The company was contacted by IDEpi, and a foodborne outbreak ill. Sanitarian Services performed an inspection of the event center. It stated over 100 employees attended the luncheon and 58 became the LDH OPH's Sanitarian Services from a company employee, local events and catering center. The initial complaint, received by associated with a company luncheon. The luncheon was held at a Section (IDEpi) was notified about a possible foodborne outbreak Office of Public Health's (OPH) Infectious Disease Epidemiology in winter 2016, the Louisiana Department of Health's (LDH) source of the outbreaks.

Noroviruses, previously called Norwalk-like viruses, are non-enveloped, single-stranded RNA viruses in the family Caliciviridae that cause acute gastroenteritis. These viruses are genetically diverse and divided into six different genogroups (I-VI), of which, three cause human illness (I, II, IV). Infection with norovirus typically causes abrupt onset of vomiting, diarrhea and nausea within 48 hours after exposure. Symptoms usually last 24 to 60 hours and illness is self-limiting, rarely causing hospitalizations.

Noroviruses are highly contagious. A person infected with norovirus can shed billions of norovirus particles in their stool and vomit, but it only takes as few as 18 particles to infect another person. Also, norovirus can be shed in stool for two or more weeks after symptoms resolve. The virus is spread via the fecal-oral route; it can be passed from person-to-person directly, from person-to-person via contaminated food items, or person-to-person via contaminated objects or fomites.

There is no vaccine to prevent norovirus infection; thorough handwashing is the single best prevention method. According to the Centers for Disease Control and Prevention (CDC), norovirus is the leading cause of illness and outbreaks from contaminated food in the United States. Infected food workers are frequently the source of the outbreaks.

In winter 2016, the Louisiana Department of Health’s (LDH) Office of Public Health’s (OPH) Infectious Disease Epidemic Section (IDEpi) was notified about a possible foodborne outbreak associated with a company luncheon. The luncheon was held at a local events and catering center. The initial complaint, received by the LDH OPH’s Sanitarian Services from a company employee, stated over 100 employees attended the luncheon and 58 became ill. Sanitarian Services performed an inspection of the event center. The company was contacted by IDEpi, and a foodborne outbreak (continued on page 6)

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NHSN AUR Module
Louisiana, January 18, 2017

Erica Washington, MPH

The Centers for Disease Control and Prevention (CDC) National Healthcare Safety Network (NHSN) is an online database used for the surveillance of healthcare-associated infections by a variety of provider types. NHSN has an array of uses including surveillance of patient safety and healthcare personnel safety indicators. Antimicrobial Use and Resistance (AUR) is one of four modules in the NHSN Patient Safety Component. The purpose of the AUR is to detect antibiotic resistance patterns of pathogens as well as to observe facility utilization of antimicrobial agents.

Although the antimicrobial use function of the AUR was released in 2011 and the antimicrobial resistance function was released in 2014, the module was largely underutilized until 2015. In May 2016, only 138 of 18,000 NHSN-reporting facilities used the AUR Module for at least one month in 30 states. None of the 138 facilities were in Louisiana.

There has been increased attention on the rate of antibiotic resistance proliferation since publication of the March 2015 White House National Action Plan for Combating Antibiotic-Resistant Bacteria. Currently, use of the AUR is being largely incentivized by the Office of the National Coordinator for Meaningful Use Stage 3 (MU3) participation. The NHSN AUR Module is listed as an option for public health registry reporting in MU3. The AUR Module is the only portion of NHSN reporting that is eligible for any Meaningful Use level.

As of January 1, 2017, facilities that have the capacity to participate in MU3 have the option of declaring their readiness to report to the AUR Module and participating voluntarily (Table).

Table: Electronic Capacities Required to Participate in the NHSN Antibiotic Use/Resistance Module - CDC, 2017

<table>
<thead>
<tr>
<th>Electronic Capacity</th>
<th>Antibiotic Use</th>
<th>Antibiotic Resistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electronic Medication Administration Record (eMAR)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bar Coding Medication Administration (BCMA)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Electronic Laboratory Information System (LIS)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Admission Discharge Transfer (ADT) System</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Third party vendor specified at <a href="http://www.sidp.org/aurvendors">www.sidp.org/aurvendors</a> or homegrown vendor with CDA capacity</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

(continued on page 5)
Non-Fatal and Fatal Injury Surveillance: Louisiana, 2014

Katharyn M. Baca, PhD; Jane Herwehe, MPH

Injury, which accounts for one out of every 10 deaths in Louisiana, is a major public health concern for the State. It is the third leading cause of death, after heart disease and cancer. Louisiana ranks tenth in the United States for highest age-adjusted rate of fatal injuries. This report lists the top causes of fatal and non-fatal injuries for the overall Louisiana population and within specific age-groups.

