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Louisiana Morbidity Report

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May-June 2007

Volume 18 Number 3

Carbon Monoxide Exposure in Office Building Sickens Employees - Louisiana, 2007

Mariella Gastanaduy, MPH

In early 2007, an office building in Louisiana was evacuated and twelve employees received emergency medical treatment due to carbon monoxide (CO) exposure. Around 3:30 p.m., the incident was first reported to the local fire department which arrived thirty minutes later, evacuated the building and conducted a CO air analysis.

The initial reading detected high levels of CO - approximately 700 parts per million (PPM) - in a stairwell. (The Occupational Safety and Health Administration's permissible exposure limit for CO is 50 ppm as an 8-hour time-weighted average in the workplace.) A second reading conducted after the building had been ventilated for approximately thirty minutes showed CO levels less than 35 ppm. Although the source of exposure is still under investigation, initial reports suggested that an improperly vented boiler introduced CO into the building.

Carbon monoxide (CO) is an odorless, colorless gas that results from combustion of fuels used by automobiles, fuel-powered generators and equipment, stoves and heating systems. When inhaled, CO quickly binds to hemoglobin at a rate 200 to 250 times greater than oxygen, resulting in hypoxic effects on organs with high oxygen requirements, such as the brain. Blood levels of carboxyhemoglobin (COHb) are considered diagnostic of CO poisoning.

The COHb levels and resulting health effects in exposed indi-

viduals depend on the concentration of CO inhaled, duration of exposure, whether it occurred in an open or closed space and individual health status. Baseline COHb levels in nonsmokers are less than one percent and between five percent and ten percent in smokers. At low levels of CO exposure, COHb levels may reach five percent to twenty percent, causing headache, shortness of breath, visual changes, confusion and impairing judgment and motor skills. At moderate levels of exposure, COHb levels may reach twenty percent to forty percent, causing drowsiness, faintness, nausea, vomiting, tachycardia and dulled sensations. At higher levels of exposure, COHb levels range from forty percent to sixty percent and may result in weakness, lack of coordination, loss of recent memory and cardiovascular and neurological collapse. Beyond these levels, coma, convulsions and death may occur.

Developing fetuses and those with a history of heart or respiratory disease are at higher risk for developing health effects. For instance, studies have shown that fetal COHb levels are ten percent to fifteen percent higher than maternal levels and that it takes fetuses approximately four to five times longer to reduce COHb levels than their mothers. The effects to the fetus may include anatomic malformations, neurological disability, or stillbirth.

Medical records were reviewed for ten of the twelve employees treated at a local hospital. The patients' mean COHb level was 14.4% and ranged from 7.7 % to 21.4%, indicating both moderate and low levels of CO exposure. (Table 1)

Table 1: Health effects reported by system category
Louisiana, 2007

System Affected	Number of Complaints
Total	29
GastroIntestinal	11
Neurological	10
Respiratory	4
Cardiovascular	4

Gastrointestinal and neurological complaints were the most common. Specific symptoms that were most frequently reported include headache (6), nausea (6), abdominal cramps (3), and shortness of breath (3). The ten patients were treated with 100% oxygen through a non-breather mask and were discharged within a few hours.

This incident highlights the importance of continuing to educate the public about preventing exposure to CO. Furnaces are one of the most common sources of CO exposure. The CDC recommends that furnaces, water heaters and other gas, oil, or coal burn-

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ing appliances are serviced each year by a qualified technician. Other prevention tips are included in Table 2.

Table 2: Preventing carbon monoxide exposure

Have your heating system, water heater and any other gas, oil, or coal burning appliance serviced by a qualified technician every year.
Install a battery-operated CO detector in your home and check or replace the battery when you change the time on your clocks each spring and fall. CO detectors should also be installed in workplaces.
Do not use a generator, charcoal grill, camp stove, or other gasoline or charcoal-burning device inside your home, basement, or garage, or near a window.
Do not run a car or truck inside a garage attached to your house, even if you leave the door open.
Do not burn anything in a stove or fireplace that isn't vented.
Do not heat your house with a gas oven.
Never convert a particular unit from one type of fuel to another without necessary burner changes and adjustments made by a trained and experienced person.

