rabies control. Louisiana RS 40:1277 states: "Authority to enact regulations for control of rabies. The Department of Health and Hospitals shall enact in the state sanitary code all necessary provisions concerning the requirements for the control of rabies in animals, including the authority of parishes and municipalities to enact local ordinances, the report of in-

(continued on page 6)

Contents

Work-related Lead Exposures and U.S. 190 Old Mississippi River Bridge Renovations - Louisiana - 2013-2014

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

The Louisiana Department of Health and Hospitals (DHH)/Office of Public Health (OPH)/Section of Environmental Epidemiology and Toxicology's (SEET) Heavy Metal and Carbon Monoxide Surveillance program tracks lead exposures for adults age 16 years and older. Since 2007, SEET has been participating in the Centers for Disease Control and Prevention (CDC)/National Institutes for Occupational Safety and Health's (NIOSH) Adult Blood Lead Epidemiology Surveillance (ABLES) program; this is a state-based surveillance program designed to track adult blood lead level (BLL) trends and prevent lead overexposures. Lead test results, regardless of level, are required to be reported to the Heavy Metal and Carbon Monoxide Surveillance Program. Electronic laboratory tests are reported daily to OPH; most tests are sent to SEET from large clinical labs (e.g, Labcorp, Quest), or hospital labs.

Health Effects of Adult Lead Exposure

Lead serves no useful purpose in the body. Adults are exposed to lead primarily through inhalation of lead-contaminated dust or fumes. Once lead enters the body, it circulates through the blood and tissues, with some accumulation in bones. Lead can be stored in the body for decades, and may replace calcium in bones and teeth. Bone fractures, menopause and some medications may recirculate lead.

Symptoms of lead toxicity vary from person-to-person and depend on dose and exposure duration. Adults often have no visible symptoms, even with high BLLs. Reported symptoms may include: headaches, nausea, vomiting, tremors, fatigue, hypertension, confusion, appetite loss or stomach pain. Long-term health effects may include: damage to the brain, heart, blood cells or kidneys, seizures and/or reproductive issues. BLL tests indicate a recent exposure to a lead source.

Sources of Adult Lead Exposure

Lead-based paints in homes and leaded gasoline have been common sources of lead exposures; however, the Environmental Protection Agency (EPA) banned leaded paint in 1978 and leaded gasoline in 1996. Adult lead exposure may still occur when remediating residences and structures painted before 1978. Lead-based paint is still widely used for commercial applications, such as bridges, ships and non-residential buildings, primarily due to lead's ability to reduce metal corrosion, to protect surfaces from wear and tear, and to increase paint adherence.

According to the CDC's ABLES website, approximately 95 percent of adults with elevated BLLs in the U.S. are exposed at work. The Occupational Safety and Health Administration (OSHA)'s medical surveillance program requires workers in high-risk lead usage industries to be re-tested every two months if a BLL test is at least 40 µg/dL. An industry is defined by OSHA as a high lead exposure risk when exposure to at least 30 µg/m3 over an eight-hour time-weighted average may occur for more than 30 days per year. A worker must be temporarily removed from the job position when a single BLL test is at least 60 µg/dL. Some industries for which OSHA may require routine lead testing include: construction, smelting, refining, oil and gas, scrap metal recycling, and battery production.

Bridge Painters and the U.S. 190 Old Mississippi River Bridge

A paint restoration and structural renovation project on the U.S. 190 Old Mississippi River Bridge, which connects East and West Baton Rouge parishes, started in September 2012 (Figure).

Figure: U.S.190 Old Mississippi River Bridge

Photo: Courtesy of TRC Engineers, Inc.

Prior to 2012, the bridge was last re-painted in 1968. During the initial phase of the project, workers were sandblasting, pressure washing and repainting the bridge with a light gray coat. The newly applied paint is described as "an organic zinc, epoxy urethane paint system," which does not contain lead. However, due to the lead content in the old paint, workers must capture blasted off material and send it to treatment facilities.

BLL tests greater than or equal to 25 µg/dL are routinely investigated by SEET to determine the source of exposure. Almost

Louisiana Morbidity Report
Volume 25, Number 2 March - April, 2014

The Louisiana Morbidity Report is published bimonthly by the DHH OPH Infectious Disease Epidemiology Section, 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 ***J.T. Lane***

State Epidemiologist ***Raoult Ratard, M.D., M.P.H.***

Editors ***Theresa Sokol, M.P.H.***
Julie Hand, M.S.P.H.
Rosemarie Robertson, B.S., M.T.(C), C.N.M.T.