Fatal injuries were identified based on International Classification of Diseases (ICD)-10 revision codes using 2014 death certificates; non-fatal injuries were identified based on ICD-9 codes using 2014 Louisiana Hospital Inpatient Discharge Diagnosis (LAHIDD).

Of all fatal injuries in Louisiana, 66% were unintentional injuries, 19% were suicides, and 15% were homicides. Injury accounted for most fatalities in Louisiana’s children. More specifically, injuries accounted for 50% of all deaths for children one to 14-years of age and 76% of all deaths among adolescents 15 to 19-years of age.

For Louisiana residents, the leading cause of fatal injury was firearm-related (Figure 1).

There was a fatal firearm incident every 10 hours in Louisiana. Louisiana had the highest firearm-related fatality rate in the nation, and nearly doubled the national age-adjusted rate (18.5 per 100,000 population compared to 10.2 per 100,000 population nationally). Out of 872 deaths due to firearms in 2014, 50% of firearm deaths were suicides, while 47% were homicides.

The leading cause of fatal injury changed by age-group:
- For five to 14-year olds, a motor vehicle crash was the leading cause of fatal injury.
- 15 to 34-year olds were most likely to die of a firearm-related injury.
- Poisonings (including drug overdoses) was the leading cause of fatal injury for 35 to 64-year olds.
- Traumatic brain injury was the leading cause of fatal injury for those who were 65 years or older. The leading causes of traumatic brain injury for all ages were firearm (due to suicide - 41%, motor vehicle crash - 18%, firearm (homicide) - 14%, and unintentional falls - 14%].

In 2014, 22,598 Louisianans were hospitalized for injury-related reasons (478.2 per 100,000 population). The top cause of non-fatal injury hospitalizations was fall-related; other top causes were traumatic brain injury and poisonings (Figure 2).

The leading cause of non-fatal injury by age-group varied:
- Traumatic brain injury was the leading cause of non-fatal injury hospitalizations for Louisiana residents younger than one-year old. For all ages, leading causes of traumatic brain injury were unintentional fall-related (35%), related to motor vehicle crash (16%), assault-related (6%), firearm related (2%), and unknown (41%).
- Poisonings (including drug-related hospitalizations such as opioids) were the most common non-fatal injury for one to four-years old (due to consumption of personal care products, cleaning supplies, etc.) and residents 25 to 54-years old (due to consumption of analgesics, sedatives, etc.).
- Fall related hospitalization was the leading cause of non-fatal injury for residents who were five to 14-years old, or residents 55 years or older.
- 15 to 24-year old residents were most likely to be hospitalized for non-fatal, motor vehicle crashes.

(continued on page 3)
New Recommendation, Strengthened Partnerships and Enhanced Provider Evaluation to Improve HPV Vaccination Rates

Stacy Hall, RN MSN

Vaccination against the Human Papillomavirus (HPV) is recommended to prevent HPV infections and HPV-associated diseases, including cancers. HPV infection causes cervical, vaginal, and vulvar cancers in women; penile cancers in men; and oropharyngeal and anal cancers as well as genital warts in both men and women.

Current National Immunization Survey (NIS) results for Louisiana have the completed HPV vaccination series for females at 39.3%, with males at 30.5%. The overall NIS result for the U.S. is 41.9% for females and 28.1% for males. This rate of HPV vaccination is significantly lower than the Healthy People 2020 Target of 80% vaccination coverage. Louisiana has met the Healthy People 2020 targets for adolescent vaccines of Tdap, varicella and MenACWY in 2015, but not for completed HPV vaccine series in females or males.

Routine vaccination at age 11 or 12 years has been recommended by the Advisory Committee on Immunization Practices (ACIP) since 2006 for females and since 2011 for males. In December 2016, a new recommendation for use of a two-dose schedule for girls and boys who initiate the vaccination series at ages nine through 14 years was made. Three doses remain recommended for persons who initiate the vaccination series at ages 15 through 26 years and for immunocompromised persons. This recommendation that 11- to 12-year-olds receive two doses of HPV vaccine at least six months apart rather than the previously recommended three doses, will make it simpler for families to get their children protected.

