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Louisiana Morbidity Report

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Carbon Monoxide Poisoning Following Hurricane Lili

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Introduction

Carbon monoxide (CO) is considered to be the leading cause of accidental poisoning in the United States. It is a colorless, odorless gas that inhibits the blood's ability to carry oxygen to the body and, depending on the levels in the blood, can cause serious or even fatal results.

Produced by the incomplete combustion of fossil fuels, CO is found in fumes produced by gasoline-powered engines of all types, in stoves and lanterns, in burning oil, gas, coal and wood and improperly functioning solid fuel appliances.

Common symptoms of CO poisoning are headache: nausea, vomiting, dizziness, weakness, chest pain and confusion. Higher CO blood levels can cause loss of consciousness and death. The higher the concentration, the more rapidly a person exhibits physiological effects.

Methods

On Thursday, October 3, 2002, Hurricane Lili made landfall as a category 2 hurricane. Lili crossed Vermilion Bay and headed northeast causing severe damage and leaving thousands of Louisiana residents without power, prompting the use of generators in many homes.

Reports of carbon monoxide poisoning triggered a health department investigation in the Acadian Region involving the following parishes: Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin and Vermilion.

A one-page questionnaire was developed to determine demographic information, signs and symptoms experienced, where generators were placed and whether or not the participants were aware that CO was present in fumes from gasoline powered engines. Interviews with victims were conducted by telephone.

Some of the respondents reported that after a few household members had their CO levels determined, the hospitals treated the remaining household members without further testing. Fifty-eight (58) survey questionnaires were completed. An Access database was created and data was analyzed using EpiInfo 2002.

Results

Respondents for the survey were residents from Lafayette (14), Church Point (10), Kaplan (10), Crowley (9) and other cities. Data from the hospitals revealed that the majority of persons treated for CO poisoning were treated in Vermilion Parish. While the city of Lafayette and surrounding areas had power restored within 2 or 3 days, some rural areas were without power nearly 2 weeks later, particularly areas in Vermilion Parish. This may explain why more people were treated in Vermilion than other parishes. There were 29 males and 29 females. The age distribution was the following:

Age Categories	Number	Percent
Under 12 years	15	26.3%
14-20 years	11	19.3%
21-35 years	12	21.1%
36-49 years	8	14.0%
50-65 years	6	10.5%
Over 65 years	5	8.8%
Total	57*	100.0%

* One person was a stroke victim and unable to state his age

The hurricane made landfall early morning on 10/3/02. The number of cases increased from 1 on 10/3/2002 to 7, then 19, to reach a peak of 22 on 10/6/2002 and finally 9 cases on 10/9/2002. On 10/09/02, 15% of respondents were still without power. From midnight to 6:00 A.M. there were 34.5% of cases, from 6:00 A.M. to noon 51.7%, from noon to 6:00 P.M. 3.4% and from 6:00 P.M. to midnight 10.3%. The majority of CO poisoning occurred during the times when people were normally sleeping.

Signs and Symptoms: The symptoms observed matched the classical description: headache (76.5%), dizziness (75.5%), weakness (71.4%), lethargic/ sleepiness (13.8%), nausea (66.0%), vomiting (40%), chest pain (42.9%), cough (10.3%), difficulty breathing

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(37.9%), confusion (42.9%), loss of consciousness (28.1%), sweating (10.3%) and paralysis of legs, paralysis of neck and visual disturbances.

On the table below, the effects of CO are listed for persons exposed to the concentrations shown.[1] However, according to the Consumer Product Safety Commission, exposure to a low concentration over several hours can be as dangerous as exposure to high carbon monoxide levels for a few minutes. Nearly 90% of the victims in this survey were exposed for 24 hours or less. About 76% were exposed 12 hours or less.

Concentration of CO in air ppm	Inhalation time and toxicity developed
50 parts per million	Safety level no effects
200	Slight headache within 2-3 hours
400	Frontal headache within 1-2 hours, becoming widespread in 3 hours
800	Dizziness, nausea, convulsions within 45 minutes, insensible in 2 hours

Location: The exposure to CO fumes resulting in poisoning occurred at home (44.8%), at a friend or relative's house (39.7%) and less often at work (15.5%).