6,000 blood lead tests are received annually for about 5,000 adult patients, with two percent of those adults having one or more BLL test greater than or equal to 25 µg/dL. Based on the lab reports that SEET receives, more than 80 percent of an average annual 106 Louisiana cases are work related. Elevated BLL tests are primarily from workers in the following three industries: smelting/refining of nonferrous metals, painting and wall covering, and oil and gas pipeline construction. Nationally, and in Louisiana, bridge painters, abatement workers and welders consistently rank among occupations for high-risk lead exposures. From January 2013 to January 2014, there were 76 Louisiana adult males with BLLs greater than or equal to 25 µg/dL (Table 1).

Table 1. Demographics - Louisiana Adults 16 Years and Older with BLLs Greater Than or Equal To 25 µg/dL (Jan. 2013-Jan. 2014)[a]

Characteristic	LA Adults	
	Count	Percent[b]
Sex		
Male	76	100%
Female	0	0%
Age Group		
16-34	37	49%
35-64	35	46%
65+	4	5%
Ethnicity[c]		
Hispanic	28	37%
Non-Hispanic	48	63%
Work-related		
Yes	70	92%
Occupation		
Painter and/or Sandblaster	52	74%
Other	18	26%
Blood Lead Level (BLL)		
≥ 25 and < 40	67	88%
≥ 40	9	12%
Total	76	

[a] Data are only included for those labs that reported to SEET.
[b] Percentages may not add up to 100 due to rounding.
[c] Ethnicity is based on Hispanic surname.

Twenty-two (29 percent) were bridge painters and lead abatement workers participating in the U.S. 190 Old Mississippi River Bridge restoration project (Table 2).

Table 2. Demographics - U.S. 190 Old Mississippi River Bridge Workers with BLLs Greater Than or Equal To 25 µg/dL (Jan. 2013-Jan. 2014)[a]

Characteristic	U.S. 190 Old MS Bridge Workers	
	Count	Percent[b]
Sex		
Male	22	100%
Female	0	0%
Age Group		
16-34	10	45%
35-64	12	55%
65+	0	0%
Ethnicity[c]		
Hispanic	5	23%
Non-Hispanic	17	77%
Work-related		
Yes	22	100%
Occupation		
Painter and/or Sandbla	21	95%
Other	1	5%
Blood Lead Level (BLL)		
≥ 25 and < 40	20	91%
≥ 40	2	9%
Total	22	

[a] Data are only included for those labs that reported to SEET, and bridge worker counts only include those specifically stated by their health care providers to be working on the U.S. 190 bridge.
[b] Percentages may not add up to 100 due to rounding.
[c] Ethnicity is based on Hispanic surname.

Of those U.S.190 bridge workers, 10 (46 percent) had two or more BLL tests greater than or equal to 25 µg/dL. Elevated BLL results for all adults ranged from 25 to 62 µg/dL; nine workers (two of whom were U.S.190 bridge painters) met or exceeded OSHA's medical surveillance retesting requirement of greater than or equal to 40 µg/dL. As renovations continue on the U.S. 190 Old Mississippi River bridge, workers are encouraged to continue to wear the proper protective equipment for the job tasks.

For additional information on the DHH Heavy Metal Surveillance program, please contact Dr. Jocelyn Lewis at (504)568-8159 or email to jocelyn.lewis@la.gov.

Chikungunya - CDC Health Advisory Alert

Chikungunya virus infection should be considered in patients with acute onset of fever and polyarthralgia, especially those who have recently traveled to the Caribbean. Health care providers are encouraged to report suspected chikungunya cases to the Department of Health and Hospitals' Infectious Disease Epidemiology Section at (800) 256-2748 to facilitate diagnosis and to mitigate the risk of local transmission.

Chikungunya virus is a mosquito-borne alphavirus transmitted primarily by *Aedes aegypti* and *Aedes albopictus* mosquitoes. Humans are the primary reservoir during epidemics. Outbreaks have been documented in Africa, Southern Europe, Southeast Asia, the Indian subcontinent, and islands in the Indian and Pacific Oceans.