Increasing HPV vaccine uptake involves both the cancer prevention and immunization communities. The Louisiana Department of Health (LDH), Office of Public Health’s (OPH) Immunization Program has partnered with the American Cancer Society in Louisiana to improve outreach. Collaboration and mutual reinforcement of prevention through vaccination messages may have a greater impact. The Louisiana Chapter of the American Academy of Pediatrics continues to promote the critical role of pediatricians in protecting patients before they become exposed to the virus.

Over 730 Vaccines For Children (VFC) providers in Louisiana receive an annual Assessment Feedback Incentives eXchange (AFIX) visit from the OPH Immunization Program staff. In 2016, a report card was given to each VFC provider. The report card includes vaccination rates, including HPV vaccination rates along with the Healthy People 2020 goals. Providers are given information on quality improvement planning, avoiding missed opportunities for vaccination along with tools for making a strong provider recommendation for HPV vaccination. The LDH OPH Louisiana Immunization Network for Kids Statewide, (LINKS) has a reminder recall feature, so providers can identify patients not up-to-date for HPV vaccination and conduct follow up. The Immunization Program is mapping parish-level HPV vaccination to direct efforts (Figure).

LDH, OPH is working to improve HPV vaccination rates. Please contact the Immunization Program at (504) 568-2600 or david.boudreaux2@la.gov for references and more information.

<table>
<thead>
<tr>
<th>Rate</th>
<th>Percentage of completed HPV vaccination series of persons aged 13 to 17 years with data from LINKS by December 12, 2016.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%-20%</td>
<td></td>
</tr>
<tr>
<td>21%-40%</td>
<td></td>
</tr>
<tr>
<td>41%-60%</td>
<td></td>
</tr>
<tr>
<td>61%-80%</td>
<td></td>
</tr>
<tr>
<td>81%-100%</td>
<td></td>
</tr>
</tbody>
</table>

Figure: HPV Vaccination Rates of Adolescents by Parish, LINKS, Louisiana, 2016*.

LDH, OPH is working to improve HPV vaccination rates. Please contact the Immunization Program at (504) 568-2600 or david.boudreaux2@la.gov for references and more information.

World Immunization Week
April 23-30, 2017

National Infant Immunization Week
April 22-29, 2017

Control and Prevention violence and injury surveillance and prevention initiatives, the Core State Violence and Injury Prevention Program (Core SVIPP) and the National Violent Death Reporting System (NVDRS). Both of these initiatives will be implemented for a five-year period from 2016 to 2021. Participation in the Core SVIPP and NVDRS are opportunities for Louisiana to build on past injury and mortality surveillance work, further strategic partnerships, and capitalize on the high level of State attention on improving Louisiana’s ability to better understand the impact of unintentional and intentional injury on our communities.

For references or more information, contact Dr. Baca at (504) 568-3504 or kasia.baca@la.gov.
The Louisiana Department of Health, Office of Public Health’s (OPH) Infectious Disease Epidemiology (IDEpi) Section conducted enhanced syndromic surveillance in OPH Regions 2, 4 and 9 during and after the August 2016 flood. Daily summaries of emergency department (ED) chief complaint data were extracted from Louisiana Early Event Detection System (LEEDS), IDEpi’s syndromic surveillance system, to monitor visits related to infectious diseases and injuries.

The severe weather and subsequent flooding began August 12, 2016. Data was analyzed starting July 1, 2016 to obtain a baseline and continued through September 15th. IDEpi tracked six syndromes related to infectious disease: fever, gastrointestinal complaints (GI), influenza-like illness (ILI), lower respiratory tract infections (LRTI), skin and soft tissue infections (SSTI), and upper respiratory tract infections (URTI). The data was monitored for spikes and increases in percentage of ED visits associated with each syndrome (Figures 1, 2 and 3).

