

Louisiana Morbidity Report



BOBBY JINDAL
GOVERNOR

Office of Public Health - Infectious Disease Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 - Phone: (504) 568-8313
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Outbreak of *Francisella novicida* Infections Among Occupants at a Long-Term Residential Facility - Louisiana, April-July, 2011

Julie Hand, MSPH; Christine Scott-Waldron, MSPH; Gary Balsamo, DVM MPH & TM

In May 2011, the Infectious Disease Epidemiology Section (IDES), Office of Public Health, was notified of two cases of bacteremia among two individuals at a long-term residential facility in the state. Blood culture results identified *Francisella tularensis* as the causative agent. *F. tularensis* causes tularemia and is currently classified as a potential bioterrorism agent by the Centers for Disease Control and Prevention (CDC). Samples were sent to the Louisiana State Public Health Laboratory for confirmatory testing and were positive on polymerase chain reaction (PCR) assay but negative by direct fluorescent antibody (DFA).

These conflicting results indicate the infections could have been caused by *F. novicida* which is closely related to *F. tularensis*, and considered a subspecies by some microbiologists. *F. novicida* is rarely associated with human illness despite the close genetic relationship to *F. tularensis*. Samples were forwarded to the CDC Bacterial Diseases Branch, Division of Vector-Borne diseases (DVBD) for further analysis. *F. novicida* was confirmed; through pulse field gel electrophoresis (PFGE) it was found that the two isolates were genetically identical strains.

F. novicida is an unusual pathogen that has not been known to readily cause human illness; two concurrent cases have never before been identified. An investigation was undertaken to explore possible exposures at the residential facility. Active surveillance for additional cases was also initiated.

Both patients exhibited end-stage liver disease, but their clinical presentations differed at the time of hospital admission. The first patient was hypothermic and unresponsive, with ulcerated lesions of the hard palate and abdominal tenderness. Despite initial improvement when treated with broad spectrum antibiotics, the patient died 11 days after hospitalization. The second patient presented with fever and ascites, and recovered. The dates when the positive blood cultures were drawn were April 4th and 12th. Both patients had a history of chronic underlying medical conditions and multiple visits to the infirmary of the facility, making it impractical to determine an exact date for illness onset. After an extensive review of records and an interview with the surviving patient, no common exposure or source was identified.

Through enhanced surveillance, a third case was identified in July. PFGE results showed that the third isolate differed from the other two by only a single band. The third patient had been on long-term immunosuppressive medications for an underlying illness and the clinical presentation included only knee pain; he also recovered. It was also difficult to determine the exact onset date for the third patient because he had a history of multiple visits to the infirmary for fever in April and also a previous hospital admission in May.

In August 2011 IDES requested CDC assistance with the investigation. The objectives of the Epi-Aid were to:

- Systematically review the records of the three cases
- Explore all possible common exposures including food, water and environmental sources
- Investigate the possibility of laboratory contamination
- Collect environmental samples for testing
- Recommend a protocol for enhanced surveillance.

Medical charts and infirmary records for all three infected patients were reviewed in detail, along with information on all locations they had been within the facility since March. In-person, open-ended interviews were conducted with the two surviving patients.

All three patients were African-American males with a mean age of 45 years. No single medical procedure or medication was common to all three patients. In the month prior to diagnosis, the three patients were housed in separate units and had no contact with each other. Food sources at the facility included dining hall kitchens, a

(Continued on Page 6)

Contents

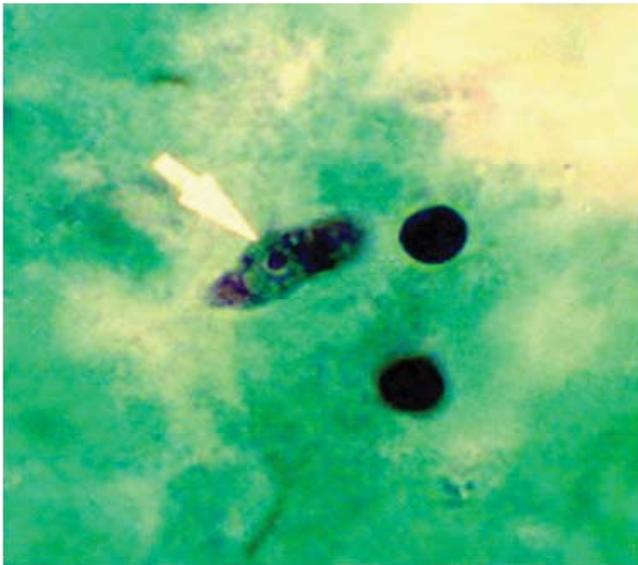
Outbreak of <i>Francisella novicida</i> Infections Among Occupants at a Long-Term Residential Facility -Louisiana, April-July, 2011	1
Second Case of <i>Naegleria fowleri</i> Meningoencephalitis Associated With Neti Pot Use - Louisiana, 2011	2
Varicella Outbreak in a Daycare - Louisiana, 2011	2
Electronic Laboratory Date and Meaningful Use	3
STD Surveillance - Louisiana, 2001-2010	4
Announcements - Updates: IDES Webpages	5
Nursing Home Toolkits	5

