

Louisiana Morbidity Report



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www.infectiousdisease.dhh.louisiana.gov

January - February, 2016

Volume 27, Number 1

Indoor Environmental Quality Complaint Summary Louisiana, 2003-2013

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The Louisiana Department of Health and Hospitals' (DHH) Office of Public Health's (OPH) Section of Environmental Epidemiology and Toxicology (SEET) has developed an Indoor Environmental Quality Educational Service to help provide accurate environmental indoor environmental quality (IEQ) information to the public. The service was established in August 2000. This is a summary of complaint reports collected between 2003 and 2013.

Methods:

DHH has established a toll-free phone line for individuals to report indoor environmental health concerns directly with the staff who also receive inquiries via email (OPH.SEETWEB@LA.GOV). Details of each phone call, letter, or internet inquiry are captured on an indoor environmental complaint form. Some IEQ issues require that staff disseminate indoor environmental educational information. Other requests for IEQ information require a referral to local, state, and/or federal agencies. DHH responses provide scientifically accurate indoor environmental quality materials by mail, fax, or email to the concerned party making the request. In some instances, presentations are made to community groups, in response to a request for specific information on an IEQ topic of interest.

(continued on page 4)

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Acute Flaccid Myelitis Louisiana, 2015

Kristine Oines, MPH

Acute Flaccid Myelitis (AFM) is a syndrome characterized by rapid onset of weakness in one or more limbs and distinct abnormalities of the spinal cord gray matter on magnetic resonance imaging (MRI)*. AFM is a subset of acute flaccid paralysis (AFP). AFP is the acute onset of weakness absent signs of spasticity or other signs indicating a central nervous system disorder; the subset includes AFM, Guillain-Barre syndrome (GBS), toxic neuropathy, and muscle disorders. Understanding of the incidence and epidemiology of AFM and its public health impact in the United States is significantly limited. While AFM is most commonly attributable to poliovirus or West Nile virus and other flaviviruses, other viruses, including non-polio enteroviruses, may cause AFM in rare instances. Louisiana reported their first case of AFM in 2014; in 2015 it was added to the Louisiana Sanitary Code as a Class A condition, reportable within 24 hours.

Clinical manifestations of AFM include acute focal limb weakness, spinal cord lesion largely restricted to gray matter** and spanning one or more spinal segments, CSF pleocytosis (CSF protein may or may not be elevated), and history of respiratory or febrile illness preceding the neurological symptoms. It is thought to be most common in children and young adults, and up until 2015, patients had to be 21 years of age or younger to be considered a case.

An apparent, nationwide rise in cases during the summer and fall of 2014, which was suspected to be linked to enterovirus D68 (EVD68), has led to an increase in AFM surveillance and specimen testing. Louisiana reported one confirmed case of unknown etiology in 2014 and two confirmed cases attributed to West Nile virus in 2015.

The Department of Health and Hospitals' (DHH) Infectious Disease Epidemiology Section (IDEpi) and the Centers for Dis-

(continued on page 6)

*The Council of State and Territorial Epidemiologists Standardized Case Definition for AFM can be found at <http://c.ymcdn.com/sites/www.cste.org/resource/resmgr/2015PS/2015PSFinal/15-ID-01.pdf>.

**Terms in the spinal cord MRI report such as "affecting mostly gray matter," "affecting the anterior horn or affecting horn cells," "affecting the central cord," "anterior myelitis," or "poliomyelitis," would all be consistent with this terminology. If still unsure if this criterion is met, consider consulting the neurologist or radiologist directly.

Traumatic Injury Hospitalizations Among Louisiana Workers, 2006-2014: Results of a Severity Threshold Analysis

Anna Reilly, PhD, MPH; Jeanne Sears, PhD, MS; Michelle Lackovic, MPH; Jocelyn Lewis, PhD, MSPH

Work-related injuries are costly to employers, employees, and society. As many injured workers are employed in physically demanding occupations such as construction, a severe injury can negatively impact and, at times, completely impair an injured worker's future ability to work. In addition to these high human costs, economists estimate that the United States' economy loses \$192 billion annually as a result of injuries in the work place, including direct payments for medical workers' compensation (WC) and other insurance costs as well as indirect costs, such as lost wages and productivity.

State-level surveillance can improve workplace safety and worker health via the identification of high-risk industries and occupations and the development of educational and prevention programs and policies. Louisiana is one of 25 states that annually calculates a set of occupational health indicators (OHIs) developed by the National Institute for Occupational Safety and Health and Council of State and Territorial Epidemiologists' (CSTE) Occupational Health Surveillance Work Group.

Similar to other states, Louisiana has observed an ongoing decline in the rate of work-related hospitalizations. However, recent analysis reveals that the hospitalization rate for work-related severe traumatic injuries has, in many cases, remained unchanged. This finding has important implications for worker safety and the prevention of severe injuries, such as spinal cord and intracranial injuries that can result in death or lifelong disability and pain.