Figure 1: ED Visits Related to Infectious Disease Syndromes - Region 2 - Louisiana, 2016

Figure 2: ED Visits Related to Infectious Disease Syndromes - Region 4 - Louisiana, 2016

Figure 3: ED Visits Related to Infectious Disease Syndromes - Region 9 - Louisiana, 2016

IDEpi also tracked five syndromes related to injuries: drowning-related injuries, personal injuries (lacerations, falls, fractures, etc.), tool or vehicle related injuries, weather-related injuries, and CO2-related injuries (Figures 4, 5 and 6). Data were monitored for spikes and increases in percentage of ED visits associated with each syndrome. During the period of surveillance, spikes in percentage were detected but not sustained and did not warrant further investigation.

For more information please contact Megan Jespersen at (504) 568-8309 or megan.jespersen@la.gov.
Submission to the AUR Module will be required for MU3 participants beginning January 1, 2018. MU3 eligibility requires participation in both the antibiotic use and the antibiotic resistance portions of the AUR Module.

In light of the requirements needed to participate in the AUR Module, the Department of Health, Office of Public Health, Infectious Disease Epidemiology Section’s (IDEpi) Healthcare-Associated Infections Program completed a survey from September 8-30, 2016 among acute care hospitals. The purpose of the survey was to assess current electronic surveillance and laboratory capacities as well as general interest in participating in the Module.

The survey was distributed to 83 acute care hospitals in Louisiana; 24 responses were received (29% response rate). Of the respondents, 17 (71%) indicated they have each of the capacities necessary to participate in both the antibiotic use and the antibiotic resistance portions of the AUR Module: electronic medication administration records; bar coding medication administration; electronic laboratory information system; admission discharge transfer system; and clinical document architecture. Survey respondents were mainly infection preventionists (83%); three (13%) were pharmacists. There was mixed interest in participating in the AUR Module at the time of the survey: seven (29%) indicated interest in reporting; five (21%) had no interest in reporting; and 12 (50%) were uncertain about their willingness to participate in the AUR Module.

Outreach and promotion of the AUR Module are ongoing. An archived webinar titled “NHSN Antibiotic Use/Resistance Module” is available through IDEpi. Additionally, recordings from the annual NHSN/Emerging Infectious Diseases Workshops are available on the IDEpi HAI website http://new.dhh.louisiana.gov/index.cfm/page/824 which shows a live demonstration of the AUR Module.

Facilities who are interested in learning more about the AUR Module may contact Erica.Washington@la.gov. Additional information is available at https://www.cdc.gov/ehrmeaningfuluse/nhsn_meaningful_use_overview.html.
Announcements

Introduction to Infection Prevention, Epidemiology, and NHSN Definitions Workshops - 2017
Metairie - March 22-23  Lafayette - April 5-6
Bossier City - April 19-20

This is a two-day workshop sponsored by the Department of Health, Office of Public Health’s, Infectious Disease Epidemiology Section. The targeted audience includes nurses, laboratory personnel, and other infection preventionists employed by healthcare settings throughout the state who have roles in infection surveillance and reporting.

These workshops are free to attend, but each day must be registered for because of seating limitations and to provide the adequate number of handouts. Nurse and laboratory education credits have been applied for. Please go to http://new.dhh.louisiana.gov/index.cfm/page/2643 for a registration form and more information.

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

Annual: Dengue; Saint Louis Encephalitis; Several Year Comparison 2014-2016
Arboviral: Guidelines for Travelers Visiting Friends & Family in Areas with Chikungunya, Dengue or Zika (CDC); Zika Public Information
Epidemiology Manual: Bed Bugs and Dialysis Centers; Hantavirus; Leptospirosis
Influenza: Weekly Report
Veterinary (Rabies): Louisiana Bat Removal Companies; State Registry of Public Animal Shelters

(It Was the Chef ... continued from page 1)

investigation was initiated.

A line listing of employees who attended the luncheon was obtained as well as a menu of food items served. Food histories and symptom information were collected on employees by six epidemiologists from IDEpi over a period of two days. Of the 106 employees provided in the line listing, IDEpi was able to reach 64 for interviews. Two employees reported they did not attend the luncheon and four reported a household member who also became ill.

Sanitarian Services notified IDEpi after the event center inspection that three food handler kitchen workers, out of five total, reported being ill the week of the luncheon. Two epidemiologists with IDEpi performed a site visit and were able to obtain food histories and symptom information on kitchen staff.