Second Case of *Naegleria fowleri* Meningoencephalitis Associated With Neti Pot Use - Louisiana, 2011

Susanne Straif-Bourgeois PhD MPH

In late September, a 51-year-old woman was admitted to a hospital in Northwest Louisiana after a three-day history of altered mental status accompanied by nausea and vomiting. The patient ran a fever of 101.4° F and was lethargic with neck stiffness. Cerebrospinal fluid was negative for Herpes Simplex Virus, Cytomegalovirus, West Nile Virus, Varicella zoster, Cryptosporidium, *Listeria monocytogenes* and *Neisseria meningitidis*. The patient died four days after being admitted to the hospital. On November 18th, the Centers for Disease Control and Prevention notified the Infectious Disease Epidemiology Section that the brain autopsy tested positive for *Naegleria fowleri* (Figure).

Figure: Trophozoite of *N. fowleri* in CSF, stained with Trichrome. Image courtesy of the Texas State Health Department.



The patient had lived by herself with her parents living on the same street block. According to her parents, the patient had gone to a private club with a pool numerous weeks before her death and also had been to the beach in Alabama and Florida in June or July. She enjoyed the beach for collecting seashells and bathing in the sun and was not a big swimmer. Since the patient had sinus problems she used a Neti Pot, especially after working in the yard to remove dust from her nasal area. When asked about water for the Neti Pot, the parents doubted that their daughter had used distilled or previously boiled water for her nasal irrigation. Water samples and swabs from the patient's residence were collected; water samples collected from the kitchen faucet, shower, bathtub faucet and bathroom sink faucet tested positive by direct Polymerase Chain Reaction for *Naegleria fowleri*. The fact that the Neti Pot tested negatively may be because it was tested two months after its last usage.

This is the second *Naegleria fowleri* death in Louisiana associated with Neti Pot usage. The first case fatality occurred in June 2011 when a 28-year old resident from South Louisiana became the first known case of primary amebic meningoencephalitis

(PAM) associated with nasal irrigation in the U.S.*

Tap water is safe for drinking since *Naegleria fowleri* infects people by entering the body through the top of the nose and via this route, invades the brain. Therefore it is important that people using nasal irrigation should avoid using tap water that has not previously been distilled, boiled or filtered (with a filter of absolute pore size of one micron or smaller). Furthermore, the irrigation device (Neti Pot) should be rinsed thoroughly and air-dried before being used again.

For more information, please contact Dr. Susanne Straif-Bourgeois at (504) 568-8313 or email to susanne.straifbourgeois@la.gov.

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Varicella Outbreak in a Daycare - Louisiana, 2011

Rebecca Ardoin, BS; Caroline, Holsinger, MPH

Varicella (chickenpox) is the primary infection caused by the varicella-zoster virus (VZV). Humans are the only source of infection for this virus. Varicella is highly infectious, with secondary infection rates in susceptible household contacts approaching 90%. Transmission occurs from person-to-person by direct contact with patients with either varicella or zoster lesions, or by airborne spread from respiratory secretions.

The highest rates of disease are among children five to nine years of age followed closely by children one to four years of age. Some recent studies have reported the highest rate of disease in the pre-school age group. This may be associated with a trend towards earlier attendance at day care and/or pre-school.

The average incubation period is from 14 to 16 days from exposure, with a range of 10 to 21 days. A mild prodrome may precede the onset of a rash. Adults may have one to two days of

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Assistant Secretary, OPH

J.T. Lane

State Epidemiologist

Raoult Ratard, MD MPH

Editors

Susanne Straif-Bourgeois, PhD MPH

Theresa Sokol, MPH

Rosemarie Robertson, BS MT(C) CNMT

fever and malaise prior to rash onset, but in children the rash is often the first sign of disease. The rash is generalized, pruritic and rapidly progresses from macules to papules to vesicular lesions before crusting. The rash usually appears first on the scalp, followed by the trunk and then the extremities, with the highest concentration of lesions on the trunk (centripetal distribution).

Vaccination Schedule and Use

Varicella virus vaccine is recommended for all children without contraindications at 12 to 18-months of age.

Exclusion of individuals with varicella until all of their lesions have crusted is routinely recommended for outbreak control. Occasional transmission of chickenpox occurring before rash onset, impairs somewhat exclusion as an outbreak control measure. Exclusion is also recommended for exposed susceptible individuals who may be in contact with people at high risk of serious complications (e.g. health care workers and family members of immunocompromised persons). Exclusion is required for the duration of the period of communicability (i.e. from the 10th until the 21st day post-exposure).