On December 7, 2013, the World Health Organization reported the first local transmission of chikungunya virus in the Americas. As of December 12, ten cases of chikungunya have been confirmed in patients who reside on the French side of St. Martin in the Caribbean. Laboratory testing is pending on additional suspected cases. Onset of illness for confirmed cases was between October 15 and December 4. At this time, there are no reports of other suspected chikungunya cases outside St. Martin; however, further spread to other countries in the region is possible. Prior to the cases on St. Martin, the only chikungunya cases identified in the Americas were in travelers returning from endemic areas.

On January 15, 2006, an adult female resident of India had onset of an illness characterized by fever, joint pain (in the knees, wrists, hands, and feet), and muscle pain (in the thighs and neck). In March 2006, she traveled to Louisiana, where she sought medical attention for persistent joint pain. At the Centers for Disease Control and Prevention (CDC), tests of a single serum sample collected on March 30 (74 days after illness onset) were positive for IgM and neutralizing antibodies to the chikungunya virus. The patient was subsequently lost to follow-up.

A majority of people infected with chikungunya virus become symptomatic. The incubation period is typically three to seven

(continued on page 6)

Reportable Infectious Disease Case Counting

The public, media and health care providers are often interested in knowing the number of cases of a specific infectious disease over a certain period of time (week, month, year or even a trend over several years), and in a certain area (state, parish, city or a more restricted area).

Feedback to the Public is Important

These numbers are part of infectious disease surveillance (also named disease tracking). They are public information. In fact, reporting these numbers and other pertinent information is a very important part of a surveillance program. Statistics give health providers a situational awareness about frequency of disease improving their ability to diagnose. Health providers then give the media and the public useful information about a specific disease, to get medical attention early, to accept more readily a vaccine, and to take other preventive measures.

Limits Imposed by Privacy and Confidentiality

Any feedback to the public must not impugn the privacy of some people. As an example, if someone asks the number of cases of whooping cough in the 100 block of Main Street, it would be inappropriate to report it. The person asking may be a parent wanting to know if the neighbor's child has whooping cough. That child may have been properly treated and be no longer infectious. However, the child may continue coughing for several weeks. Other parents may get involved and cause some serious difficulties for the child and family. The better approach is to keep the specifics of the child confidential and for the health department to take appropriate measures to make sure that the child is excluded from school until he/she is no longer infectious. On the other hand, reporting that many children have whooping cough in a parish or statewide would be useful.

The same considerations would apply for timing. For example, if one West Nile encephalitis death is reported in a parish during a specific week or month, it would be very easy for the media to identify the person through the obituaries and identify the individual, possibly causing grief to the family.

Louisiana and federal HIPAA (Health Information Protection and Portability Act) laws penalize the reporting of privileged information (i.e. information that is confidential), and reporting information so specific as to allow the identification of an individual.

As in Anything that We Measure, the Precision of These Numbers Vary

The precision of any measurement depends on the instrument used to make the measurement and on the use of the measurement. When filling a car with gasoline, the purpose of the measurement is to pay a fair price to the company providing the gas. A precision at the tenth of a gallon is considered acceptable. When prescribing a cough syrup a precision made by a teaspoon is considered sufficient. For some potentially more toxic medications, the precision of a drop is required.

For example, if in 2012 there were 74 cases of whooping cough and in 2013 there were 170 cases of whooping cough, it really does not matter whether there were 72, 74 or 76 cases in 2012, and 165, 170 or 175 cases in 2013. In this example the range of multiplication (2013 number of cases /2012 number of cases) goes from 2.17 to 2.43. What really matters is that from 2012 to 2013 the number of cases of pertussis was multiplied by more than two times.

Making comparison on a small area may be meaningless and even misleading. For example, an inquiry is made from a certain parish for the number of cases of whooping cough from the beginning of the year to June 30th for 2012 and 2013. The purpose is to inform the readers of the local newspaper in that parish about the risk of whooping cough. It may happen that the number of cases in this parish went from nine cases to 12 cases, giving the impression that the increased risk of whooping cough is not so bad. Giving out the statewide numbers may be more useful because it gives a more comprehensive appreciation of the increased risk.

Another potentially misleading approach occurs in West Nile reporting. If a certain parish has had no cases of West Nile infection reported while West Nile infections are increasing throughout the state, it may give a false sense of security for the residents of that parish.

Why Can't We Get an Accurate Number?