There are several potential reasons for the observed decrease in work-related hospitalizations including the treatment of injuries on an outpatient basis that several years ago would have been admitted to the hospital for treatment, constriction of WC coverage due to introduction of laws or regulations that reduce benefits or make it more difficult for those with certain injuries to qualify for benefits, and the increased use of contingent workers who may not receive WC coverage. Together these changes may result in a downward trend in observed hospitalizations, particularly since WC as payer is typically used to identify occupational injuries in hospital discharge data. However, observed decreases in hospitalization rates may not necessarily correlate with a decreased incidence of worker injuries.

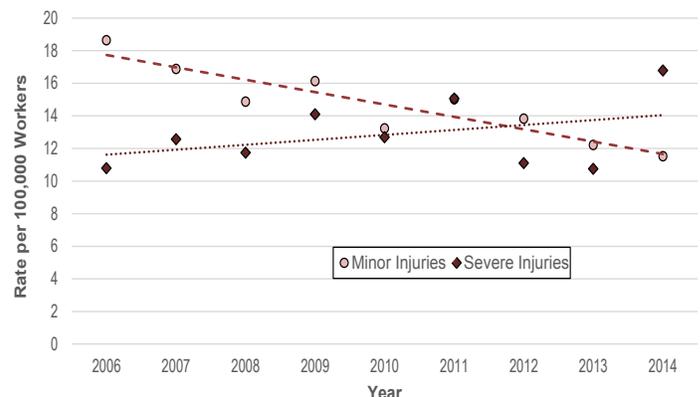
This data review examines characteristics of work-related severe traumatic injury hospitalizations in Louisiana from 2006 to 2014 using injury severity restriction guidelines to reduce the bias encountered from changing healthcare delivery and WC coverage/reporting patterns. Hospitalization records were obtained from the Louisiana Hospital Inpatient Discharge Database (LAHIDD). Work-relatedness was determined by expected primary payer of the hospital bill being WC, and injury cases were selected if the primary diagnosis was an injury. Injuries were categorized as minor/indeterminate or severe based on the severe injury list included in CSTE's OHI guidance document. This list includes injury diagnostic codes in the range of 800.0 - 959.9 that have been estimated to have an Abbreviated Injury Scale (AIS)

severity of three or above or that have a high probability of hospital admission, excluding the following diagnostic codes: 905.x - 909.x (late effects of injury), 910.x - 924.x (superficial injuries), 930.x - 939.x (foreign bodies), 940.x - 949.x (burns, which are not well-characterized by AIS-based severity measures), and 958.x (traumatic complications).

Hispanic ethnicity is not captured in LAHIDD. As a proxy measure, Hispanic ethnicity was coded by matching last names with a U.S. Census Spanish surname list, which contains surnames most commonly associated with self-reported Hispanic ethnicity from census data. While this method may select some cases with Spanish ancestry dating back centuries, it more importantly assists in identifying Louisiana's growing Hispanic population. Rates were calculated using Louisiana employment counts by year, age, sex, race, and Hispanic ethnicity.

For the years from 2006 to 2014, there were a total of 4,531 work-related injury hospitalizations; 1,937 of these (an average of 215 per year) were considered severe. Figure 1 displays age-adjusted* rates and linear trend lines for work-related minor/indeterminate and severe injury hospitalizations.

Figure 1: Age-Adjusted Rates for Work-Related Hospitalizations Louisiana, 2006-2014



* Adjusted to the U.S. 2000 Census

Louisiana Morbidity Report

Volume 27, Number 1 January - February, 2016

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.

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Negative binomial regression was used to compare trend lines by adding an interaction term to the model representing the ratio of the trend in severe injuries to the trend in minor/indeterminate injuries. Over the nine-year period, there was a statistically significant mean annual decrease of 5.1% in minor/indeterminate work-related injury hospitalizations, while there was a 2.4% mean annual increase (nonsignificant, i.e., statistically flat trend) in severe work-related injury hospitalizations. The trend line for severe injuries significantly increased relative to that for minor/indeterminate injuries (trend ratio=1.078, 95% CI: 1.039-1.120), which supports tracking severe injuries separately from all hospitalizations in order to avoid obscuring these important trend differentials.

The table compares the age-adjusted rates of work-related severe traumatic injury hospitalizations by race, ethnicity, sex, and age.

Table: Distribution and Rate of Severe Work-Related Injury Hospitalizations by Race, Sex, and Age - Louisiana, 2006-2014 (N=1,937)

	Number	Percentage	Rate/100,000 Workers	RR (95% CI)*
Race**				
White	1,300	67.1	10.50	reference
Black	365	18.8	7.90	0.75 (0.53, 1.06)
Ethnicity				
Non-Hispanic	1,768	91.3	10.58	reference
Hispanic	169	8.7	25.00	2.36 (1.48, 3.78)
Sex				
Male	1,623	83.8	17.60	reference
Female	314	16.2	3.80	0.22 (0.15, 0.31)
Age (years)				
16-24	214	11.0	9.26	reference
25-34	349	18.0	9.10	0.98 (0.59, 1.63)
35-44	311	16.1	8.00	0.86 (0.51, 1.45)
45-54	465	24.0	11.71	1.27 (0.78, 2.05)
55-64	382	19.7	15.08	1.63 (0.99, 2.69)
65+	216	11.2	26.63	2.88 (1.63, 5.07)