Summary of Events

On November 8, 2011, a nurse at a pediatrician’s office faxed a report of two diagnosed chickenpox cases attending the same daycare to the Infectious Disease Epidemiology Section (IDES) of the Department of Health and Hospital’s Office of Public Health. The Disease Surveillance Specialist and Immunization Specialist called to confirm the diagnosis with the daycare. The facility director reported that four children were out sick with chickenpox, all with onset dates of either November 7 or November 8, 2011. Two of those cases were seen at a children’s clinic; laboratory confirmation was performed on Case 1.

IDES informed the facilities director of the spread of varicella and told her that exclusion criteria for ill children were until all the lesions have crusted over.

On November 9, 2011, another attendant at the daycare facility informed IDES of another case (Case 5) whose symptoms began October 21, 2011. Since he had the earliest onset of symptoms, it can be assumed that he was the index case.

A recommendation was made that all unvaccinated children must be excluded from the daycare until 21 days after the most recent onset date, returning on November 29, 2011.

On November 23, 2011, IDES conducted follow-up with the daycare. It was revealed at that time that there was an additional case (Case 6) not originally reported with an onset date of November 11, 2011. This pushed the exclusion criteria back to December 2, 2011.

Discussion of Cases

The source of the index case’s infection was not identified. The index case has a two-year old brother, who had been vaccinated for varicella and was never sick. The index case had been in Texas for three weeks prior to his illness and return to daycare. The family denied contact with anyone else infected with chickenpox.

Cases 1, 2, 3, 4, and 6 developed symptoms 17 to 21 days after the index case (Case 5), which is consistent with the 10 to

21-day incubation period of varicella. This allows the assumption that Case 5 was the source of infection for all of the other cases (Table).

Table: Onset Dates for Cases in Daycare - Region 5 - Louisiana, 2011

Case Number	Onset Date	Classroom in Daycare Facility
1	Morning of 11/7/2011	0-6 months
2	Evening of 11/7/2011	>6 months to 11 months
3	11/7/2011	>6 months to 11 months
4	11/8/2011	>11 months to 14 months
5 (index case)	10/21/11	>6 months to 11 months
6	11/11/11	>6 months to 11 months

After reviewing the vaccination records of all of the children in attendance at the daycare (73 total), ten (13.7%) were to be excluded either due to lack of varicella vaccination or lack of record of varicella vaccination. Sixteen children (21.9%) in the facility were unvaccinated for varicella (those excluded + the cases); 12

(Continued on Page 6)

Electronic Laboratory Data and Meaningful Use

Joseph Foxhood, BA

The American Recovery and Reinvestment Act (ARRA) of 2009 provides enhanced Medicare and Medicaid reimbursement incentives for hospitals, physicians and other types of providers to receive incentives for being early electronic health record (EHR) technology adopters. These incentives become penalties in the form of reimbursement reductions in 2015; there is a long list of providers who are queuing up to achieve these objectives now.

The Office of Public Health (OPH), Department of Health and Hospitals (DHH) is currently engaged in partnering with a number of facilities or facility collectives, including the Louisiana Health Information Exchange (LaHIE), to receive laboratory reports for reportable conditions that meet the requirements to qualify for these incentives. There are three avenues affecting public health reporting among all the other requirements, and providers must choose one for the first phase of objectives. These include immunization reporting, electronic laboratory reporting and syndromic surveillance reporting. There are other requirements as well that do not touch on the public health reporting arena. These requirements include elements such as EHRs and standardized health record coding, and in later phases, have requirements for care coordination and monitoring health outcomes.

A big boon for public health is that these requirements are very specific about the file formats and field structure of acceptable reports. This makes it easier to bring on a new electronic trading partner once the standards are met by the reporting party. The standards allow more focus on data quality and less on maintaining a myriad of various disparate formats, and alleviate the need to actively retrieve files, as they must come automatically. The caveat now with these data is that many more duplicate reports will be received and procedures to handle them must be developed and implemented by the various programs that use these data, as

(Continued on Page 5)

STD Surveillance Update Louisiana, 2001-2010

Jessica Fridge, MSPH

The Department of Health and Hospital's Office of Public Health STD/HIV Program's (SHP) Sexually Transmitted Disease (STD) Surveillance Program collects and analyzes data on cases of chlamydia, gonorrhea, syphilis (all stages), and congenital syphilis. Louisiana's Sanitary Code* mandates that all medical providers and laboratories report these STDs to SHP along with basic demographic and residence information. The majority of new cases are received through paper and electronic laboratory reporting. Cases are also provided directly from public health providers throughout the state. In November 2011, the program released its Louisiana Annual Report with STD data from 2010 with the findings summarized below (Table).