Although the rate of fatal CO poisoning has decreased over the past two decades, each year there are still an estimated 480 deaths and 15,200 emergency department visits from accidental CO exposure in the US. There is uncertainty about the actual number of CO poisonings because surveillance of CO poisoning is limited (only 14 states require notification of acute CO poisoning incidents and COHb lab results are a "notifiable condition" in 8 states).

In Louisiana, CO poisoning is not a reportable condition, but health care providers are encouraged to report cases of CO exposure to the Louisiana Poison Control Center (LA PCC). In addition to providing diagnostic and treatment information, LA PCC routinely forwards cases of CO exposure (and other environmental exposures) to the Office of Public Health for follow-up investigation. The LA PCC's twenty-four hour hotline number is (800) 222-1222.

This study was supported in part by the National Institute for Occupational Safety and Health (NIOSH) through cooperative agreement#U60-OH008470-01.

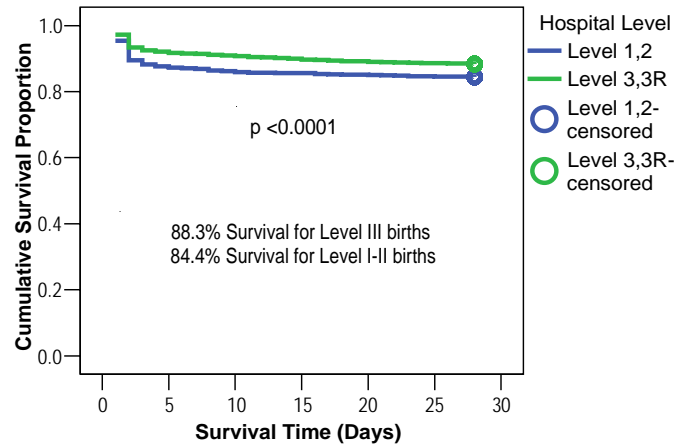
Very Low Birth Weight Deliveries In Level I-II Neonatal Facilities - Louisiana, 2004

Lyn Kieiltyka, PhD, MPH; Ashley Chin, PhD, MA;
Tri Tran, MD, MPH

Nationally, the percent of very low birth weight (VLBW, less than 1,500 grams) births increased 24.3% from 1980 to 2000. In 2004, 1.5% of all US births were VLBW. In contrast, 2.1% (1,370) of all Louisiana resident births and 1.5% (902) of singleton births were VLBW.

An infant's birth weight carries significant implications toward future health, including reduced chances of survival for VLBW infants. The availability of advanced neonatal care is extremely important for these tiny infants, as the likelihood of survival improves with advanced life saving techniques.(Figure 1)

Figure 1: Survival function curves among infants born in Level III versus Level I or II facilities - Louisiana, 1998-2004



Hospitals with neonatal intensive care units/nurseries designated as "Level III" have the technology and capability to offer the most advanced neonatal care available, including subspecialty care and advanced lifesaving techniques, thereby providing the optimum environment for very small infants. In 2004, twenty-seven percent of the 125 birthing hospitals in Louisiana had a Level III neonatal nursery.

The Healthy People 2010 goal is to have at least ninety percent of all VLBW births born in Level III facilities. The Maternal Child Health Program relies on surveillance data collected by the center for Health Statistics and Vital Records to monitor the health status of women and children in Louisiana, including tracking the percent of VLBW births delivered in Level III facilities. In 2004, eighty-six

Louisiana Morbidity Report	
Volume 18 Number 3	May - June 2007
<p>The Louisiana Morbidity Report is published bimonthly by the Infectious Disease Epidemiology Section of the Louisiana Office of Public Health 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.</p>	
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percent of VLBW births in Louisiana were delivered in Level III facilities, indicating that Louisiana is likely on target for achieving the 2010 goal of ninety percent prior to the 2005 hurricanes. Post-hurricanes, only three birthing hospitals (1- Level II, 2 - Level III) are known to have stopped obstetrical services, suggesting that hospital closures would not negatively impact the opportunity for women to deliver in Level III facilities. Additional information will become available as new post-hurricane data are reported.