*RR=Rate Ratio, CI= Confidence Interval; **Missing/Other Races n=272

Some studies have reported higher rates among Hispanic and black workers as these workers are often more likely than their white counterparts to be employed in risky industries and occupations. Our analysis found that black workers have lower rates than white workers, although the difference was not statistically significant. Rates for Hispanics were significantly greater than for non-Hispanics (25.0/100,000 vs. 10.6/100,000, respectively). This finding likely reflects the growing Hispanic population in Louisiana. Hispanic employment counts have more than doubled over the nine-year study period from 49,941 to 113,685.

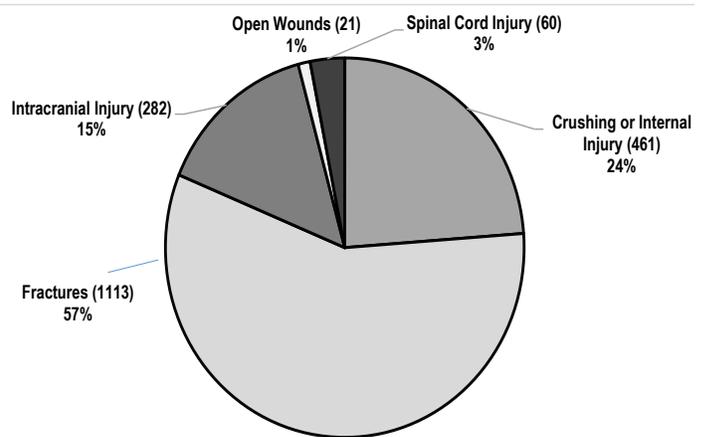
The rate of severe injury among females (3.8 per 100,000 workers) was significantly lower than the rate for males (17.6 per 100,000 workers). Female workers were 78% less likely to experience a severe work-related injury than male workers (RR=0.22, 95% CI: 0.15-0.31).

Overall, rates increase with increasing age. However, aside from those aged 65 and older, the rates of severe injury among workers of other age groups (25- 34, 35- 44, 45-54, and 55-64 years of age) were not significantly different when compared to the youngest workers in the state (16-24 year-olds). Workers 65

years or older were nearly twice as likely to experience a severe work-related injury as workers who were 16 to 24 years-old (RR=2.88, 95% CI: 1.63-5.07).

Figure 2 shows work-related severe traumatic injury hospitalizations by type of injury. The majority of injuries were fractures (57%), followed by crushing or internal injuries (24%) and intracranial injuries (15%). Less than 5% of injuries were spinal cord injuries or open wounds. The ICD-9-CM external cause of injury codes (Ecodes) were evaluated. Ecodes with information about the cause of injury were available for 67.3% of the records. Of these records, the most commonly reported Ecodes were falls (55.1%), motor vehicle accidents (20.9%), struck by or against objects (12.3%), and machinery accidents (11.7%).

Figure 2: Work-Related Severe Traumatic Injury Hospitalizations by Injury Type- Louisiana, 2006-2014 (N=1,937)



This preliminary review of Louisiana’s severe traumatic injury data has important implications for worker safety professionals and warrants ongoing tracking and analysis by occupational health programs. Work-related traumatic injury is a leading cause of death and disability for workers, and our data indicate that hospitalization rates for severe injuries have remained steady over the nine-year period.

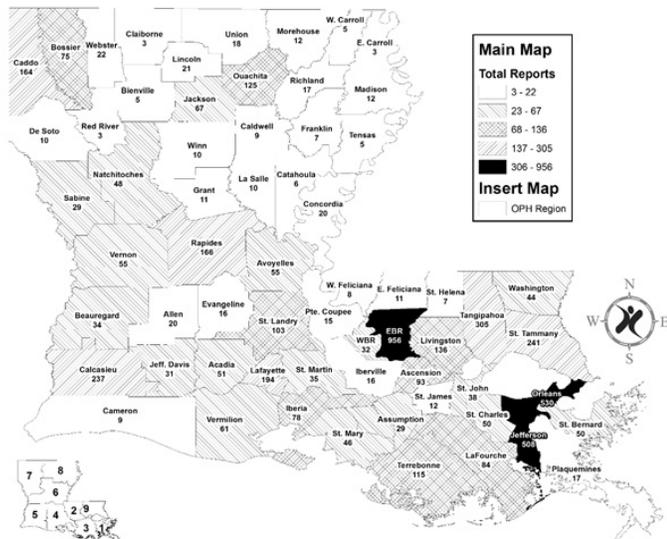
As we engage our partners on outreach and prevention efforts targeting severe injuries, there are important data limitations that must also be addressed. LAHIDD does not collect needed detail about worker activities, occupation, or industry. Addressing these data gaps requires use of other data sources, such as WC claims, medical records, and direct worker reports. Additionally, LAHIDD does not reliably code Hispanic ethnicity. While the Spanish surname list helped to address this limitation, Louisiana’s growing Hispanic population makes it increasingly important that all healthcare data reliably and systematically capture information on Hispanic ethnicity.