There are several reasons why we can never get an accurate number. Here is a review of some of these reasons taking the example of West Nile infections:

Many Infections Occur "Below the Radar" of Medical Care

Most (80 percent to 90 percent) West Nile infections cause no symptoms at all. The few reported asymptomatic cases are detected because a blood donation screening test showed the presence of the virus. Some people (10 percent to 20 percent) infected recently by West Nile may have a mild fever and a barely discernable rash. Some people will get medical attention, others do not. A lack of insurance, a busy work schedule, a high tolerance for minor illnesses, may be the cause for seeking no medical care.

A very small proportion of West Nile infected individuals (one to two percent) have neuro-invasive disease (meningitis or encephalitis), and definitely get medical care. Even among these severe cases, West Nile is not always diagnosed. For example an 85-year-old man who had a stroke a few months before and still has severe impairment, is infected by West Nile virus causing him to be re-hospitalized. The physicians may focus on the sequelae of the stroke and not test for West Nile.

Case Definitions are Used to Classify a Case

When measuring anything, there must be an instrument that will provide the same result consistently. The measuring tool may differ in precision, but it must be consistent. To take an example of gas in a car and cough syrup, a gas pump must always give the tenth of gallon consistently, the teaspoons or droppers must always give consistent volumes of medication. The same applies for an illness; the instrument used to count illnesses is a case definition.

Case definitions must be consistent throughout the 50 states to provide comparable results from state-to-state and provide a meaningful national picture. Every year the Council of State and Territorial Epidemiologists convene their annual meeting to discuss, among other things, case definitions. Since public health is a state responsibility, these definitions must be agreed upon by a majority of the states. This activity is carried out in collaboration with the federal Centers for Disease Control and Prevention (CDC). A case

definition must include some clinical signs and symptoms, and usually some very specific lab results. Trying to cover all the different ways an illness may present itself and all the different ways the body may respond to an infection would make the case definition very complicated.

It appears that detecting the "bug" (bacteria, virus, fungus) is important but very often the "bug" is gone by the time one gets sick. A typical example is West Nile: by the time the individual is sick, the virus has disappeared from the blood. The way to diagnose an infection is to look for antibodies. There may be some antibody test results that are false positive or false negative. Physicians make diagnoses based on a "preponderance of evidence".

The purpose of a diagnosis is to make the best guess about the cause of the illness and select the most appropriate management based on the diagnosis made. It matters a lot if a diagnosis is missed because it may result in a physician not selecting the best and most efficient case management (treatment in particular). Accuracy is important.

The purpose of a case definition is to make the best guess about the cause of the illness and select a consistent way of defining and counting cases. It does not matter if some cases are missed because of a case definition. Consistency is important.

Most of the time, the diagnosis and case definitions match, but not always; it must be that way because of their different purposes.

Dates May Also Influence Case Counts

The best case scenario would always be to count cases by the date of infection, but this date is never known. No one knows for sure when he/she caught whooping cough or which mosquito transmitted the West Nile virus.

The second best date is the date of onset i.e. when the illness started. This is already imprecise. Some individuals will notice symptoms very early, others will wait for days before noticing that they are ill. Some will not remember when they started getting ill. If the date of onset is not reported, then the date of diagnosis, date of hospitalization, date of collection of lab test may be used. As the case is documented, dates are collected and cases may shift from one week to another. This causes some discrepancy when comparing month-to-month or comparing year-to-year for cases occurring at the very end or at the very beginning of the year.

To make a long story short, counting cases of infectious diseases (or any other disease) is never as precise and consistent as one would expect.

Announcements

Updates: Infectious Disease Epidemiology (IDEpi) Webpages

www.infectiousdisease.dhh.louisiana.gov

Annual Reports: Chikungunya; Three-Year Comparison 2012-2014
Antibiotic Resistance: Louisiana Antibiogram 2012
Epidemiology Manual: Anthrax Public Information-Spanish; Ascaris Public Information-Spanish; Campylobacter Public Information-Spanish; Chikungunya Summary; Cholera Public Information-Spanish; Cryptosporidiosis Public Information-Spanish; Giardia Public Information-Spanish; Pertussis Public Information-Spanish; Rabies Summary; Salmonellosis Public Information-Spanish
HAI: CDC Progress Report-Louisiana; Spring 2014 Newsletter
Hepatitis: Hepatitis Awareness Month; Hepatitis Risk Assessment: Online Tool
Influenza: Weekly Report

Test Your Knowledge

As part of the Norovirus Collaborative for Outreach, Research, and Education (NoroCORE) project (*http://norocore.ncsu.edu)*, funded by the U.S. Department of Agriculture, National Institute of Food and Agriculture, RTI International and Clemson University conducted a survey of food safety and public health professionals to characterize their knowledge of Noroviruses (NoVs) and to identify knowledge gaps. Louisiana participated in this survey.