Table: Cases and Case Rates of STDs by Sex, Race, Age Group and Region - Louisiana, 2010

	Chlamydia		Gonorrhea		P&S Syphilis	
	Case Number	Rate per 100,000	Case Number	Rate per 100,000	Case Number	Rate per 100,000
TOTAL	29,151	643.0	8,912	196.6	547	12.1
Reported Sex						
Female	20,582	889.4	4,827	208.6	252	10.9
Male	6,659	300.1	3,541	159.6	284	12.8
Unknown	1,910		544		11	
Reported Race/Ethnicity						
Black/African American	16,038	111.9	5,737	397.7	449	31.1
Hispanic/Latino	310	161.0	73	37.9	4	2.1
White	3,554	130.0	816	29.8	48	1.8
Other/Unknown/Multi-race	9,249		2,286		46	
Age Group						
	Age at Diagnosis					
0-9	64	10.3	34	5.5	0	0.0
10-14	467	152.2	134	43.7	2	0.7
15-19	10,408	3,185.0	2,805	858.4	90	27.5
20-24	11,070	3,272.2	3,115	920.8	169	50.0
25-29	4,354	1,307.8	1,528	459.0	100	30.0
30-34	1,485	502.5	621	210.1	58	19.6
35-39	596	215.6	292	105.6	28	10.1
40-44	257	89.2	161	55.9	29	10.1
45+	450	25.7	222	12.7	71	4.1
Region						
1-New Orleans	5,985	716.5	1,799	215.4	78	9.3
2-Baton Rouge	3,898	587.7	1,095	165.1	45	6.8
3-Houma	1,916	470.7	482	118.4	36	8.8
4-Lafayette	3,302	565.3	875	149.8	76	13.0
5-Lake Charles	1,470	502.4	375	128.2	35	12.0
6-Alexandria	1,786	576.6	538	173.7	16	5.2
7-Shreveport	5,663	1,040.5	2,101	386.0	190	34.9
8-Monroe	3,107	873.3	1,185	333.1	46	12.9
9-Hammond/Sidell	1,976	365.1	449	83.0	25	4.6
Unknown	48		13		0	

April is 'STD Awareness Month' across the nation. Because Louisiana experiences some of the highest rates of STDs in the nation, awareness is crucial, now more than ever.

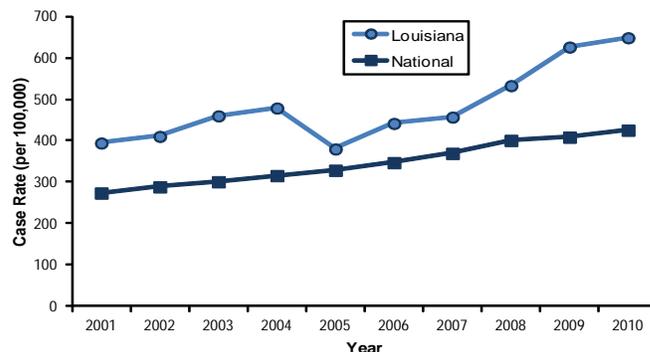
The Chlamydia Epidemic in Louisiana

In the most recent Centers for Disease Control and Prevention STD Surveillance Report, Louisiana ranked third in the nation for chlamydia case rates. In 2010, 29,151 cases of chlamydia were diagnosed in Louisiana with a case rate of 643.0 per 100,000 popula-

* Sanitary Code on page 8

tion, which was substantially higher than the national case rate of 426.0 per 100,000 population. Since 2005, Louisiana's chlamydia case rate has been steadily increasing (Figure 1).

Figure 1: Chlamydia Case Rates - Louisiana and the United States, 2001-2010

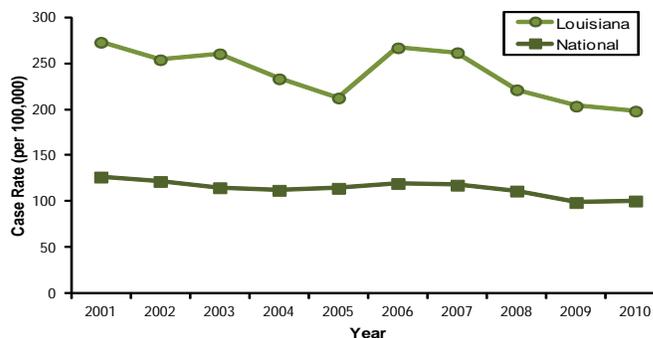


The majority of new chlamydia cases were diagnosed among women between the ages of 15 to 24 years. Almost 81% of cases with a reported race were diagnosed among Blacks. Louisiana has a targeted gonorrhea and chlamydia screening program in family planning clinics for women under 31 years of age, where the majority of cases are diagnosed and treated.

The Gonorrhea Epidemic in Louisiana

In 2009 and 2010, Louisiana ranked second in the nation for gonorrhea case rates. In 2010, 8,912 cases of gonorrhea were diagnosed in Louisiana with a case rate of 196.6 per 100,000 population. The gonorrhea case rate has gradually declined in Louisiana since 2006, but it still remained almost twice as high as the national rate of 100.8 per 100,000 population in 2010 (Figure 2).