Another important consideration is the delivery of multiples (twins, triplets, etc.), since multiples are more likely to be preterm and/or VLBW. From 1998 to 2004 in Louisiana, eighty-five percent of singletons, eighty-seven percent of twins and ninety-four percent to one hundred percent of other higher-order births were delivered in facilities with Level III nurseries. This shows excellent knowledge and practice among Louisiana health care providers to encourage delivery of higher-order births in facilities with subspecialty neonatal care.

Why does HP2010 track this indicator?

It is well documented that VLBW infants born in Level III facilities are more likely to have better outcomes, including lower mortality. Significantly fewer VLBW infants delivered in Level III facilities died in the first twenty-eight days of life compared to VLBW infants born in lower Level facilities. (Table 1)

Table 1: Mortality rates for resident births by hospital facility level Louisiana, 2004

Age at Death	Neonatal Mortality Rate per 1,000 VLBW Births (95% Confidence Interval)	
	Level III (n=2160)	Level I-II (n=564)
< 1 day	83 (76, 89)	132 (114, 152)
1- < 7 days	57 (51, 62)	90 (74, 109)
7 - <28 days	70 (64, 77)	115 (96, 137)

Which women are more likely to deliver singleton VLBW infants at facilities without advanced neonatal care?

This analysis summarizes the characteristics of Louisiana women who delivered singleton VLBW infants in facilities without advanced neonatal care (Level I or II). Vital records birth data of Louisiana resident women giving birth to a VLBW singleton weighing 500-1,499 grams during the period from 1998 to 2004 were included in analyses.

Of the 11,664 births meeting inclusion criteria, eighty-six percent were delivered in a Level III facility. Significant differences between women who delivered at Level III facilities and women who delivered at lower level (Level I or II) facilities were found for most characteristics, including maternal age, race, maternal education, Medicaid-paid delivery, prenatal care adequacy (Kotelchuck index), rural residence, maternal medical risk factors during pregnancy and newborn abnormal conditions (including anemia, birth injury, fetal alcohol syndrome, respiratory distress syndrome, meconium aspiration, assisted ventilation, seizures, etc.). There was no statistical difference in racial distribution of all births by hospital Level; sixty-nine percent of women were African-American, thirty

percent were White and one percent was 'other races' for both Level III and Level I and II facilities.

Logistic regression results indicated that, after accounting for geographic/regional differences, factors associated with delivery of a VLBW infant in a lower level facility included African-American race, maternal age less than twenty years, prenatal care adequacy, living in a rural parish and whether the infant had any abnormal conditions. Specifically, African-American mothers were 1.2 times more likely than White mothers to deliver in a lower level facility. Women living in rural areas were almost three times as likely to deliver at a lower level facility than those living in urban areas. (Table 2).

Table 2: Logistic regression results* - adjusted odds ratio of delivery of VLBW infants in a lower level facility - Louisiana, 2004

Characteristic (Reference)		Odds Ratio	95% Confidence Interval
Race (White)	Black	1.2	1.0, 1.5
	Other	0.9	0.4, 1.8
Age (35+)	<20	1.5	1.1, 2.0
	20-34	1.2	0.9, 1.6
Residence (Urban)	Rural	2.9	2.4, 3.6
Prenatal Care (Adequate)	Inadequate	1.4	0.9, 1.8
	Intermediate Adequate Plus	1.4 0.6	1.0, 2.0 0.5, 0.7
Abnormal Cond. (None)	Any	5.7	4.9, 6.8
Birth Weight (<1000g)	1000+g	1.4	1.2, 1.6

*Odds ratios are adjusted for all variables shown in the table plus Public Health Region.

Although only singleton births are included in Table 2, associations remained mostly similar when analyses included multiples (data not shown).