For more information or references, email michelle.lackovic@la.gov.

Results:

From 2003 to 2013, there were 6587 reports received from Louisiana parishes (Figure 1).

Figure 1: Number of Total LDHH/IEQ Reports by Parish Louisiana, 2003-2013



Map produced 9/2/14 by LaDHH/OPH/SEET using data provided by LaDHH. Disclaimer: SEET cannot guarantee the accuracy of the information contained on these maps and expressly disclaims liability for errors and omissions in their contents.

Many complaints reported to staff are based on environmental or health situations resulting after a storm or flooding event (Table 1).

Table 1: Major Storms and Flooding Events - Louisiana, 2001-2013

Year	Storm	Date	Initial Louisiana Landfall	OPH-Region(s)
2001	Allison*	6/11	SE LA Coast	1,3,9
2002	Bertha	8/24	Vermilion, Iberia, St. Mary	3,4
	Hanna	9/12	Plaquemine	1
	Isidore	9/14	St. Mary, Terrebonne	3
	Lili	10/03	Vermilion Bay	4
2003	Bill	6/29	Terrebonne	3
2004	Ivan	9/24	Cameron	5
	Matthew	10/8	Terrebonne	3
2005	Cindy	7/3	Mouth of Mississippi	1,3,9
	Katrina	8/29	Mouth of Mississippi	1,3,9
	Rita	9/24	Johnson's Bayou	5
2007	Humberto	9/13	Cameron (Vinton)	5
2008	Gustav	9/01	Mouth of Mississippi	1,3,9
	Ike	9/13	Cameron	5
2009	Ida	11/4	Plaquemine	1
2010	Bonnie	7/22	Plaquemine	1
2011	Lee*	9/2	St. Mary, Iberia	3,4
2012	Isaac	8/21	Lafourche, Terrebonne	3
2013	Karen	10/3	SW LA Coast	4,5

*Tropical Storm and/or severe flooding

Source: National Weather Center's National Hurricane Center www.nhc.noaa.gov

The only year during the period summarized (2003-2013) that did not have significant storm activity was 2006. Water intrusion events may overlap due to residual flooding in low-lying areas

where the ground is already water-soaked or has drainage issues.

For most of the reported complaints, the structure of concern was a place of residence. The largest number (N= 1969) was in reference to indoor environmental quality issues involving a *House*; the *Apartment* category represented the second largest number of complaints received (N=1481)(Table 2).

Table 2: Number of DHH IEQ Reports by Location Louisiana, 2003-2013

Location	Total
House	1969
Apartment	1481
Mobile Home	599
Office	278
School	210
Retail	115
Condo	93
Hotel/Motel	69
Healthcare facility	58
Miscellaneous	73
Location unspecified	29
Church	18
Storage	9
Jail/Prison	9
Court	8
Grand Total	4946

Reports are recorded in the DHH/IEQ database in one of eight general categories based on health details. For the time period reviewed, the most frequently reported health symptoms are those that affect the respiratory system (N=4099) (Table 3).

Other health symptom reports refer to complaints that do not fit into the established categories listed.

Table 3. Number of DHH IEQ Reports by Health Complaints (Multiple Organ Systems per Report) - Louisiana, 2003-2013

Year:	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Respiratory	32	525	1167	240	251	274	154	281	330	458	387	4099
Cancer	0	0	0	0	0	0	0	0	4	0	5	9
Dermal/Rash	5	45	0	4	13	20	23	48	50	61	60	329
GI	3	36	0	5	31	26	10	26	26	17	36	216
Neurologic	8	106	58	11	57	165	35	47	47	62	94	690
Other	25	62	28	34	21	78	15	13	27	33	34	370
None Reported	27	316	18	347	181	248	104	246	280	240	187	2194

Inquirers with health concerns are advised to consult with and seek treatment from their health care provider (Table 4).

Table 4: Number of DHH IEQ Reports by Information Requested excluding health complaints) - Louisiana, 2003-2013

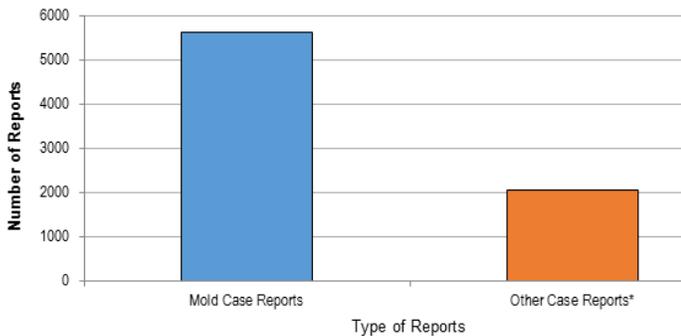
Information Requested	Number
Licensure	75
Certification education request	66
Professionals	55
Law	51
Medical testing	24
Environmental sampling	24
Cleaning/Remediation Products	20
Grand Total	315

Some IEQ reports only require a referral to appropriate professionals, agencies, or organizations. For example, a question about

what agency licenses mold remediators would be referred directly to the Louisiana State Licensing Board for Contractors (www.lslbc.louisiana.gov; (800) 256-1392.