The following True-False questions were among those asked of survey respondents from mid-October 2011 to mid-January 2013. Infection preventionists and food safety professionals sent in a total of 1,567 surveys. (*Answers on page 6.)*

Prevention and Control Strategies

1) Quaternary ammonium compounds and chlorine bleach are equally effective against NoV.

2) Using a sanitizing solution of chlorine bleach at 100 ppm will eliminate NoV from a contaminated surface.

3) Antimicrobial soap must be used on hands to remove NoV.

4) Alcohol-based hand sanitizer is as effective against NoV as washing hands with soap and water.

Transmission

5) Once infected with NoV, a person is permanently immune from contracting NoV again.

6) Most NoV infections occur on cruise ships than in any other setting.

7) It is safe for people infected with NoV to prepare food for others as long as they properly and frequently wash their hands while preparing food.

8) People infected with NoV may be able to spread NoV for at least three days even after they no longer show signs and symptoms of illness.

9) The most common mode of transmission for NoV is person-to-person.

10) NoV does not survive well on porous surfaces, such as textiles, upholstery, and carpeting.

Norovirus Illness

11) Children younger than five years of age and adults aged 65 and older are more susceptible than the general population to severe NoV infections.

12) Most NoV outbreaks occur in the winter.

13)Bacteria cause more cases of foodborne disease than do viruses

14) People can get vaccinated to prevent NoV infection.

15) NoV infection can easily be treated with antibiotics.

Food Handling

16) Steaming shellfish for three minutes will inactivate NoV.

17) Ready-to-eat foods are the most common food source for NoV infections.

18) Fresh produce implicated in NoV outbreaks is always contaminated by food preparers infected with NoV.

19)Any food can become contaminated with NoV.

20) Restaurant workers infected with NoV should be restricted to handling packaged food, wrapped single-service or single-use articles, or soiled food equipment or utensils.

(Chikungunya ... continued from page 3)

days with a range from two to 12 days. The most common clinical findings are acute onset of fever and polyarthralgia. Joint pains are often severe and debilitating. Other symptoms may include headache, myalgia, arthritis, or rash. Persons at risk for more severe disease include neonates (younger than one month of age) exposed intrapartum, older adults (at or above 65 years of age), and persons with underlying medical conditions (e.g., hypertension, diabetes, or cardiovascular disease).

No specific antiviral treatment is available for chikungunya fever. Treatment is generally palliative and can include rest, fluids, and use of analgesics and antipyretics. Because of similar geographic distribution and symptoms, patients with suspected chikungunya virus infections also should be evaluated and managed for possible dengue virus infection. People infected with chikungunya or dengue virus should be protected from further mosquito exposure during the first few days of illness to prevent other mosquitoes from becoming infected and reduce the risk of local transmission.

No vaccine or preventive drug is available. The best way to prevent chikungunya virus infection is to avoid mosquito bites. Use air conditioning or screens when indoors. Use insect repellents and wear long sleeves and pants when outdoors. People at increased risk for severe disease should consider not traveling to areas with ongoing chikungunya outbreaks.

Laboratory diagnosis is generally accomplished by testing serum to detect virus, viral nucleic acid, or virus-specific immunoglobulin M (IgM), and neutralizing antibodies. During the first week of illness, chikungunya virus infection can often be diagnosed by using viral culture or nucleic acid amplification on serum. Virus-specific IgM and neutralizing antibodies normally develop toward the end of the first week of illness. To definitively rule out the diagnosis, convalescent-phase samples should be obtained from patients whose acute-phase samples test negative.

Chikungunya virus diagnostic testing is performed at the CDC, two state health departments (California and New York), and one commercial laboratory (Focus Diagnostics).

For more information go to *dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/EpiManual/ChikungunyaSummary.pdf* or *www.cdc.gov/chikungunya/*.