Outbreak cases were defined as those who ate the luncheon food and developed diarrhea or vomiting within two days. Secondary cases were defined as those who were a close contact of a luncheon attendee and developed diarrhea or vomiting after more than two days. Controls were defined as those who attended the luncheon and did not experience vomiting or diarrhea.

In total, there were 39 employees and one spouse who met the case definition. There were also three secondary cases and three food handler cases.

Symptom information was obtained on the 43 cases and secondary cases (Table). Other commonly reported symptoms include body aches (21%) and weakness/fatigue (14%).

Table: Symptom Information for Outbreak Cases and Secondary Cases

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diarrhea</td>
<td>39 (91%)</td>
</tr>
<tr>
<td>Fever</td>
<td>19 (44%)</td>
</tr>
<tr>
<td>Chills</td>
<td>34 (79%)</td>
</tr>
<tr>
<td>Nausea</td>
<td>39 (91%)</td>
</tr>
<tr>
<td>Vomiting</td>
<td>35 (81%)</td>
</tr>
<tr>
<td>Headache</td>
<td>31 (72%)</td>
</tr>
</tbody>
</table>

Symptom duration was available for 41 of the 43 cases and secondary cases. Symptom duration ranged from one to 144 hours with an average of 49 hours. Four cases and another number of secondary cases reported consulting a physician or visiting an emergency department for their symptoms. No hospitalizations or deaths were reported.

The three ill kitchen staff reported symptoms of body aches, nausea, and vomiting (1) or nausea, vomiting, and diarrhea (2) all lasting 24 hours. None consulted a physician or sought medical care.

The first symptom onset occurred in a kitchen worker the day before the luncheon (Figure).

Figure: Symptom Onset for Outbreak - Louisiana, 2016

Five stool samples were collected from luncheon attendees and all five tested positive for norovirus. A stool sample was also collected from the food handler with the initial symptom onset and was positive for norovirus and Clostridium difficile (up to 3% of the population is colonized for C.diff). All stools were tested at the LDH OPH Laboratory using the Biofire FilmArray® Gastrointestinal Panel, a multiplex PCR panel. All stool samples were sent to Tennessee Department of Health laboratory for genetic sequencing, results are pending.

This is considered to be a confirmed outbreak of norovirus among 46 persons who attended, worked, or were a household contact of an attendee of the company’s luncheon. No single food item from the luncheon had a significant association to illness. Contamination by the ill food handler shedding norovirus was the likely source. The event center was provided prevention recommendations for foodhandlers, information on norovirus from the CDC and LDH as well norovirus cleaning guidelines.

IDEpi recommendations included the following:

- For three days after resolution of illness, foodhandlers should be excluded from work or work in an area where they are not in contact with food.
- For three weeks after resolution of illness, foodhandlers should wash their hands and wear gloves whenever they handle food ready to be served.

From September to December 2016, there have been six confirmed norovirus outbreaks in Louisiana reported to IDEpi, consisting of one foodborne outbreak and five healthcare facility-associated outbreaks.

Suspected outbreaks of any infectious diseases are a Class A Disease with required reporting to LDH OPH within 24 hours. For more information on norovirus, go to http://new.dhh.louisiana.gov/index.cfm/page/531.

For more information, please contact Angie Orellana at (337)262-1641 or email to angie.orellana@la.gov.
### Table 1: Communicable Disease Surveillance, Incidence by Region and Time Period, November-December, 2016