Figure 2: Gonorrhea Case Rates - Louisiana and the United States, 2001-2010



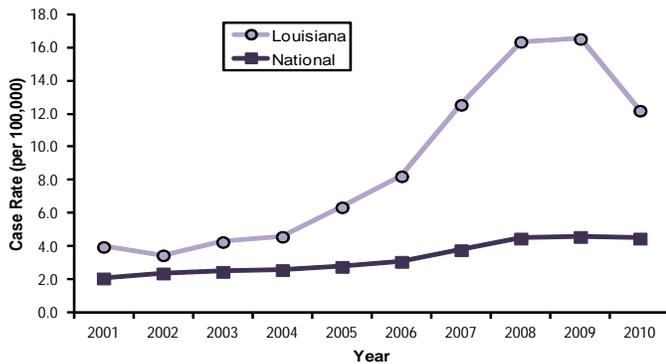
The majority of new gonorrhea cases diagnosed in Louisiana in 2010 were among women between the ages of 15 to 24 years. Additionally, almost 87% of cases with a reported race were Black.

The Syphilis Epidemic in Louisiana

Since 2006, Louisiana has ranked first in the nation for primary and secondary (P&S) syphilis case rates. In 2010, 547 cases of syphilis were diagnosed in Louisiana with a case rate of 12.1 per 100,000 population. From 2005 to 2009, Louisiana's case rate almost tripled and finally in 2010, decreased for the first time, although it still remained significantly higher than the national rate,

which was 4.5 per 100,000 population (Figure 3).

Figure 3: Primary and Secondary Syphilis Case Rates - Louisiana and the United States, 2001-2010



In 2010, new diagnoses occurred in 34 of Louisiana's 64 parishes. The Shreveport region had the greatest number of new diagnoses (190 cases). The New Orleans region had the second highest number of new cases (78 cases), followed by the Lafayette region (76 cases).

The majority of the newly diagnosed syphilis cases in Louisiana were among Blacks. Although Blacks make up only 32% of Louisiana's population, almost 90% of all new syphilis diagnoses were among this population. The majority of new syphilis cases were diagnosed in persons between the ages of 15 to 29 years.

The Congenital Syphilis Epidemic in Louisiana

In 2010, there were 33 cases of congenital syphilis reported from Louisiana. Louisiana ranked first in the nation for congenital syphilis rates with a rate of 52.3 per 100,000 live births. A third of all congenital syphilis cases in 2010 were born in the Shreveport region and an additional 21% were born in the New Orleans region. Approximately 88% of the mothers of congenital syphilis cases were Black.

The SHP office regularly reports and publishes data on websites www.std.dhh.louisiana.gov and www.HIV411.org. SHP will update these websites with events and data relevant for STD Awareness Month in April 2012. For more information, please contact Jessica Fridge at Jessica.Fridge@la.gov.

Announcements

Nursing Home Toolkits

The Infectious Disease Epidemiology Section (IDES), Department of Health and Hospital's Office of Public Health is distributing toolkits for infection control efforts in Louisiana nursing homes. The toolkits, which will be mailed at the beginning of 2012, include a CD with information on the following infections: **CAUTI** (catheter-associated urinary tract infections), and **C.diff** (*Clostridium difficile*). Additional toolkit information includes an inter-facility transfer communication form for patients who are exchanged between acute and nursing home care, Centers for Medicare and Medicaid (CMS) materials, and IDES infection control power points.

These nursing home toolkits are being distributed as part of the

Healthcare-Associated Infections (HAI) program and supplement the educational outreach currently conducted by State Epidemiologist Dr. Raoult Ratard. Dr. Ratard's introductory infection control information for nursing home providers is a training series offered statewide through partnership with the Louisiana Nursing Home Association and will conclude Spring 2012.

To receive a nursing home CD toolkit, please email to erica.washington@la.gov.

Updates: Infectious Disease Epidemiology (IDES) Webpages

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

ANNUAL REPORTS: Leptospirosis; Norovirus; Reportable Condition Summary-Past Three Years; Rubella (Measles); Tuberculosis

EPIDEMIOLOGY MANUAL: Brucellosis Case Report Form (CDC); Norovirus; Tick-Borne Rickettsial Disease Case Report Form (CDC)

HAI: Winter, 2011 Newsletter

INFLUENZA: Weekly Report

VETERINARY: Canine, Equine and Feline LARSS Antimicrobial Resistance Surveillance System Results 2004-2011

Electronic Laboratory Data ... Continued from Page 3)

required by the reporting needs for the various diseases. This will lead to more full and complete case reporting in Louisiana.

OPH has, for more than a decade, accepted electronic data as a vehicle for laboratories to meet their obligations for reporting infectious and other diseases as mandated by the state's Sanitary Code*. These data came in a variety of formats, ranging from flat text files, to spreadsheets to Health Language 7 (HL7) formatted files. These files also have been received in multiple ways – from dial-up data transfer initiated by program staff over a secured line, to being deposited monthly, weekly or in real-time directly into OPH electronic mailboxes.

The system used to accept, process and route these files was first developed by the HIV (now STD/HIV) Section, OPH but was soon expanded to automatically process and route all reportable conditions to the correct programs. The benefits of automation are clear: not only are the data more readily and correctly processed, but the current volume of data is now beyond what could reasonably be processed manually. Prior to the Meaningful Use incentive requirements, the downside had been that every reporting entity could choose their preferred method of electronic reporting; OPH was glad to receive it, but had to write custom translation routines for each new data format.