Identifying women at high risk of delivering in lower level facilities helps target efforts to improve the percent of VLBW deliveries in facilities with Level III nurseries. As these women are at increased risk of poor birth outcomes, including infant death, it is imperative that we educate both providers and patients on the importance of delivering high-risk preterm and VLBW infants in facilities with subspecialty neonatal care.

Current happenings...

The Louisiana Perinatal Commission has advocated that obstetrical and neonatal hospital levels be congruent in Louisiana. As of 2007, birthing hospitals offering Level III neonatal care are also required to offer Level III obstetrical services. Under the new plan, the availability of Level III obstetrical care will help insure maternal transports prior to delivery, when medically possible, thereby increasing the opportunity for better outcomes for Louisiana women and children. (Louisiana State Register, Volume 33, No. 2)

For more information, please contact Dr. Kieltyka at (504-219-4572) or email rlkielty@dhh.la.gov.

Salmonella tennessee **Outbreak in Peanut Butter** **United States and Louisiana,** **2007**

Annu Thomas MSc, MPH

In the fall of 2006, the Centers for Disease Control and Prevention (CDC) detected a rise in cases of *Salmonella tennessee* nationally. In January 2007, this increase in cases of *S. tennessee* was attributed to the consumption of peanut butter.

Peter Pan peanut butter and Great Value peanut butter with the product code of "2111" was the food vehicle implicated in the outbreak. A confirmed case was defined as *S. tennessee* infection with illness onset after August 1, 2007 with the isolate demonstrating one of three specific pulse-field gel electrophoresis patterns.*

The following data is preliminary. In the United States, 591 cases of *S. tennessee* related to the peanut butter outbreak occurred in forty-seven states (reported April 25, 2007). There were three different clusters associated with the outbreak, (attributed to three different strains of *S. tennessee*); 497 cases were from the first cluster, seventy-six cases from the second cluster and twenty-three cases were from the third cluster. The median age of cases involved in the outbreak was fifty-two years. Forty-two percent of the cases were above the age of fifty-nine years and seventy-three percent of cases were female. Twenty percent were hospitalized. There have been no deaths associated with this outbreak. Illness onset ranged from August 1, 2006 through April 15, 2007.

There were no cases of *S. tennessee* reported to the Infectious Disease Epidemiology Section during the period 1997 through 2006. In 2007, Louisiana has identified four confirmed cases of *S. tennessee*, related to the clusters mentioned above. Three cases belonged to the first cluster, while the last case belonged to the second cluster. Three cases were female, one case male. Seventy-five percent of the cases were above sixty-five years of age. All cases had other underlying conditions and consumed peanut butter with the "2111" product code.

In terms of product testing from samples collected by Food and Drug Administration (FDA), eleven closed jars of peanut butter (including both Peter Pan and Great Value brands) tested positive for *S. tennessee*. One hundred jars of the same brands of peanut butter tested negative. (These included closed and opened jars of peanut butter.)

In terms of product testing from samples collected by other states: 213 samples were tested, out of which twenty jars were positive for *S. tennessee*, which included one opened jar and nineteen unopened jars of peanut butter.

Case Definition:

A person infected with *Salmonella* usually develops diarrhea, abdominal cramping and possibly fever within twelve to seventy-two hours. The illness usually resolves in four to seven days. In the elderly, infants and the immunocompromised, the diarrhea may be

severe and they may need to be hospitalized. Persons who may still have a jar of Peter Pan or Great Value peanut butter with product code "2111" should discard these jars.

For more information, please contact Ms. Thomas at (504) 219-4547 or email aethomas@dhh.la.gov.

* DNA fingerprinting technique for enteric bacteria

West Nile Virus **Manifestations as** **Chorioretinitis** **Louisiana, 2006-2007**

Christine M. Scott, MSPH

The majority of persons infected with West Nile Virus (WNV) will be asymptomatic whereas approximately twenty percent may develop symptoms until their immune system is able to clear the infection. One percent of those developing symptoms, may develop neurological manifestations of meningitis or encephalitis requiring hospitalization. However, most persons develop a mild febrile illness characterized by fever, headache and myalgia and may not even seek medical care for the illness.