The generators were never located inside the building, but outside in the open or next to an open building. Although the generators were located in a well-ventilated area, respondents still suffered from CO poisoning.

Exposure to CO fumes seem to have occurred through openings in doors/windows or through air blown into the house by air conditioners. The generators were used to power the air conditioners because of the extreme heat experienced after the storm. Though not specifically asked, seven people reported that the generator was located near an air conditioner that was in use.

No one reported having a generator inside the house or building, but two people reported having the generator in a building that was attached to the structure where they were exposed. One of these respondents reported that after only one hour of exposure, he suffered from paralysis in his legs and his neck, but was able to drag himself out of the building.

Timing: Poisoning occurred fairly early during generator use: 20.7% during the first 6 hours, 41.4% from 6 to 12 hours. A large number of respondents became ill with less than 6 hours of exposure, while 2/3 of the respondents became ill with 12 hours or less of exposure. The period between midnight and noon was the most dangerous. In all probability, most people would have had the greatest exposure during these hours, as they were more likely to have been sleeping or staying inside instead of being up and moving in and out of the house or building.

An electric CO detector was in one household (all 7 victims were in the same household), but the detector was not plugged into the generator and therefore, not functioning.

Treatment: Fifty-five of the 58 persons were treated in the hospital and 3 in the ambulance. Of the 58 persons surveyed, 41 of them were treated between 10/5/02 and 10/6/02. This is most likely due to the fact that the many people who had evacuated their homes before the storm had returned by these dates and that by these dates, more people had a chance to purchase or borrow a generator.

Fifteen (26.3%) of the victims treated were under 12 years of age. Nearly all respondents who had small children in their home, reported that the children were the first to become ill. Most of the literature indicates that CO affects small children and persons with heart or respiratory problems more quickly than other individuals.

Awareness: Respondents were aware of the danger of CO fumes in gasoline powered engines in only 31.0% of cases.

Recommendations:

Foremost, the study reveals that the public is not generally aware of the dangers of carbon monoxide and needs to be educated. Along with other health alerts issued during storms, particularly power outages, the Office of Public Health should **include warnings about CO poisoning in relation to the use of gasoline-powered generators**. Additionally, advisories need to be put out regarding how CO poisoning occurs.

Most of the safety tips available on the Internet call for placing the generator in a "well ventilated area" with little or no other information about placement included. The advisories should not only call for the placement of generators in a well-ventilated area but also give specific information on the placement of generators in relation to open doors and windows, ventilation systems, and other cracks or holes in walls, such as vents for dryers or water heaters. They should include, as well, warnings about the cracks left in the windows and/or doors from the extension cords connected to the generator. (Heavy-duty flat extension cords can be purchased which will fit between the bottom of a door and the seal at the threshold.)

All homes should be equipped with a battery powered functional carbon monoxide detector as a safety mechanism for CO detection.

People should also be educated regarding the signs and symptoms of CO poisoning. Many people thought they were experiencing some kind of stomach virus or food poisoning, especially when the children were the first to become ill.

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In the future, should some health concern arise that involves the use of an appliance, the Office of Public Health should contact the Consumer Product Safety Commission to discuss the possibility of a joint investigation.

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BRFSS: Awareness of Signs and Symptoms of Heart Attack and Stroke

Srikant Nannapaneni, MPH

Cardiovascular disease (CVD) is the leading cause of death and disability for both men and women in all racial and ethnic groups in Louisiana and the United States. In Louisiana alone, CVD was responsible for 14,977 deaths in the year 2000 (36% of all deaths that year). In 1999, CVD was also responsible for more than 76,000 hospitalizations in Louisiana and an estimated $1.4 *billion* in hospital charges.

One main factor known to adversely influence the outcome of an acute CVD event such as a heart attack or stroke, is the time between the onset of symptoms and institution of treatment. Studies have shown that patients treated with clot dissolving drugs within 1 hour of symptom onset had a 45% reduction in mortality rate compared to those who did not receive the treatment.

Awareness of the signs and symptoms of heart attack and stroke by the general public plays a major role in reducing the time delay between the onset of a heart attack or stroke and accessing emergency care.