<table>
<thead>
<tr>
<th>DISEASE</th>
<th>HEALTH REGION</th>
<th>IME PERIOD</th>
<th>Jan-Dec</th>
<th>Jan-Dec</th>
<th>Jan-Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nov-Dec 2016</td>
<td>Nov-Dec 2015</td>
<td>Cum 2016</td>
<td>Cum 2015</td>
</tr>
<tr>
<td>Vaccine-preventable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hepatitis B Cases</td>
<td>0 0 5 0 1 0 0 2 5</td>
<td>13 8 54 80</td>
<td>-32.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>0 0 1.3 0.4 0 0 0.6 1.3</td>
<td>0.3 0.2 1.3 1.9</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measles</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mumps</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rubella</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pertussis</td>
<td>1 0 1 0 0 0 1 0 1</td>
<td>4 5 50 44</td>
<td>13.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexually-transmitted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV/AIDS Cases</td>
<td>77 31 11 14 7 13 31 16 9</td>
<td>209 173 1265</td>
<td>1128</td>
<td>12.1</td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>9.2 4.7 2.7 2.4 2.4 4.2 5.7 4.5 1.7</td>
<td>4.6 3.8 27.9</td>
<td>24.9</td>
<td>24.9</td>
<td></td>
</tr>
<tr>
<td>Chlamydia Cases</td>
<td>1,119 634 315 535 201 278 636 423 390</td>
<td>4,620 5,070</td>
<td>31,631</td>
<td>32,305</td>
<td>-2.1</td>
</tr>
<tr>
<td>Rate</td>
<td>125.1 92.9 77.6 88.0 67.2 90.8 116.5 119.1 68.0</td>
<td>91.2 108.5</td>
<td>677.2 691.6</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Gonorrhea Cases</td>
<td>417 187 93 186 65 118 196 188 126</td>
<td>1,578 1,665</td>
<td>11,177</td>
<td>10,274</td>
<td>8.8</td>
</tr>
<tr>
<td>Rate</td>
<td>46.6 27.4 22.9 30.6 21.7 38.5 35.9 53.0 22.0</td>
<td>33.8 35.6</td>
<td>239.3 220.0</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Syphilis (P&amp;S)</td>
<td>32 3 6 8 4 4 10 2 3</td>
<td>72 141</td>
<td>675 696</td>
<td>-3.0</td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>3.6 0.4 1.5 1.3 1.3 1.3 1.8 0.6 0.5</td>
<td>1.5 3.0</td>
<td>14.5 14.9</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Enteric</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campylobacter Cases</td>
<td>1 5 6 12 2 10 1 4 3</td>
<td>44 39</td>
<td>275 224</td>
<td>22.8</td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0</td>
<td>0.0 0.1</td>
<td>0.3 0.1</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Salmonella Cases</td>
<td>19 10 13 32 17 12 21 25 18</td>
<td>167 184</td>
<td>1339</td>
<td>1353</td>
<td>-1.0</td>
</tr>
<tr>
<td>Rate</td>
<td>1.8 1.8 3.4 6.2 6.3 3.9 4.2 7.1 4.7</td>
<td>3.9 4.3</td>
<td>31.0 31.4</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Shigella Cases</td>
<td>6 6 33 2 1 2 6 5 2</td>
<td>63 50</td>
<td>384 229</td>
<td>67.7</td>
<td></td>
</tr>
<tr>
<td>Rate</td>
<td>0.6 1.1 8.8 0.4 0.4 0.7 1.2 1.4 0.5</td>
<td>1.5 1.2</td>
<td>8.9 5.3</td>
<td>NA*</td>
<td></td>
</tr>
<tr>
<td>Vibrio, cholera Cases</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vibrio, other Cases</td>
<td>0 1 0 2 0 0 0 0 0</td>
<td>4 9 47</td>
<td>56 56</td>
<td>-16.1</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>H. influenzae (other)</td>
<td>1 5 0 2 1 1 1 0 1</td>
<td>12 16</td>
<td>56 64</td>
<td>-12.5</td>
<td></td>
</tr>
<tr>
<td>N. Meningitidis</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 1 2 5</td>
<td>NA*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

### Figure: Department of Health Regional Map

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### Table 2: Diseases of Low Frequency, January-December, 2016

<table>
<thead>
<tr>
<th>Disease</th>
<th>Total to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legionellosis</td>
<td>34</td>
</tr>
<tr>
<td>Lyme Disease</td>
<td>4</td>
</tr>
<tr>
<td>Malaria</td>
<td>11</td>
</tr>
<tr>
<td>Rabies, animal</td>
<td>4*</td>
</tr>
<tr>
<td>Varicella</td>
<td>75</td>
</tr>
</tbody>
</table>

### Table 3: Animal Rabies, November-December, 2016

<table>
<thead>
<tr>
<th>Parish</th>
<th>No. Cases</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeSoto</td>
<td>1</td>
<td>Skunk</td>
</tr>
</tbody>
</table>