It should be noted that there can be multiple environmental issues of concern in one report. Of the total number of reports, 73% (N=5629) involve mold issues. Several topic and symptom categories can be captured in a single consultation. For example, an inquirer may report respiratory and gastrointestinal symptoms while also stating that there are mold, particulate, sewage and odor issues of concern in their rental apartment. The LDHH IEQ database records all symptom categories and residential issues reported (Figure 2).

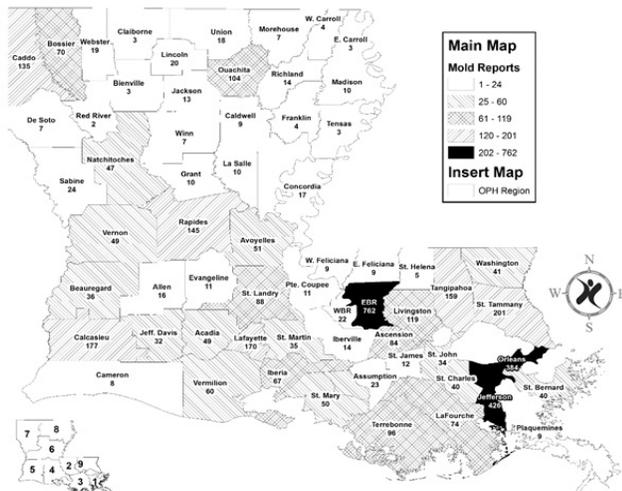
Figure 2: Total Reported Mold Issues Compared to Other Reported Environmental Issues of Concern - Louisiana, 2003-2013



*The LDHH IEQ Database excludes: carbon monoxide; mercury; lead; Chinese drywall; and methamphetamine clandestine laboratories reports which, are captured by other LDHH/SEET programs. 'Other Case Reports' includes 24 categories such as 'environmental tobacco smoke' and 'volatile organic compounds' some of which overlap.

Most reports come from south Louisiana, which includes the major metropolitan areas for LDHH OPH Regions 1 and 2. The highest number of reports for the period summarized (2003-2013) are from East Baton Rouge, Orleans, and Jefferson parishes (Figure 3).

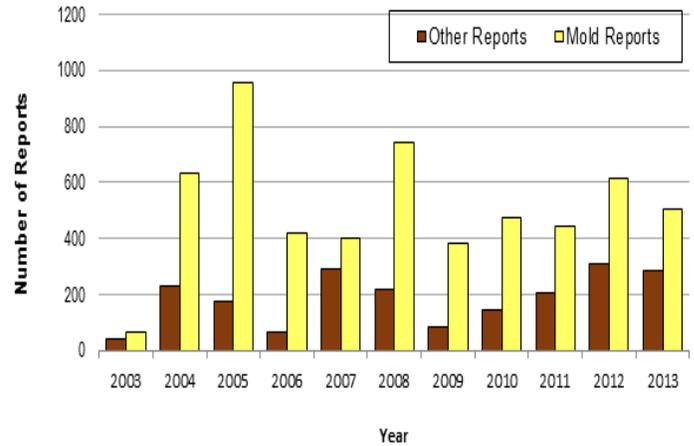
Figure 3: LDHH/IEQ old Reports by Parish - Louisiana, 2003-2013



Map produced 9/2/14 by LaDHH/OPH/SEET using data provided by LaDHH. Disclaimer: SEET cannot guarantee the accuracy of the information contained on these maps and expressly disclaims liability for errors and omissions in their contents.

Inquiries that are related to mold outnumber all other topics reported between 2003 and 2013. Reports received by the DHH IEQ during October 2005 (N=425) represented the largest number of reports for a one-month period. Total reports for 2005 (N=1203) is the largest number for the 2003 to 2013 timeframe. The average number of reports per month from 2003 to 2013 is 50 (Figure 4).

Figure 4: Frequency of LDHH IEQ Mold Reports Compared to Other IEQ Reports - Louisiana, 2003-2013



Discussion:

Indoor environmental quality reports tend to increase during and after a storm, hurricane, tornado, or area flooding event. Careful documentation is used to ensure that the accurate address of the structure of concern is captured along with the submitters' current contact information. This is important to note because residents may be displaced and seek refuge further inland from the hardest hit coastal DHH OPH Regions.

There is clearly a need for Louisianans to receive information regarding indoor environmental quality issues, especially those related to mold. Please visit <http://new.dhh.louisiana.gov/index.cfm/page/829> for information on SEET's IAQ Education service.

This 10-year summary report demonstrates that providing scientifically accurate information to residents, local and state governmental officials, academics, and professional organizations is vitally important. The information provided should reflect cultural sensitivity and population diversity. DHH will continue to monitor indoor environmental quality trends in Louisiana for planning, public education, and outreach purposes and will assist in responding to these issues whenever needed.