In 2001, the Louisiana Behavioral Risk Factor Surveillance System (BRFSS) survey, a state-based random-digit-dialed telephone survey of non-institutionalized adults aged 18 years or older, was used to assess public awareness of the signs and symptoms of heart attack and stroke. Awareness of the individual signs and symptoms of heart attack varied widely. While 91% of the respondents were able to identify chest pain/discomfort as a symptom of heart attack, 63% incorrectly reported trouble seeing in both eyes as being a symptom of heart attack. Overall, respondents who were African American, individuals 65 years and older, unemployed or have annual household income of less than $15,000 were less likely to report awareness of signs and symptoms of heart attack. Similarly, a greater proportion (91.3%) of respondents were able to identify sudden numbness or weakness of face, arm or leg as a symptom of stroke but 70% inaccurately identified chest pain/discomfort as being a symptom of stroke. As with heart attack symptom awareness, race, age, education, employment status and household income were found to influence the degree of awareness of stroke symptoms.

Our results correspond well with other studies, which assessed the knowledge of signs and symptoms of heart attack and stroke. The key findings of this study are: 1) overall, chest pain and weakness or numbness are the most commonly recognized symptoms of heart attack and stroke respectively with a lesser degree of awareness of the other signs and symptoms, 2) awareness of signs and symptoms of heart attack and stroke appear to vary with sociodemographic characteristics.

The Louisiana Cardiovascular Health (CVH) program is currently in the process of developing a statewide plan to decrease the burden of CVD. The plan aims to bring about system level changes by creating heart-healthy environments and facilitating policy changes to decrease the death and disability due to CVD in the state of Louisiana.

For further information on the results from this study and the Louisiana CVH program, please contact Ms. Tara Doskey, Program Coordinator for the Louisiana CVH program at (504) 568-7210.

Newborn Sickle Cell Screening

Charles Myers, GSW; Kara L. Cooper, MD MSPH;
Louis Trachtman, MD MPH

In accordance with the Newborn Screening Law and Rule (R.S.40: 1299.1., 2., 3. and LAC 48: V. 6300), the Office of Public Health operates a mandated newborn screening program to include screening for sickle cell disease among four other diseases on the screening panel. The four other diseases include Phenylketonuria (PKU), congenital hypothyroidism, biotinidase deficiency, and (currently under pilot status although universal) galactosemia. The dramatic findings from the 1986 NIH collaborative double blind trial of prophylactic oral penicillin provided the impetus for states to establish newborn sickle cell screening programs in the late 1980s and early 1990s. This standard setting study demonstrated an 84% reduction in streptococcus pneumonia infections compared to the placebo group. Through the support of a Federal Health Resources and Services Administration (HRSA) grant, universal screening for sickle cell disease was statewide in Louisiana by January 1992. Universal newborn screening ensures that infants are diagnosed within a week after birth and this in turn speeds their placement under a physician's care (sooner than they would have been otherwise). The State Central Laboratory uses High Pressure Liquid Chromotography as the primary screening method and testing with isoelectric focusing is performed on all abnormals. (Sickle dex or sickle prep methodologies are not acceptable methods for newborn screening and should never be used.) This review examines the proportion of infants detected with a hemoglobinopathy by phenotype, year and region from 1995 through 2000. Also included is data on the initiation of penicillin prophylaxis.

As Table 1 shows, the most frequent sickle cell disease in Louisiana is S disease followed by SC disease. The third highest at 8.80% is C disease. These three phenotypes comprise 94.18% of the hemoglobinopathies detected in newborns in Louisiana. The detection of E disease, which also results in a hemolytic disorder, should be noted at 0.18%. In figure 1, the number of cases of sickle cell disease in Louisiana from 1995-2000 is presented by state region. Figure 2 shows the improvement in the initiation of penicillin prophylaxis for patients with a phenotype of S disease or SC disease from 1995-2000. (Figure 2 is limited to these phenotypes as there is not agreement among specialists on the initiation of penicillin prophylaxis for other sickling hemoglobinopathies).