Information on WNV fever cases and asymptomatic cases has been inconsistently reported on national and state levels due to numerous factors, including the unawareness of asymptomatic persons that they are infected and the tendency of most symptomatic persons to not seek diagnosis and treatment. Thus, the number of WNV neuroinvasive disease infections cases is considered the only true measure to monitor the progress of the endemic. Since 2001, approximately 600 total neuroinvasive disease infections were reported in Louisiana. Many of the clinical symptoms associated with WNV infections are not specific enough to suggest the serological tests needed to diagnose WNV. Therefore, it is of great importance to identify and describe unique demonstrations of WNV neuroinvasive infections as in the following case study.

Case Study:

In March 2007, the Infectious Disease Epidemiology Section of the Office of Public Health was notified of WNV IgM antibodies in the serum of a man sixty-three years of age with a pre-existing history of many chronic conditions, including myasthenia gravis and gastroesophageal reflux disease. He was reported to have been in fairly good health without any significant symptoms for the past six years.

In October 2006, he was admitted to the hospital with left otitis media, confusion and in addition, fever and chills for four days. The physicians tested blood and cerebrospinal fluid (CSF) for bacterial and viral etiologies of meningitis; however, the patient was not tested for any arboviruses, including WNV. The results of his spinal fluid tests were: 270 - white blood cells, 36 - lymphocytes, glucose - 59, an

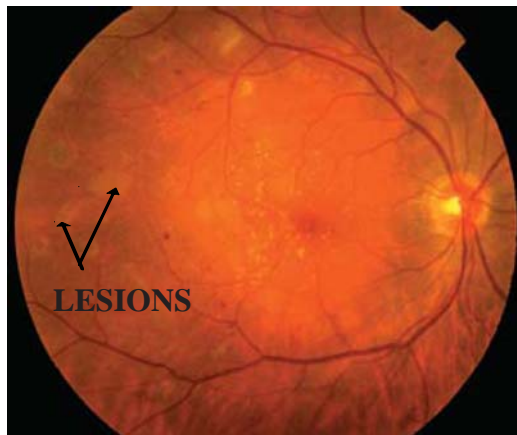
elevated total protein - 84. All cultures for both blood and CSF were negative. The CSF bacterial latex panel was negative as well as negative for influenza antigens A and B.

In November 2006, the patient was admitted to the hospital with progressive weakness in the lower extremities for three days. He received intravenous immunoglobulin and his condition improved.

In March 2007, in the standard retinal angiogram from his ophthalmologist, his physician noticed cream-colored circular, "ring-like" lesions and referred the patient to be tested for WNV. These chorioretinitis findings were consistent with previously described cases.

Chorioretinitis can look either active (circular deep creamy lesions) or inactive (bilateral partially atrophic and also hypopigmented lesions and streaks) involving the choroid and retina of the eye. (Figure 1).

Figure 1: Chorioretinal lesions in evolution, two months after serology-positive West Nile virus infection - Eidsness, Stockl, Colleaux "West Nile Chorioretinitis", *Canadian Journal of Ophthalmology* vol. 40, no. 6, 2005



The circular lesions range from 300-1000 microns in size and are scattered throughout the retina. The streak lesions range from 200-1500 microns in size. The chorioretinitis lesions have been associated in patients without ocular symptoms, although some patients have experienced floaters and blurred vision. Elderly persons and the presence of diabetes have been identified as risk factors.

Both IgM antibodies for WNV in serum and also the aforementioned chorioretinal lesions have been documented to persist over a one-year period. It was determined that the case was infected in the fall of 2006, although he was not diagnosed until March 2007.

For references or more information, please contact Christine Scott (504) 219-4544 or cmscott@dhh.la.gov.

Did You Know...

Norovirus infections may also be known as Winter Vomiting Disease (WVD) or SRSV (small round structured virus) infections.