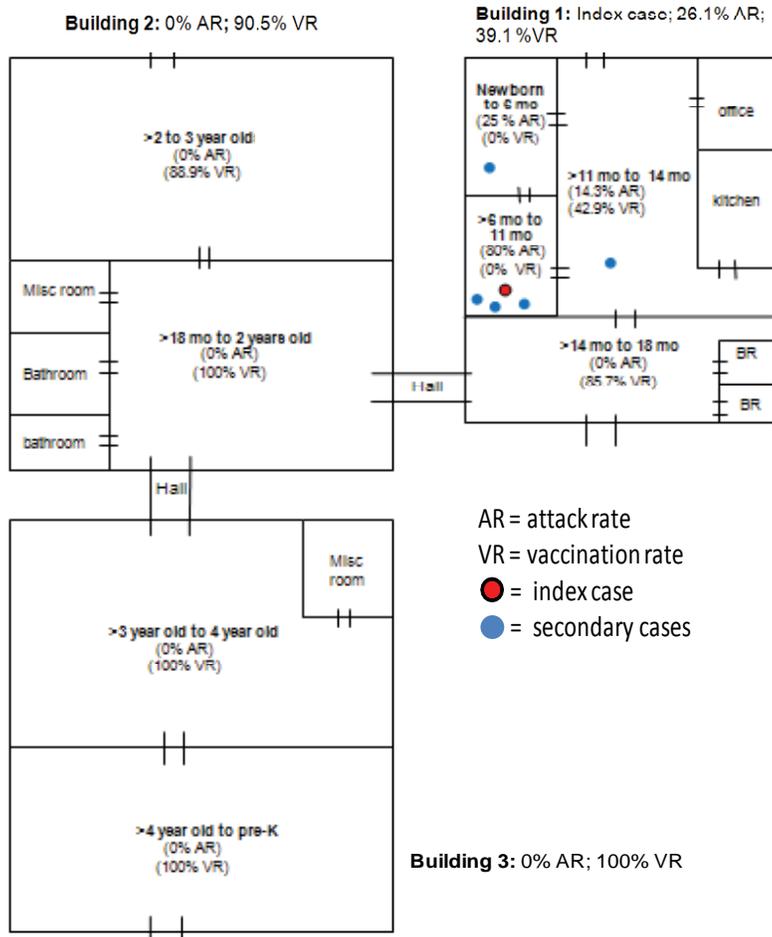
Presently, the Immunization Section, OPH is receiving the majority of the requests for Meaningful Use data transfers, as they have been the more visible presence to providers throughout the state. Syndromic surveillance (LEEDS – Louisiana Early Events Detection System - Infectious Epidemiology Section, OPH) is now receiving and testing its first exchanges in HL7 meaningful-use-compatible format; electronic laboratory reporting is fully functional and adding new data exchange partners regularly. In this new venture, OPH is working closely with the DHH Meaningful Use team as well as Medicaid staff to make the transition to more complete electronic reporting as smooth as possible.

For more information, please contact Mr. Foxhood at (504) 568-5130 or email to joseph.foxhood@la.gov.

* Sanitary Code on page 8

Varicella ... Continued from Page 2)

Figure: Attack Rate (AR) and Vaccination Rate (VR) in Daycare Rooms Region 5 Louisiana, 2011



(75%) of those were too young to receive the varicella vaccination.

There are three buildings at the daycare facility, connected with hallways. Building 1 has four classrooms, Building 2 has two classrooms, and Building 3 has two classrooms. They are separated by age, with the youngest children in Building 1 (Figure).

The index case was in the ‘older than six months to 11 months’ room of Building 1. He infected three others in his classroom; he also infected a child in the ‘newborn to six months’ room of Building 1 and a child in the ‘older than 11 months to 14 months’ room of the same building. As expected with an airborne pathogen, the infection spread from room to room in Building 1, but did not spread from building one to any other buildings. Also, the highest concentration of cases was in the classroom of the index case.

No children in the ‘older than 14 months to 18 months’ classroom became sick, despite the fact that it is in Building 1. This could be due to the higher vaccination rate (85.7%) in this older group, or it could be due to the fact that there are no doors directly from the index case’s classroom (>6 month to 11 months); therefore airborne particles are less likely to spread from the index room into the ‘older than 14 to 18 months’ classroom.

Most of the children in Building 1 were younger than one-year old, therefore unvaccinated for varicella (60.9%), and much more vulnerable to the infection. Comparatively only 9.5% were unvaccinated in Building 2 and 0% were unvaccinated in Building 3.

For more information, please contact Ms. Ardoin at (337) 475-3219 or email to rebecca.ardoin@la.gov.