Children with sickle cell disease need to be under the care of a local primary care physician as well as a center or regionally based sickle cell specialist. For information on treatment issues including continuity of care, penicillin prophylaxis and pneumococcal vaccines, please direct your inquiries accordingly:

Charles Scher, MD, Sickle Cell Center of Southern Louisiana: 504/588-5312; Raj Warrier, MD, Louisiana State University Medical School-New Orleans and Children's Hospital: 504/896-9740; Majed Jeroudi, MD Sickle Cell Center of Northern Louisiana –LSU/Shreveport: 318/675-6075; Richard Howes, MD, and Stephen Barnes, MD, University Medical Center, Lafayette: 337/261-6136.

For more information on the Genetic Diseases Program/OPH, call 504-568-5070.

Table 1: Number and percentages of newborns detected by Hemoglobinopathy (Phenotypes) in Louisiana 1995-2000

Phenotypes	#	%
S disease (FS, SF, SS)	334	58.80%
SC disease (CS, CSF, FCS, FSC, SC, SCF)	151	26.58%
c disease (FC, CF, CC)	50	8.80%
E disease (EE, FE)	7	1.23%
Sickle – thalassemia syndrome (FSA, SA, SAF, SFA, $SFAA_2$)	24	4.23%
Sickle E disease (FSE)	1	0.18%
Sickle other disease FS - other	1	0.18%

Figure 1: Cases by region, Louisiana , 1995-2000

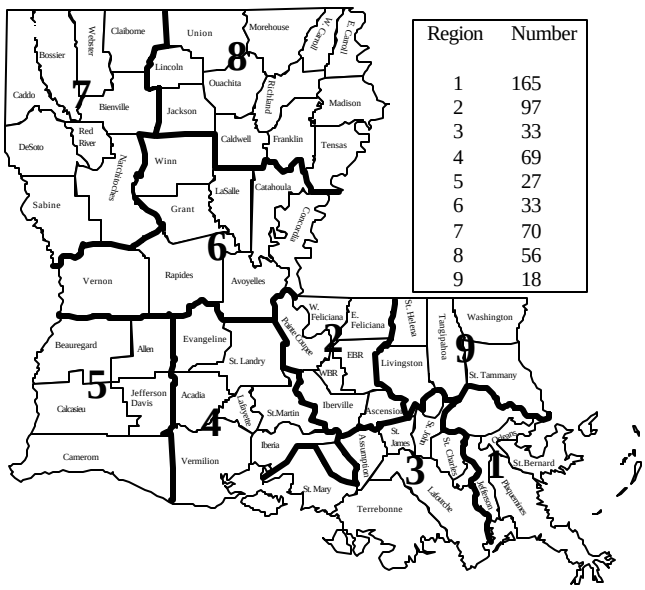
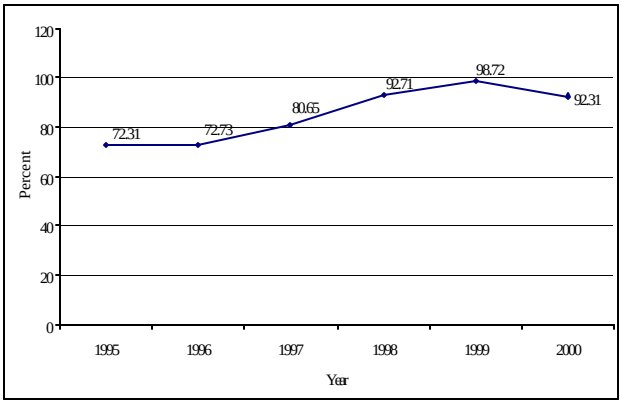


Figure 2: Percentage of infants with phenotypes of FS and FSC on penicillin prophylaxis by 3 months of age, 1995-2000



AN OBSERVATIONAL STUDY ON CHILD PASSENGER SAFETY SEAT USE

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Katherine Fontenette BA, Injury Prevention Coordinator

Introduction

Motor vehicle related accidents kill more children than any other single cause in the United States [1,2]. To reduce the trauma suffered by children involved in traffic crashes, child safety seats should be used effectively.

Despite these effective prevention measures, nearly 600 children less than 4 years old died in motor vehicle crashes in 1998 in the US [2]. Approximately 29% of children aged 4 years and younger do not ride in appropriate child safety seat restraints, which when correctly installed and used, reduces the need for hospitalization by 69% among children less than 4 years, and reduces the risk of death by approximately 70% for infants and by 47% to 54% for toddlers 1-4 years old.