Point of Dispensing Sites

Stacy Hall, RN, MSN

The Strategic National Stockpile (SNS) is a cache of medicines, medical supplies and vaccines maintained by the Centers for Disease Control and Prevention (CDC). These assets will be used to save lives, prevent disease and facilitate basic health care services. Any state may request the assets of the SNS which are delivered to a secure RSS (receiving, staging and storing) location. The RSS is an intermediary point within the state from which assets are delivered to treatment centers and/or dispensing site. (Treatment centers include hospitals and other health care organizations.) In a mass prophylaxis setting, hospitals will provide medication to their staff, patients and medication for staff families, but not to the public. Providing medication for hospital and other responder staff allows these persons to continue to perform essential duties in place of not taking time to go to a public dispensing site to obtain medication for themselves and their families.

Sites for the dispensing of prophylaxis to the public are called PODs (points of dispensing sites) in Louisiana. PODs may range from small clinics, when the threat is contained to a small area or group of persons, to very large operations providing medication or vaccination to the entire population of the state. The 'CDC Public Health Emergency Preparedness Cooperative Agreement - August, 2006' continues to encourage all states to "ensure that smallpox vaccination can be administered to all known or suspected contacts of cases within three days and, if indicated, to the entire jurisdiction within ten days." Another scenario presented in the Cooperative Agreement and the basis for the Cities Readiness Initiative* is a "bioterrorism attack over a large geographic area with an agent such as *Bacillus anthracis*, the organism that causes anthrax. In this case, antibiotics must reach the identified population within twenty-four to forty-eight hours to have the greatest lifesaving effect."

This worst-case scenario allows planning that is complete and which then, can be scaled back for a more limited response. National guidance has developed a formula for determining the number of PODs an area requires. The formula for calculating the number of PODs is:

$$(TP/HPP) - (S/PPH) = \text{PODs}$$

TP = Total Population

HPP = number of Hours to Provide Prophylaxis

S = amount of time to set up the clinic

PPH = the number of Persons Per Hour who are provided prophylaxis

The number of persons per hour who are provided prophylaxis is also called 'throughput'. Throughput numbers can vary widely across settings.

State and local emergency preparedness and public health personnel are working to identify POD sites across Louisiana. Parish

(Continued on page 6)

health units provide prophylaxis to small groups of persons exposed to disease on a regular basis. Parish health units will form the backbone of POD planning, but it will not be possible for the entire population of Louisiana to be processed through the eighty-four parish health units in the period of time required by the planning scenarios.

Schools and recreation centers often are good POD sites. Most people know where their nearest elementary or high schools and recreation centers are located. Specific sites are evaluated for security, ease of parking, access by mass transit as well as many other factors. A 'Local Point of Dispensing Preparedness Workbook' has been developed to assist local personnel in comprehensive planning for a specific POD site. This workbook is available by request through parish public health preparedness staff.

After the identification of POD sites, staffing quickly becomes an issue. Hospital, emergency medical services and public health staff will likely have additional responsibilities based on the situation which is requiring mass prophylaxis. They may participate in planning activities, but should not be depended upon for essential POD positions in events. POD staffing will only be approximately ten percent health care professionals and ninety percent support staff.

During an event requiring mass prophylaxis it is expected that routine professional license regulations will be relaxed. Local POD planning includes the identification of a variety of health care professionals who could provide assistance for PODs. This includes retired physicians, nurses, dentists, their assistants and students in these professions. As many of the terrorism threats can also affect animals, veterinarians and their associates may be needed for animal health activities. Other areas of the country are planning with school staff, faith-based organizations and civic groups for the support services functions of a POD.

There are some populations for which transport to a public POD would be very difficult, including prisons, military installations, universities and nursing homes. Outreach has begun to identify these occupational and residential facilities with health care professionals who could provide prophylaxis to their residents, staff and staff families.

First responder organizations and large industries with occupational health can also act as their own POD sites. The ability of these facilities with health care professionals prepared to provide prophylaxis to their residents and staff, will allow medication or vaccination to occur in a familiar setting and limits the transportation of these persons to local POD sites. This better serves the residents and personnel of the facility and encourages continuity of services and maintenance of infrastructure activities. It also assists all citizens of the state by reducing the number of persons requiring prophylaxis at local POD sites.