*Animal Rabies, Sep-Oct, 2016 (added Late October)
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 (initial detection)
- Botulism
- Brucellosis
- Cholera
- Cryptosporidiosis
- Diphtheria
- Echinococcosis
- Enteric Fever
- German Measles
- Giardiasis
- Listeriosis
- Paralytic Shellfish Poisoning (domoic acid, neurotoxic shellfish poisoning, scombroid)
- Plague (Yersinia pestis)
- Poliomyelitis (paralytic & non-paralytic)
- Q Fever (Coxiella burnetii)
- Rabies (animal and human)
- Ricin Poisoning
- Rubella (congenital syndrome)
- Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)
- Smallpox
- Staphylococcus aureus, Vancomycin
- Streptococcus pneumoniae
- Tuberculosis (due to M. tuberculosis, M. bovis, or M. africanum)
- 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: \textit{Acanthamoeba, Naegleria, Balamuthia, others})
- Anaplasmosis
- Anthropod-Borne Viral Infections (West Nile, St. Louis, California, Eastern Equine, Western Equine, Chikungunya, Usu, and others)
- Aseptic Meningitis
- Babesiosis
- Botulism
- Chagas Disease
- Chancroid
- Escherichia coli, Shiga-toxin producing (STEC), including \textit{E. coli O157:H7}
- Granuloma Inguinale
- Haemophilus influenzae
- Hepatitis A (acute illness)
- Hepatitis B (perinatal infection)
- Hepatitis E
- Herpes (neonatal)
- Human Immunodeficiency Virus ²(HIV), infection in pregnancy
- Human Immunodeficiency Virus ³(HIV), perinatal exposure
- Legionella
- Listeriosis
- Mumps
- Salmonellosis
- Syphilis
- Tetanus
- Tuberculosis
- 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)
- Anaplasma Phagocytophilum
- Blastomycosis
- Campylobacteriosis
- Chlamydial infection
- Coccidioidomycosis
- Cryptococcosis (\textit{C. neoformans} and \textit{C. gattii})
- Cryptosporidiosis
- Cyclosporiasis
- Ehrlichia (human granulocytic, human monocytic, \textit{E. chaffeensis} and \textit{E. ewingii})
- Enterococcus, Vancomycin Resistant [VRE], invasive disease
- Giardiasis
- Glanders (\textit{Burkholderia mallei})
- Gonorrhea (genital, oral, ophthalmic, pelvic inflammatory disease, rectal)
- Hepatitis B (acute illness and carriage in pregnancy)
- Hepatitis B (perinatal infection)
- Hepatitis E
- Herpes (neonatal)
- Human Immunodeficiency Virus (HIV), infection in pregnant women
- Human Immunodeficiency Virus (HIV), perinatal exposure
- Legionella
- Listeriosis
- Lyme Disease
- Lymphogranuloma Venereum
- Meningitis, Eosinophilic (including those due to \textit{Angiostrongylus cantonensis})
- Meningococcal disease
- Mumps
- Salmonellosis
- Syphilis
- Tetanus
- Tuberculosis
- Typhoid Fever

Class D Diseases/Conditions - Reporting Required Within 3 Business Days

- Cancer
- Carbon Monoxide Exposure and/or Poisoning
- Complications of Abortion
- Congenital Hypothyroidism
- Galactosemia
- Heavy Metal (arsenic, cadmium, mercury)
- Heavy Metal Exposure and/or Poisoning (all ages)
- Hemophilia
- Lead Exposure and/or Poisoning (all ages)²
- Lead Exposure and/or Poisoning (all ages)³
- Pesticide-Related Illness or Injury (all ages)
- Phenylketonuria
- Pneumococcosis (diphteria, herylliosis, silicosis, byssinosis, etc.)
- Radiation Exposure, Over Normal Limits
- Raye’s Syndrome
- Severe Traumatic Head Injury
- Severe Undernourishment (severe anemia, failure to thrive)
- Sickle Cell Disease (newborns)
- 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 (800) 256-2748 for forms and instructions.

²Report on STD-43 form. Report cases of syphilis with active lesions by telephone, within one business day, to (504) 568-8374.
²Report on form TB 2431 (8/94). Mail form to TB Control Program, DHHR-OPI, P.O. Box 60630, New Orleans, LA. 70160-0630 or fax both sides of the form to (504) 568-5016.
²Report on the Louisiana HIV/AIDS Program: Visit \url{www.hiv.dhh.louisiana.gov} or fascimile (504) 568-8253, telephone (504) 568-8254, or (800) 242-3112.
²Report to the Louisiana Genetic Diseases Program and Louisiana Childhood Lead Poisoning Prevention Programs: \url{www.genetics.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.