In Louisiana, safety laws and regulations mandate that children aged 0 - 12 are required to be restrained in all seating positions and children ages 2 and under must be properly restrained in an appropriate child safety seat [1].

Methods

In an effort to assess the use of child safety seats among children 5 years and under, an observational study was conducted in eight parishes in central Louisiana over a 10-week period during spring of 2002. The study areas were selected in an effort to obtain a representative sample of children aged 5 and under in the area. Observations conducted at all eight of the parish health units, on days when child health services were scheduled, and at the major shopping center in each of the eight parishes. Observers remained at each site for one hour and recorded all children in observed vehicles at each site. Information collected included: demographic information on both the driver and child passenger (ages were estimated and later categorized), vehicle type, safety seat type and position, location of the child in the vehicle, use of seat belt by the driver, and location of the observation. Data was entered and analyzed in SPSS Version 10.0.

Results

A total of 270 children were observed throughout the region. Table 1 shows the demographic distribution of all the children observed.

Table 1: Demographics of the observed children (N=270)

Gender	**Male**	**Female**	**Unknown**
	144 (54.3%)	121(45.7%)	5(1.9%)
Ethnicity	**White**	**Black**	**Other**
	186 (68.9%)	78(28.9%)	6(2.2%)
Age Group	**≤ 1year**	**1-5yrs**	**> 5yrs - < 13yrs**
	38 (14.1%)	206 (76.3%)	26 (9.6%)
Location In vehicle	**Back**	**Front**	
	186 (68.9%)	84 (31.1%)	

Children and safety seats: Of the 270 children observed, 244 were estimated to be less than or 5 years old and 26 were estimated to be more than 5 years old. The majority of the children 5 years and under were observed to be traveling in the back seat of the vehicles (73.8%), (however, only 35.7 % (N=87) of them were observed to be in child safety seats). The remaining children were either restrained by the car's seat belt (9.4%, n=23), sitting on the lap of an adult, or another child (6.1%, n=15), or were not restrained at all. Table 2 shows the age distribution of all children observed by method of restraint.

Table 2: Method of restraint by age group

Age Group	Child Passenger Safety Seat		Car Seat Belt		Not Restrained	
	No.	(%)	No.	(%)	No.	(%)
<1 year	30	(34.1)	1	(3.1)	7	(4.7)
1-5 years	57	(64.8)	22	(68.8)	127	(84.7)
>5 years	1	(1.1)	9	(28.1)	16	(10.7)
Total	88	(100)	32	(100)	150	(100)

Drivers and safety belts: A total of 207 drivers were observed. White drivers made up 73.4% (n=152) and African American drivers made up 26.6% (n=55) of the drivers. There were also more female drivers (75.4%) than male drivers (24.6%). Of the drivers observed, 55.1% (n=114) wore seat belts (24.6% were male and 74.4% female). The estimated age of the drivers were categorized and most of them were between the ages of 21-30 years (49.3%) and 31-40 years old (29%). The other age groups, 16-20, 41-50 and >50 accounted for 4.3%, 11.6% and 5.8% of the drivers, respectively.

Among the 114 drivers observed to be wearing seat belts, a total of 101(88.6%) were the drivers for the 244 children aged 5 and under. Among them, a total of 133(54.5%) children traveled with restrained drivers, and among the 87 children who were observed to be traveling in child safety seats, 57(65.5%) traveled with drivers who were restrained and 30(34.5%) traveled with drivers who were not restrained. On the other hand, a total of 76(31.1%) children who were not restrained traveled with drivers who were themselves restrained, leaving a slightly greater number of unrestrained children (n=81, 33.2%) traveling with drivers who were also not restrained. For children aged 5 and under who were restrained in a child safety seat, most were traveling with drivers who were either within the estimated 21-30 year age group (n=46 children), were female (n=62 children), and/or were white (n=59 children). It is important to note that the children who traveled with restrained drivers were more likely to be restrained than those who did not ($X2=6.61$; p-value=0.01).