Outbreak of *Francisella novicida* ... Continued from Page 1)

canteen and a café. There was no common exposure from these three entities identified as unique to these three patients. There is a farm on-site, and the processing and handling of vegetables was also ruled out as a potential exposure. Records documented that none of the three patients were working in the month prior to infection onset. Interviews with the two surviving patients revealed that one reported infrequent exposure to rodents, but neither had indicated exposure to other animals or insects. Both patients stated that they consumed large quantities of water and relied on water instead of other beverages available within the facility. Both reported consuming ice directly, or with water. No significant events were detected in the water system during the period of interest. Water at the facility is supplied through the parish water system, and is monitored closely on a routine basis. There are 15 ice machines within the facility. Four are located inside a building near the infirmary and the other 11 are housed in an open-air enclosure. Environmental samples of the water supply and ice machines were obtained and analyzed at CDC DVBD.

To rule out laboratory contamination as a possible explanation for these three cases, record reviews and interviews with the microbiologists at the hospital were completed. No other isolates of *Francisella* were identified and there were no instances where unidentified Gram-negative rods had been isolated. During a five-

month period, the hospital processed 1,981 blood culture sets of which 136 (6.9%) were from patients at the facility of concern. Based on these values, the probability that random contamination at the hospital would occur only among cultures obtained from this facility is estimated at $p < 0.001$.

Among the environmental samples obtained and analyzed by CDC DVBD, swabs from one set of ice machines yielded evidence of *F. novicida* by PCR. Although the ultimate source of contamination could not be identified, ice appears to be the likely vehicle of transmission. IDES reviewed guidelines with staff for maintenance and cleaning of ice machines, dispensers and storage chests in addition to proper sanitary handling and transportation of ice. These guidelines can be viewed on the IDES website at <http://new.dhh.louisiana.gov/assets/oph/Center-PHCH/Center-CH/infectious-epi/EpiManual/IceMachinesManual.pdf>.

Ice machines at the facility are no longer kept in an open-air enclosure and are routinely cleaned; they are at much lower risk from obvious environmental exposures.

Enhanced active surveillance for additional cases continued through January 2012. From early September to mid-December, 2011, no additional cases were identified.

For more information, please contact Ms. Hand at (504) 568-8298 or email to julie.hand@la.gov.

Table. Communicable Disease Surveillance, Incidence by Region and Time Period, November-December, 2011

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Nov-Dec	Nov-Dec	Jan-Dec	Jan-Dec	Jan-Dec	
										2011	2010	Cum	Cum	%	
Vaccine-preventable															
Hepatitis B	Cases	2	0	0	1	0	0	2	2	7	14	10	58	57	1.8
	Rate ¹	0.2	0	0	0.2	0	0	0.4	0.6	1.8	0.3	0.2	1.3	1.3	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	7	-100
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Pertussis		1	2	0	0	0	0	0	0	1	4	9	24	35	-31.4
Sexually-transmitted															
HIV/AIDS	Cases ²	44	40	12	8	7	9	8	11	10	152	186	1292	1141	13.2
	Rate ¹	4.4	6.9	3.1	1.5	2.5	3.0	1.6	3.1	2.3	3.5	4.3	29.6	26.1	NA*
Chlamydia	Cases ³	780	196	73	224	127	68	325	215	141	2149	6633	22554	29151	-22.6
	Rate ¹	96.7	30.5	18.5	38.7	44.6	22.7	60.9	61.9	27.0	48.7	150.4	511.3	643.0	NA*
Gonorrhea	Cases ³	231	58	6	70	18	13	140	72	28	636	2043	6544	8912	-26.6
	Rate ¹	28.6	9.0	1.5	12.1	6.3	4.3	26.2	20.7	5.4	14.4	46.3	148.4	196.6	NA*
Syphilis (P&S)	Cases ³	14	2	0	5	4	0	18	3	4	50	65	408	547	-25.4
	Rate ¹	1.7	0.3	0.0	0.9	1.4	0.0	3.4	0.9	0.8	1.1	1.5	9.3	12.1	NA*
Enteric															
Campylobacter	Cases	1	5	5	4	0	3.0	4	2	2	26.0	30	196	225	-12.9
Hepatitis A	Cases	0	0	0	0	0	3	0	0	0	3	1	5	11	-54.5
	Rate ¹	0	0	0	0	0	1.0	0	0	0	0	0	0.1	0.3	NA*
Salmonella	Cases	7	23	14	43	7	9	16	10	24	153	181	1431	1365	4.8
	Rate ¹	0.7	4.0	3.7	8.3	2.6	3.0	3.2	2.8	6.2	3.5	4.2	33.2	31.6	NA*
Shigella	Cases	9	7	3	10	2	11	10	2	12	66	41	481	290	65.9
	Rate ¹	0.9	1.2	0.8	1.9	0.7	3.6	2.0	0.6	3.1	1.5	1.0	11.1	6.7	NA*
Vibrio cholera	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*
Vibrio, other	Cases	1	0	0	0	0	0	0	0	2	3	2	52	28	85.7
Other															
<i>H. influenzae (other)</i>		1	3	0	0	0	1	1	0	2	8	3	53	31	71.0
<i>N. Meningitidis</i>		1	1	0	0	0	0	1	0	0	3	5	14	17	NA*

¹ = Cases Per 100,000.