For references or more information, contact Melanie Ramson at (225) 342-7136 or melanie.ramson@la.gov.

IDEpi Question/Answer Corner

Is Louisiana going to have a large Zika outbreak like other countries?

There is some division among authorities answering this question.

Large outbreaks have occurred in very crowded and poor neighborhoods with poor sanitation, housing with no mosquito proofing at all, and lots of small containers with standing water in the vicinity. These conditions are at a level seldom reached in Louisiana. Also, the best vector is *Aedes aegypti*. It is present in Louisiana, but in limited areas. *Aedes albopictus* (the Asian Tiger mosquito) is much more common in Louisiana, and it is considered to be not as good as *Ae. aegypti* to transmit Zika. Note that there are also many other *Aedes* mosquito species that are not good transmitters of Zika or other arboviruses.

Many authorities think that Louisiana is at risk for small outbreaks, but not for a sustained transmission over many months over a large part of the state.

What is the link between microcephaly and Zika?

It seems that the largest concentration of microcephaly is in Brazil, but not in other areas. The relation between Zika and microcephaly has not yet been completely proven. It may be that factors other than Zika play a part. Given the uncertainties, the Centers for Disease Prevention and Control made travel recommendations as precautionary measures.

My facility has had a small outbreak of diarrhea –likened to a norovirus outbreak. At what percentage of the population having symptoms should the Office of Public Health be notified?

The Department of Health and Hospitals (DHH) should be notified if there is a suspicion of an outbreak. DHH can provide stool testing to confirm norovirus and give recommendations to help stop a potential outbreak. If the first stage (one to three cases) is not dealt with, it may be too late for preventing a continuation of cases.

For more information on norovirus go to <http://new.dhh.louisiana.gov/index.cfm/page/531>.

Acute Flaccid ... continued from page 1)

ease Control and Prevention are requesting specimen submission for all clinically compatible cases, with or without a suspected or known etiology. Testing is available to confirm or eliminate a suspected cause, and to explore other possible etiologies. Laboratory testing also enhances the overall knowledge and understanding of the epidemiology of AFM. An MRI showing a spinal cord lesion is not necessary for specimen submission, though an MRI of the spine is strongly recommended for suspected cases. The specimens requested (as available) in order of priority are:

- CSF specimen
- blood (serum and whole blood) specimen
- respiratory tract specimen
 - type of specimen (ranked from first preference to last preference)
 - nasopharyngeal aspirate
 - nasopharyngeal wash
 - nasopharyngeal swab
 - oropharyngeal swab
- stool specimen.

Any health care professional suspecting a case of AFM should contact the Louisiana DHH IDEpi Section by phone at (504) 568-8313 or (800) 256-2748.

Louisiana Fact

First State Bacteriological Laboratory

On April 15, 1894 Louisiana became the first state* agency to establish a diagnostic bacteriological laboratory under the direction of Dr. Paul E. Archinard. The bacteriological laboratory was located in the City Hall Annex building which then stood at 546 Carondelet in New Orleans. Early testing consisted of performing cultures and microscopic examinations of clinical specimens for diphtheria, malaria, tuberculosis and typhoid fever. In 1921 the first branch public health laboratories were established in Shreveport and Monroe.

*(A municipal bacteriological laboratory was established in Brooklyn, N.Y. in 1887.)

The Rudolph Matas History of Medicine in Louisiana - Vol. 2, edited by John Duffy, 1962, 480-1

Announcements

Updates: Infectious Disease Epidemiology (IDEpi) Webpages
www.infectiousdisease.dhh.louisiana.gov

Annual Reports: Meningococcal Infections; Murine Typhus; Several Year Comparison 2014-2016

Epidemiology Manual: Murine Typhus; Murine Typhus Public Info; Murine Typhus Summary; Pets and Floodwaters; Zika Public Info; Zika Virus

Influenza: Weekly Report

Veterinary: Hospitals That Carry the Rabies Vaccine

West Nile Virus: Weekly Report

Save the Date!

April 2, 2016

Hepatitis C Consortium
New Orleans Area

Rapid Response Team / Field Epidemiology Workshop

Bossier City - May 25, 2016 Alexandria - May 26, 2016
New Orleans - May 31, 2016

For more information, go to <http://new.dhh.louisiana.gov/index.cfm/page/1816>.