There is the sincere hope that an event requiring mass prophylaxis will never occur. However, plans must be made as to how the citizens of Louisiana can best be served following the catastrophic scenarios described in CDC's preparedness planning guidance.

For more information, please contact Ms. Hall at (504) 568-5022 or email shall@dhh.la.gov.

* Cities Readiness Initiative will be printed in the July-August, 2007 issue of the LMR

Louisiana Fact

America's First Woman Pharmacist - 1734

Upon her arrival at the French settlement of New Orleans in the early 1700's, Sister Xavier Hebert, a member of the first contingent of Ursuline nuns to travel to America, was called upon to restore and manage the city's dilapidated Royal Hospital.

Among her administrative tasks, Sister Xavier had sole responsibility for the supervision, preparation and dispensing of all drugs. Most of these potions consisted of herbs and other exotic spices, thought by doctors of that time to possess certain health properties.

Though crude by present standards, the availability of these medications played a critical role in 18th century health care, as they were the only recognized treatments for an assortment of ailments. Since these medications were not readily found in the New World, Sister Xavier planted and tended her own herb garden, which was to produce much of the medicine required by the French colony. It is because of her diligence and dedication to the supply, management and delivery of drugs during this era, that Sister Xavier is widely acknowledged today as the first woman pharmacist in America.



Information received with thanks to Sister Joan Marie Aycock of the Ursuline Sisters of New Orleans, James P. Bartholomew, Rph and the Schering-Plough Corporation.

Announcements

Updates: Infectious Disease Epidemiology Webpage
<http://www.infectiousdisease.dhh.louisiana.gov>

ANNUAL REPORT/INFECTIOUS DISEASE SURVEILLANCE REPORTS: Hepatitis B, Hepatitis C, Staphylococcal Invasive Disease (MRSA), Streptococcal Invasive Disease-Group A & Unspecified, Tetanus, Trichinosis

EPIDEMIOLOGY MANUAL: Mold Summary, *Stachybotrys chartarum*, Typhoid

FEATURED SERVICES: Mortality in the Greater New Orleans Area, Louisiana - Post Katrina

INFLUENZA: 2006-2007 Season Summary Report - Louisiana
REGIONAL CONTACT INFORMATION

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

March-April, 2007

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Mar-Apr 2007	Mar-Apr 2006	Jan-Apr Cum 2007	Jan-Apr Cum 2006	% Chg*	
Vaccine-Preventable															
Hepatitis B															
Cases	0	0	0	3	0	0	0	0	2	5	8	21	19	NA*	
Rate ¹	0	0	0	0.6	0	0	0	0	0.5	0.1	0.2	0.5	0.4	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	1	0	NA*	
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Pertussis	1	0	1	1	0	0	0	0	0	3	5	6	11	-45.5	
Sexually-Transmitted															
HIV/AIDS															
Cases ²	16	29	3	6	6	2	8	5	1	76	177	221	331	-33.0	
Rate ¹	1.6	5.0	0.8	1.1	2.2	0.7	1.6	1.4	0.2	1.7	4.0	5.1	7.6	NA	
Gonorrhea															
Cases	360	209	92	217	41	70	304	149	90	1532	1863	3240	3347	-107	
Rate ¹	34.8	34.6	24.0	39.6	14.5	23.2	58.2	42.1	20.5	34.3	41.7	72.5	74.9	NA	
Syphilis (P&S)															
Cases	18	8	1	5	3	2	5	0	8	50	40	99	65	34.0	
Rate ¹	1.7	1.3	0.3	0.9	1.1	0.7	1.0	0.0	1.8	1.1	0.9	2.2	1.5	NA	
Enteric															
Campylobacter	0	3	1	2	0	1	0	0	2	9	17	19	31	-38.7	
Hepatitis A															
Cases	0	0	0	4	0	0	1	0	0	5	2	11	5	120	
Rate ¹	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.3	0.1	NA*	
Salmonella															
Cases	3	10	4	10	5	10	3	3	12	60	96	126	162	-22.2	
Rate ¹	0.3	1.8	1.1	1.9	1.9	3.3	0.6	0.9	3.1	1.4	2.2	2.9	3.8	NA	
Shigella															
Cases	2	5	1	23	0	0	2	4	4	41	25	72	47	53.2	
Rate ¹	0.2	0.9	0.3	4.5	0.0	0.0	0.4	1.1	1.0	1.0	0.6	1.7	1.1	NA	
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	NA*	
Vibrio, other	0	0	2	0	0	0	0	0	0	2	7	4	8	NA*	
Other															
<i>H. influenzae (other)</i>	0	1	0	0	0	0	1	0	0	2	5	4	8	NA*	
<i>N. Meningitidis</i>	0	0	2	1	0	0	0	0	1	4	8	11	25	-56.0	