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

³ = Preliminary data.

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

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

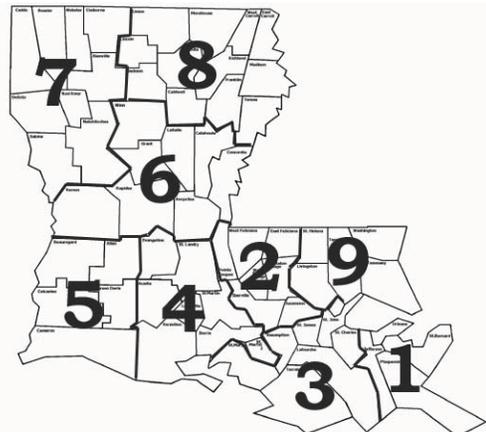
Disease	Total to Date
Legionellosis	22
Lyme Disease	1
Malaria	2
Rabies, animal	6**
Varicella	103

Table 3. Animal Rabies, November - December, 2011

Parish	No. Cases	Species
	0	

** added Orleans Bat February

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.

Anthrax	Measles (rubeola)	Severe Acute Respiratory Syndrome-associated Coronavirus (SARS-CoV)
Avian Influenza	Neisseria meningitidis (invasive disease)	Smallpox
Botulism	Plague	Staphylococcus Aureus, Vancomycin Intermediate or Resistant (VISA/VRSA)
Brucellosis	Poliomyelitis, paralytic	Tularemia
Cholera	Q Fever (Coxiella burnetii)	Viral Hemorrhagic Fever
Diphtheria	Rabies (animal and human)	Yellow Fever
Haemophilus influenzae (invasive disease)	Rubella (congenital syndrome)	
Influenza-associated Mortality	Rubella (German measles)	

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

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

Arthropod-Borne Neuroinvasive Disease and other infections (including West Nile, St. Louis, California, Eastern Equine, Western Equine and others)	Hepatitis A (acute disease)	Malaria
Aseptic meningitis	Hepatitis B (acute illness & carriage in pregnancy)	Mumps
Chancroid ¹	Hepatitis B (perinatal infection)	Pertussis
Escherichia coli, Shig-toxin producing (STEC), including E. coli 0157:H7	Hepatitis E	Salmonellosis
Hantavirus Pulmonary Syndrome	Herpes (neonatal)	Shigellosis
Hemolytic-Uremic Syndrome	Human Immunodeficiency Virus [(HIV), infection in pregnancy] ²	Syphilis ¹
	Human Immunodeficiency Virus [(HIV), perinatal exposure] ²	Tetanus
	Legionellosis (acute disease)	Tuberculosis ²
		Typhoid Fever

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

Diseases of significant public health concern-report by the end of the workweek after the existence of a case, suspected case, or a positive laboratory result is known.

Acquired Immune Deficiency Syndrome (AIDS) ³	Gonorrhea ¹	Staphylococcal Toxic Shock Syndrome
Blastomycosis	Hansen Disease (leprosy)	Streptococcal disease, Group A (invasive disease)
Campylobacteriosis	Hepatitis B (carriage, other than in pregnancy)	Streptococcal disease, Group B (invasive disease)
Chlamydial infection ¹	Hepatitis C (acute illness)	Streptococcal Toxic Shock Syndrome
Coccidioidomycosis	Hepatitis C (past or present infection)	Streptococcus pneumoniae, penicillin resistant [DRSP], invasive infection]
Cryptococcosis	Human Immunodeficiency Virus [(HIV syndrome infection)] ²	Streptococcus pneumoniae (invasive infection in children < 5 years of age)
Cryptosporidiosis	Listeria	Transmissible Spongiform Encephalopathies
Cyclosporiasis	Lyme Disease	Trichinosis
Dengue	Lymphogranuloma Venereum ¹	Varicella (chickenpox)
Ehrlichiosis	Psittacosis	Vibrio Infections (other than cholera)
Enterococcus, Vancomycin Resistant [(VRE), invasive disease]	Rocky Mountain Spotted Fever (RMSF)	
Giardia	Staphylococcus aureus, Methicillin/Oxacillin Resistant[(MRSA), invasive infection]	

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

Cancer	Hemophilia ⁴	Severe Traumatic Head Injury
Carbon Monoxide Exposure and/or Poisoning ⁵	Lead Exposure and/or Poisoning (children) ⁴ (adults) ⁵	Severe Undernutrition (severe anemia, failure to thrive)
Complications of Abortion	Pesticide-Related Illness or Injury (All ages) ⁷	Sickle Cell Disease (newborns) ⁴
Congenital Hypothyroidism ¹	Phenylketonuria ⁴	Spinal Cord Injury
Galactosemia ⁴	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)

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

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

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

³Report on CDC72.5 (f.5.2431) card

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

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

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