Discussion & Recommendations

In this study, results indicated that only 35.7% of the children aged 5 or less were restrained while being transported, indicating a high risk for injury or death in the event of a crash. It is estimated that children aged 12 and under are up to 36% less likely to die in a crash if they are in the rear seat of a passenger vehicle. [1] In this study, despite the low number of restrained children, a significant number (73.8%) of them were appropriately placed on the back seats

(Continued on next page)

of the vehicles, posing a lower risk of injury to them in the event of a crash.

Although it is recommended that all children aged 5 and under should be in an appropriate child passenger safety seat, quite a few were restrained by the car's seat belt 9.4% (n=23) with one of these children estimated as being less than one year old.

It is critical to note that a vast majority of the children aged 5 or less who were in child safety seats (n=57) were traveling with drivers who were restrained, indicating that drivers' use of seat belts may be indicative of a child passenger being restrained as well (x^2=6.61, p-value=0.010). In essence, it is important to note that any education or intervention focused on increasing the use of child safety seats should be coupled with education/awareness interventions for the increased use of seat belts among drivers as well.

Based on the results of this study, it should be noted that the enforcement of or the implementation of primary regulations for the use of seat belts among all drivers, and especially among those who are less likely to wear seat belts may aid in increasing the use of child safety seats for child passengers, thus decreasing the risk of injury and death during crashes.

Interventions are a key to reducing risk of fatal crashes among children. Some intervention measures can include: education and routine car safety seat checks, awareness of the injuries that can occur to unrestrained children, provision of car safety seats to low income families, educational materials or fines for the inappropriate transportation of children as well as enforcing the use of safety belts among drivers which may aid in increasing the use of child safety seats.

Sources

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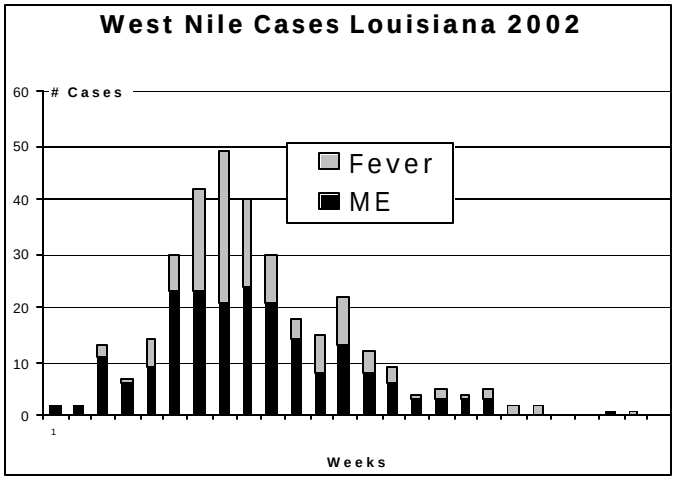
2. Zaza, Stephanie et al. (2001): Reviews of Evidence Regarding Interventions to Increase Use of Child Safety Seats, *American Journal of Preventive Medicine 21 (4 Suppl): 31-47.*

West Nile Virus Infection in Louisiana: The final counts for 2002

Parish	Cases Now	Cases /100K	Death	Death /100K	ME	Fever	Unk
Jefferson	41	9.0	1	0.2	24	16	1
Orleans	22	4.5	3	0.6	10	12	
St Bernard	2	3.0				2	
Ascension	15	19.6	1	1.3	6	9	
East Baton Rouge	50	12.1	6	1.5	37	13	
East Feliciana	4	18.6			2	2	
Iberville	5	15.2			2	3	
Pointe Coupee	12	52.6			6	6	
West Baton Rouge	2	9.1			2		
St. Charles	1	2.1				1	
St James	3	14.2			2	1	
St John	3	7.0			2	1	
St Mary	1	1.9				1	
Terrebonne	1	1.0				1	
Evangeline	1	2.8			1		
Iberia	2	2.7			2		
Lafayette	5	2.6	1		4		1
St Landry	1	1.1			1		
St Martin	1	2.2				1	
Vermillion	1	1.9				1	
Allen	1	3.9				1	
Calcasieu	10	5.4	2	1.1	8	2	
Avoyelles	2	4.8			2		
Concordia	1	4.9	1	4.9	1		
Grant	1	5.3			1		
Rapides	22	17.4			14	8	
Winn	1	5.9			1		
Bossier	3	3.0			3		
Caddo	5	2.0			5		
Natchitoches	1	2.6				1	
DeSoto	1	3.9	1		1		
Red River	1	10.4			1		
Ouachita	10	6.8			6	4	
Richland	2	9.5	1		2		
Tensas	1	15.4				1	
Union	1	4.4			1		
Livingston	18	19.6	1	1.1	12	6	
St Helena	1	9.5				1	
St Tammany	40	20.8	4	2.1	27	12	1
Tangipahoa	24	23.9	2	2.0	12	12	
Washington	10	22.7			6	4	
Undetermined	0						
Total	329	8.6	24	0.6	204	122	3