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 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.

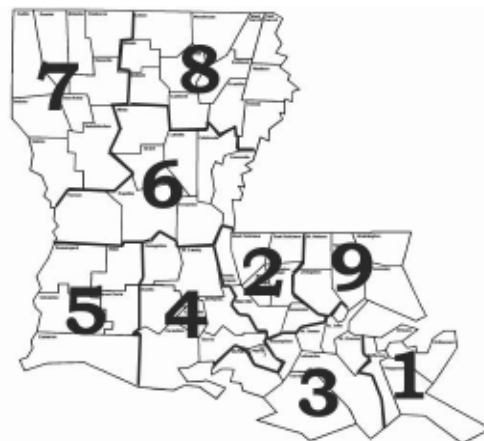
* Percent Change not calculated for rates or count differences less than 5

Table 2. Diseases of Low Frequency (January-April, 2007)

Disease	Total to Date
Legionellosis	0
Lyme Disease	0
Malaria	1
Rabies, animal	0
Varicella	22

Table 3. Animal rabies (March-April, 2007)

There were no animal rabies reported for March-April, 2007



**Sanitary Code - State of Louisiana
Chapter 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)	Hemolytic-Uremic Syndrome	Pertussis
Aseptic meningitis	Hepatitis A (acute disease)	Salmonellosis
Chancroid ¹	Hepatitis B (acute illness & carriage in pregnancy)	Shigellosis
Escherichia coli, Shig-toxin producing (STEC), including E. coli O157:H7	Hepatitis B (perinatal infection)	Syphilis ¹
Hantavirus Pulmonary Syndrome	Hepatitis E	Tetanus
	Herpes (neonatal)	Tuberculosis ²
	Legionellosis (acute disease)	Typhoid Fever
	Malaria	
	Mumps	

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)	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)	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	Heavy Metal (Arsenic, Cadmium, Mercury) Exposure and/or Poisoning (All ages)	Severe Traumatic Head Injury
Complications of Abortion	Lead Exposure and/or Poisoning (All ages)	Severe Undernutrition (severe anemia, failure to thrive)
Congenital Hypothyroidism ³	Pesticide-Related Illness or Injury (All ages)	Sickle Cell Disease (newborns) ³
Galactosemia ³	Phenylketonuria ³	Spinal Cord Injury
Hemophilia ³	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)

Case reports not requiring special reporting instructions (see below) can be reported by Confidential Disease Case Report forms (2430), facsimile, (504) 219-4522, telephone, (504) 219-4563, or web base at <https://ophrdd.dhh.state.la.us>.

¹Report on STD-43 form. Report cases of syphilis with active lesions by telephone.

²Report on CDC72.5 (f.5.2431) card.

³Report to the Louisiana Genetic Diseases Program Office by telephone at (504) 219-4413 or facsimile at (504) 219-4452.

This public health document was published at a total cost of . Seven thousand copies of this public document were published in this first printing at a cost of . The total cost of all printings of this document, including reprints is . This document was published by to inform physicians, hospitals, and the public of current Louisiana morbidity status under authority of R.S. 40:36. This material was printed in accordance with the standards for printing for state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of Louisiana Revised Statutes.

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