Save The Date

Children's Behavioral Health Summit

Friday, June 6, 2014 8 a.m. - 4:30 p.m.
Holiday Inn South
9940 Airline Highway, Baton Rouge, LA, 70816

The seventh annual summit focuses on the changing landscape of our service delivery system and will offer new perspectives on children's behavioral health treatment. Family members, youth, social workers, licensed professional and addiction counselors, behavioral health care and human service providers, and other partners are invited to participate. Sponsored by the Department of Health & Hospitals' Office of Behavioral Health and Magellan Health Services, the summit is free to attend with CEUs and lunch available to all registered attendees.

For information, please contact Deborah Crump at (225) 342-1085 or email to *deborah.crump@la.gov.*

Field Epidemiological Workshop

New Orleans-July 30, 2014 Alexandria- August 19, 2014
Ruston- September 17, 2014

Sponsored by the Department of Health & Hospitals Office of Public Health, the Infectious Disease Epidemiology Section will hold three one-day trainings for non-Infectious Disease Rapid Response Team members. This training is targeted towards sanitarians, public health nurses, infection control professionals, disease surveillance specialists, epidemiologists, health care providers and other public health care professionals interested in epidemiological principles and outbreak investigations.

The workshops are free to attend and open to the public, but must be registered for to assure seating availability. CEUs will be available. For a registration form and more information, go to *dhh.louisiana.gov/index.cfm/page/1816*.

This is the final paper-printed copy of the Louisiana Morbidtity Report. For notification when future on-line versions are available, please email to rosemarie.robertson@la.gov.

Hepatitis Awareness Month

The month of May is designated as National Hepatitis Awareness Month in the United States, and May 19th is National Hepatitis Awareness Day. During May, the Centers for Disease Control and Prevention (CDC) and its public health partners work to shed light on this hidden epidemic by raising awareness of viral hepatitis and encouraging priority populations to get tested.

Hepatitis Risk Assessment: Online Tool

Find out if you should be tested by taking a five-minute online Hepatitis Risk Assessment at *www.cdc.gov/HEPATITIS/riskassessment*. It is designed to determine an individual's risk for viral hepatitis and ask questions based upon CDC's guidelines for testing and vaccination. This risk assessment tool allows individuals to answer questions privately, either in their home or in a health care setting, and print their recommendations to discuss with their doctor. For more information, please go to *www.cdc.gov/hepatitis/TestingDay/index.htm*.

(Dog Rabies... continued from page 1)

cidence of the disease and the enactment of enforcement provisions."

The dramatic reduction in human rabies cases since 1953 is almost certainly due to the concurrent striking reduction in domestic dog cases. Reductions in canine rabies over the course of the twentieth century are the result of pet rabies vaccination and effective animal control. The disease is still present in Louisiana wildlife, and quite likely would pose an increased threat should either pet vaccination or animal control become significantly reduced.

Rabies is a Class A disease and must be reported to the state within 24 hours at 1-800-256-2748. For more information, please go to website *dhh.louisiana.gov/index.cfm/page/790*, or contact Dr. Gary Balsamo, Public Health State Veterinarian at (504) 568-8315 or email to *gary.balsamo@la.gov*

Answers To Survey True/False Questions - Page 4

1) F 2) F 3) F 4) F 5) F 6) F 7) F 8) T 9) T 10) F 11) T
12) T 13) F 14) F 15) F 16) F 17) T 18) F 19) T 20) F

Table: Communicable Disease Surveillance, Incidence by Region and Time Period, January-February, 2014