Table: Communicable Disease Surveillance, Incidence by Region and Time Period, November-December, 2015

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Nov-Dec 2015	Nov-Dec 2014	Jan-Dec Cum 2015	Jan-Dec Cum 2014	Jan-Dec % Chg*	
Vaccine-preventable															
Hepatitis B	Cases	0	3	2	0	0	1	0	1	2	9	21	82	95	-13.7
	Rate ¹	0	0.5	0.5	0	0	0.3	0	0.3	0.5	0.2	0.5	1.9	2.2	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	0	0	0	NA*
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis		1	2	1	0	1	0	0	0	0	5	4	44	74	-40.5
Sexually-transmitted															
HIV/AIDS	Cases ²	59	44	6	16	5	12	25	15	10	191	182	1221	1226	NA*
	Rate ¹	7.1	6.6	1.5	2.7	1.7	3.9	4.6	4.2	1.8	4.2	4.0	26.9	27	NA*
Chlamydia	Cases ^{1,3}	1,209	724	355	524	246	293	629	436	371	4,787	4,666	26,182	28,896	-9.4
	Rate ¹	137.3	107.2	87.7	87.9	83.4	94.8	114.5	122.3	66.4	103.5	100.9	566.0	624.7	NA*
Gonorrhea	Cases ^{1,3}	486	264	112	174	105	60	174	131	109	1,615	1,558	8,062	8,978	-10.2
	Rate ¹	55.2	39.1	27.7	29.2	35.6	19.4	31.7	36.8	19.5	34.9	33.7	174.3	194.1	NA*
Syphilis (P&S)	Cases ^{1,3}	11	10	4	4	3	5	19	7	3	66	80	592	575	3.0
	Rate ¹	1.2	1.5	1.0	0.7	1.0	1.6	3.5	2.0	0.5	1.4	1.7	12.8	12.4	NA*
Enteric															
Campylobacter	Cases	4	6	5	6	3	5	2	0	2	33	35	218	261	-16.5
Hepatitis A	Cases	1	2	0	0	0	0	0	0	0	3	0	6	5	NA*
	Rate ¹	0.1	0.4	0	0	0	0	0	0	0	0.1	0	0.1	0.1	NA*
Salmonella	Cases	12	14	22	47	15	6	27	9	21	173	170	1334	1270	5.0
	Rate ¹	1.2	2.5	5.8	9.1	5.6	2.0	5.3	2.6	5.5	4.0	3.9	30.9	29.4	NA*
Shigella	Cases	10	15	5	5	1	2	6	6	1	51	11	228	138	65.2
	Rate ¹	1.0	2.6	1.3	1.0	0.4	0.7	1.2	1.7	0.3	1.2	0.3	5.3	3.2	NA*
Vibrio, cholera	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other	Cases	3	2	3	1	1	0	0	0	0	10	9	58	55	NA*
Other															
<i>H. influenzae (other)</i>		4	5	0	1	0	2	3	0	1	16	8	65	49	32.7
<i>N. Meningitidis</i>		0	0	0	0	0	0	0	0	0	0	0	4	6	NA*

¹ = Cases Per 100 000 Population.

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 = Preliminary data.

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

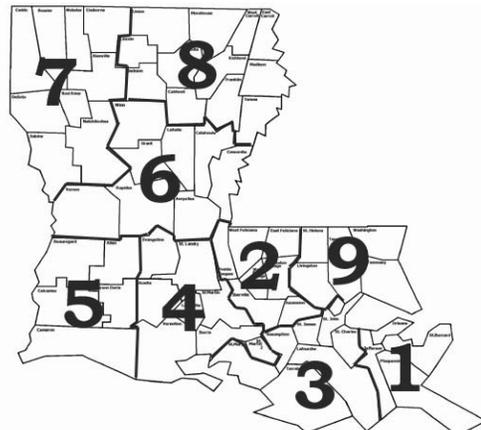
Table 2. Diseases of Low Frequency, January-December, 2015

Disease	Total to Date
Legionellosis	43
Lyme Disease	2
Malaria	12
Rabies, animal	4
Varicella	110

Table 3. Animal Rabies, November-December, 2015

Parish	No. Cases	Species
	0	

Figure: Department of Health and Hospitals Regional Map



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	Fish/Shellfish Poisoning (domoic acid, neurotoxic shellfish poisoning, ciguatera, paralytic shellfish poisoning, scombroid)	Plague (<i>Yersinia pestis</i>)	Smallpox
Anthrax	Foodborne Infection	Poliomyelitis (paralytic & non-paralytic)	<i>Staphylococcus aureus</i> , Vancomycin Intermediate or Resistant (VISA/VRSA)
Avian or Novel Strain Influenza A (initial detection)	<i>Haemophilus influenzae</i> (invasive infection)	Q Fever (<i>Coxiella burnetii</i>)	Staphylococcal Enterotoxin B (SEB) Pulmonary Poisoning
Botulism	Influenza-associated Mortality	Rabies (animal and human)	Tularemia (<i>Francisella tularensis</i>)
Brucellosis	Measles (Rubeola imported or indigenous)	Ricin Poisoning	Viral Hemorrhagic Fever (Ebola, Lassa, Marburg, Crimean Congo, etc.)
Cholera	Neisseria meningitidis (invasive infection)	Rubella (congenital syndrome)	Yellow Fever
<i>Clostridium perfringens</i> (foodborne infection)	Outbreaks of Any Infectious Disease	Rubella (German Measles)	
Diphtheria	Pertussis	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)	