DISEASE		HEALTH REGION 1	2	3	4	5	6	7	8	9	TIME PERIOD Nov-Dec 2013	Nov-Dec 2012	Jan-Dec Cum 2013	Jan-Dec Cum 2012	Jan-Dec % Chg*
Vaccine-preventable															
Hepatitis B	Cases	0	0	0	2	0	1	0	0	6	9	10	9	10	NA*
	Rate[1]	0	0	0	0.4	0	0.3	0	0	1.6	0.2	0.2	0.2	0.2	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	0	1	NA*
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis		1	2	1	2	0	0	4	3	3	16	12	16	12	NA*
Sexually-transmitted															
HIV/AIDS	Cases[2]	70	44	14	12	4	7	27	17	13	208	219	208	219	-5.0
	Rate[1]	7.0	7.6	3.6	2.2	1.4	2.3	5.3	4.8	3.0	4.8	5.0	4.8	5.0	NA*
Chlamydia	Cases[1,3]	998	447	324	405	145	182	643	413	251	3,808	2,851	3,808	2,851	33.6
	Rate[1]	115	66.5	80.0	68.4	49.2	58.6	116.7	116.0	45.4	82.7	62.0	82.7	62.0	NA*
Gonorrhea	Cases[1,3]	282	110	69	165	40	53	167	156	55	1,097	863	1,097	863	27.1
	Rate[1]	32.5	16.4	17.0	27.9	13.6	17.1	30.3	43.8	10.0	23.8	18.8	23.8	18.8	NA*
Syphilis (P&S)	Cases[1,3]	23	6	1	5	2	4	16	8	1	66	54	66	54	22.2
	Rate[1]	2.6	0.9	0.2	0.8	0.7	1.3	2.9	2.2	0.2	1.4	1.2	1.4	1.2	NA*
Enteric															
Campylobacter	Cases	3	2	1	0	4	0	3	3	3	19	33	19	33	-42.4
Hepatitis A	Cases	1	1	0	0	0	0	0	0	0	2	5	2	5	NA*
	Rate[1]	0.1	0.2	0	0	0	0	0	0	0	0	0.1	0	0.1	NA*
Salmonella	Cases	10	12	4	14	9	5	8	13	12	87	91	87	91	NA*
	Rate[1]	1.0	2.1	1.1	2.7	3.4	1.6	1.6	3.7	3.1	2.0	2.1	2.0	2.1	NA*
Shigella	Cases	4	11	2	3	0	0	1	11	2	34	26	34	26	30.8
	Rate[1]	0.4	1.9	0.5	0.6	0	0	0.2	3.1	0.5	0.8	0.6	0.8	0.6	NA*
Vibrio, cholera	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other	Cases	0	0	0	0	0	0	0	0	0	0	2	0	2	NA*
Other															
H. influenzae (other)		2	2	0	3	1	0	0	0	4	12	12	12	12	NA*
N. Meningitidis		0	1	0	1	0	0	1	0	0	3	3	3	3	NA*

[1] = Cases Per 100,000.

[2] = 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.

[3] = Prelminary data.

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

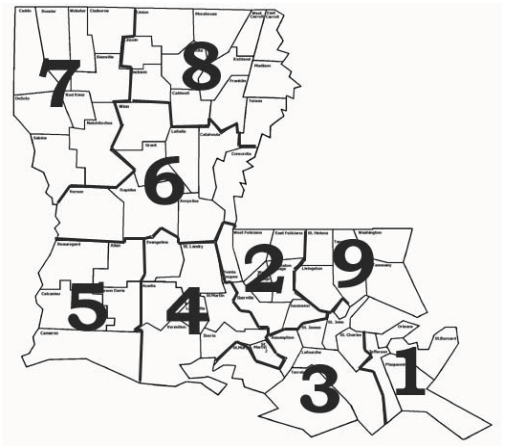
Table 2. Diseases of Low Frequency, January-December, 2014

Disease	Total to Date
Legionellosis	4
Lyme Disease	0
Malaria	0
Rabies, animal	0
Varicella	6

Table 3. Animal Rabies, January-February, 2014

Parish	No. Cases	Species
	0	

Figure: Department of Health and Hospitals Regional Map



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

PRSRT STD
U.S. POSTAGE
P A I D
Baton Rouge, LA
Permit No. 1032

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.

- Acute Flaccid Paralysis
- Anthrax
- Avian or novel strain Influenza A (iniital detection)
- Botulism
- Brucellosis
- Cholera
- *Clostridium perfringens* (foodborne infection)
- Diphtheria
- Fish/Shellfish Poisoning (Domoic Acid, neurotoxic, Cigueatera, paralyitc, Scombroid)
- Foodborne Infection
- *Haemophilus influenzae* (invasive disease)
- Influenza-associated Mortality
- Measles (Rubeola imported or indigenous)
- N*eisseria meningitidis* (invasive infection)
- Outbreaks of Any Infectious Disease
- Pertussis
- Plague (*Yersinia Pestis*)
- Poliomyelitis (paralytic & non-paralytic)
- Q Fever (*Coxiella burnetii)*
- Rabies (animal and human)
- Ricin Poisoning
- Rubella (congenital syndrome)
- Rubella (German Measles)
- Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)
- Smallpox
- *Staphylococcus aureus*, Vancomycin Intermediate or Resistant (VISA/VRSA)
- Staphylococcal Enterotoxin B (SEB) Pulmonary Poisoning
- Tularemia (*Francisella tularensis*)
- Viral Hemorrhagic Fever
- Yellow Fever

Class B Diseases/Conditions - Reporting Required Within 1 Business Day

Diseases of public health concern needing timely response because of potential of epidemic spread-report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

- Amoeba (free living infection: *Acanthamoeba, Naegleria, Balamuthia,* Others)
- Anaplasmosis
- Arthropod-Borne Neuroinvasive Disease (West Nile, St, Louis, California, Eastern Equine, Western Equine, Others)
- Aseptic Meningitis
- Babesiosis
- Chagas Disease
- Chancroid
- Dengue Fever
- *Escherichia coli*, Shig-toxin producing (STEC), including *E. coli* 0157:H7
- Granuloma inguinale
- Hantavirus (infection or Pulmonary Syndrome)
- Hemolytic-Uremic Syndrome
- Hepatitis A (acute disease)
- Hepatitis B (acute illness & carriage in pregnancy)
- Hepatitis B (perinatal infection)
- Hepatitis E
- Herpes (neonatal)
- Human Immunodeficiency Virus [(HIV), infection in pregnancy][2]
- Human Immunodeficiency Virus [(HIV), perinatal exposure][2]
- Legionellosis (acute disease)
- Malaria
- Mumps
- Salmonellosis
- Shigellosis
- Syphilis[1]
- Tetanus
- Tuberculosis[3] (*M. tuberculosis, M. bovis, M. africanum*)
- 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]
- Anaplasma Phagocytophilum
- Blastomycosis
- Campylobacteriosis
- Chlamydial infection[1]
- Coccidioidomycosis
- Cryptococcosis
- Cryptosporidiosis
- Cyclosporiasis
- Ehrlichiosis (human granulocytic & monocytic, *Ehrilichia chaffeenisis*
- Enterococcus, Vancomycin Resistant [(VRE), invasive disease]
- Giardia
- Glanders
- Gonorrhea[1] (genital, oral, ophthalmis, pelvic inflammatory disease, rectal)
- Hansen Disease (leprosy)
- Hepatitis B (carriage, other than in pregnancy)
- Hepatitis C (acute illness)
- Hepatitis C (past or present infection)
- Human Immunodeficiency Virus (HIV (infection other than as in Class B)[2]
- Human T Lymphocyte Virus (HTLV I & II infection)
- Leptospiriosis
- Listeria
- Lyme Disease
- Lymphogranuloma venereum 1
- Meliodosis (*Burkholderia pseudomallei)*
- Meningitis, Eosinophilic
- Nipah Virus infection
- Psittacosis
- Spotted Fevers {Rickettsia species including Rocky Mountain Spotted Fever (RMSF)]
- *Staphylococcus aureus*,(MRSA) invasive infection
- Staphylococcal Toxic Shock Syndrome
- Streptococcal Disease, Group A (invasive disease)
- Streptococcal Disease, Group B (invasive disease)
- Streptococcal Toxic Shock Syndrome
- *Streptococcus pneumoniae*, invasive disease
- Transmissible Spongiform Encephalopathies (Creutzfeldt-Jacob Disease & variants)
- Trichinosis
- Varicella (chickenpox)
- Vibrio Infections (other than cholera)
- Yersiniosis

Class D Diseases/Conditions - Reporting Required Within 5 Business Days

- Cancer
- Carbon Monoxide Exposure and/or Poisoning[5]
- Complications of Abortion
- Congenital Hypothyroidism[4]
- Galactosemia[4]
- Heavy Metal (Arsenic, Cadmium, Mercury) Exposure and/or Poisoning (All ages)[5]
- Hemophilia[4]
- Lead Exposure and/or Poisoning (children)[4] (adults)[5]
- Pesticide-Related Illness or Injury (All ages)[5]
- Phenylketonuria[4]
- Reye's Syndrome
- Severe Traumatic Head Injury
- Severe Undernutrition (severe anemia, failure to thrive)
- Sickle Cell Disease (newborns)[4]
- Spinal Cord Injury
- 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), fascimile (504) 568-8290, telephone (504) 568-8313, or 1-800-256-2748 for forms and instructions.

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

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

[3]Report on CDC72.5 (f.5.2431) card

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

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

This public health document was published at a total cost of $1,400.00. Seven thousand two hundred copies of this public document were published in this first printing at a cost of $1,400.00. The total cost of all print ings of this document, including reprints is $1,400.00. This document was published by DHH OPH Infectious Disease Epidemiology Section 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.