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: <i>Acanthamoeba</i> , <i>Naegleria</i> , <i>Balamuthia</i> , others)	Chagas Disease	Hepatitis B (perinatal infection)	Mumps
Anaplasmosis	Chancroid	Hepatitis E	Salmonellosis
Arthropod-Borne Viral Infections (West Nile, Dengue, St. Louis, California, Eastern Equine, Western Equine, Chikungunya, Usutu, and others)	<i>Escherichia coli</i> , Shiga-toxin producing (STEC), including <i>E. coli</i> O157:H7	Herpes (neonatal)	Shigellosis
Aseptic Meningitis	Granuloma Inguinale	Human Immunodeficiency Virus ² [(HIV), infection in pregnancy]	Syphilis ¹
Babesiosis	Hantavirus (infection or Pulmonary Syndrome)	Human Immunodeficiency Virus ² [(HIV), perinatal exposure]	Tetanus
	Hemolytic-Uremic Syndrome	Legionellosis	Tuberculosis ³ (due to <i>M. tuberculosis</i> , <i>M. bovis</i> , or <i>M. africanum</i>)
	Hepatitis A (acute illness)	Malaria	Typhoid Fever
	Hepatitis B (acute illness and carriage in pregnancy)		

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 ³ (AIDS)	Giardiasis	Listeriosis	Staphylococcal Toxic Shock Syndrome
<i>Anaplasma Phagocytophilum</i>	Glanders (<i>Burkholderia mallei</i>)	Lyme Disease	Streptococcal Disease, Group A (invasive disease)
Blastomycosis	Gonorrhea ¹ (genital, oral, ophthalmic, pelvic inflammatory disease, rectal)	Lymphogranuloma Venereum ¹	Streptococcal Disease, Group B (invasive disease)
Campylobacteriosis	Hansen's Disease (leprosy)	Melioidosis (<i>Burkholderia pseudomallei</i>)	Streptococcal Toxic Shock Syndrome
Chlamydial infection ¹	Hepatitis C (acute illness)	Meningitis, Eosinophilic (including those due to <i>Angiostrongylus</i> infection)	<i>Streptococcus pneumoniae</i> , invasive disease
Coccidioidomycosis	Histoplasmosis	Nipah Virus Infection	Transmissible Spongiform Encephalopathies (Creutzfeldt-Jacob Disease & variants)
Cryptococcosis (<i>C. neoformans</i> and <i>C. gattii</i>)	Human Immunodeficiency Virus ² (HIV) (infection other than as in Class B)	Non-gonococcal Urethritis	Trichinosis
Cryptosporidiosis	Human T Lymphocyte Virus (HTLV I and II infection)	Ophthalmia neonatorum	Varicella (chickenpox)
Cyclosporiasis	Leptospirosis	Psittacosis	<i>Vibrio</i> Infections (other than cholera)
Ehrlichiosis (human granulocytic, human monocytic, <i>E. chaffeensis</i> and <i>E. ewingii</i>)		Spotted Fevers [<i>Rickettsia</i> species including Rocky Mountain Spotted Fever (RMSF)]	Yersiniosis
<i>Enterococcus</i> , Vancomycin Resistant [(VRE), invasive disease]		<i>Staphylococcus aureus</i> (MRSA), invasive infection	

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

Cancer	Heavy Metal (arsenic, cadmium, mercury) Exposure and/or Poisoning (all ages) ⁵	Phenylketonuria ⁴	Severe Traumatic Head Injury
Carbon Monoxide Exposure and/or Poisoning ⁵	Hemophilia ⁴	Pneumoconiosis (asbestosis, berylliosis, silicosis, byssinosis, etc.)	Severe Undernutrition (severe anemia, failure to thrive)
Complications of Abortion	Lead Exposure and/or Poisoning (all ages) ^{4,5}	Radiation Exposure, Over Normal Limits	Sickle Cell Disease ⁴ (newborns)
Congenital Hypothyroidism ⁴	Pesticide-Related Illness or Injury (all ages) ⁵	Reye's Syndrome	Spinal Cord Injury
Galactosemia ⁴			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 (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 form TB 2431 (8/94). Mail form to TB Control Program, DHH-OPH, P.O. Box 60630, New Orleans, LA. 70160-0630 or fax both sides of the form to (504) 568-5016

⁴Report to the Louisiana Genetic Diseases Program and Louisiana Childhood Lead Poisoning Prevention Programs: www.genetics.dhh.louisiana.gov or facsimile (504) 568-8253, telephone (504) 568-8254, or (800) 242-3112

⁵Report to the Section of Environmental Epidemiology and Toxicology: www.seet.dhh.louisiana.gov or call (225) 342-7136 or (888) 293-7020

All **laboratory facilities** shall, in addition to reporting tests indicative of conditions found in §105, report positive or suggestive results for additional conditions of public health interest. The following findings shall be reported as detected by laboratory facilities: 1. adenoviruses; 2. coronaviruses; 3. enteroviruses; 4. hepatitis B (carriage other than in pregnancy); 5. hepatitis C (past or present infection); 6. human metapneumovirus; 7. parainfluenza viruses; 8. respiratory syncytial virus; and 9. rhinoviruses.