West Nile Virus Update



ME = Meningoencephalitis

Age Group	Cases M	Cases F	Cases Total	Cases /100K	Death	Death /100K
0-14	3	7	10	1.2	0	0.0
15-29	26	29	55	6.3	1	0.1
30-44	49	28	77	8.9	1	0.1
45-59	39	33	72	11.1	2	0.3
60-75	35	23	58	13.1	3	0.7
75+	30	27	57	36.0	17	10.7
Total	182	147	329	8.6	24	0.6

Clinical	
WNFever	122
WN Meningoenc	204
Undetermined	3
Total	329

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE
Sep- Oct 2002
PROVISIONAL DATA

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION 1	2	3	4	5	6	7	8	9	TIME PERIOD Sep-Oct 2002	Sep-Oct 2001	Jan-Oct Cum 2002	Jan-Oct Cum 2001	% Chg
Vaccine-preventable														
H. influenzae (type B)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis B Cases	1	2	0	2	2	0	1	2	3	13	22	110	107	+2.8
Rate[1]	0.1	0.4	0	0.4	0.7	0	0.2	0.6	0.8	0.3	0.5	2.5	2.5	
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mumps	0	0	0	0	0	0	0	0	0	0	0	1	2	-100.0
Rubella	0	0	0	0	0	0	0	0	0	0	0	1	0	+100.0
Pertussis	0	0	0	0	0	0	0	0	0	0	3	8	8	0
Sexually-transmitted														
HIV/AIDS Cases[2]	19	25	2	10	2	6	3	6	4	77	205	800	968	-17.0
Rate[1]	1.9	4.3	0.5	1.9	0.7	2.0	0.6	1.7	0.9	1.8	4.7	18.3	22.1	
Gonorrhea Cases	542	183	62	126	92	77	481	158	72	1793	2253	9897	10469	-5.5
Rate[1]	52.2	32.2	16.4	24.4	34.3	25.2	95.1	45	18.7	42.5	53.4	234.5	248.1	
Syphilis (P&S) Cases	0	8	2	12	0	0	2	7	0	31	47	129	143	-9.8
Rate[1]	0	1.4	0.5	2.3	0	0	0.4	2.2	0	0.7	1.1	3.1	3.4	
Enteric					.									
Campylobacter	3	3	0	3	0	0	0	2	0	11	24	103	127	-18.0
Hepatitis A Cases	11	2	0	2	1	0	0	0	1	17	10	78	83	-6.0
Rate[1]	1.1	0.40	0	0.4	0.4	0	0	0	0.3	0.4	0.2	1.8	1.9	
Salmonella Cases	21	21	23	35	21	6	13	31	20	191	244	770	769	+0.1
Rate[1]	2	3.7	6.1	6.8	7.8	1.9	2.6	8.9	5.2	4.4	5.7	17.8	17.8	
Shigella Cases	20	41	0	4	3	3	5	1	11	88	42	458	213	+115.0
Rate[1]	2	7.2	0	0.8	1.1	1	1.0	0.2	3.0	2	0.9	10.6	4.9	
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	1	0	+100.0
Vibrio, other	1	0	0	1	2	0	0	0	2	6	3	35	28	+25.0
Other														
H. influenzae (other)	1	0	0	0	0	0	0	0	0	1	3	9	9	0
N. Meningitidis	2	1	1	1	0	0	0	0	0	5	7	39	70	-44.0
Tuberculosis	0	0	1	2	0	0	3	2	0	11	41	117	259	-55

1 = Cases Per 100,000

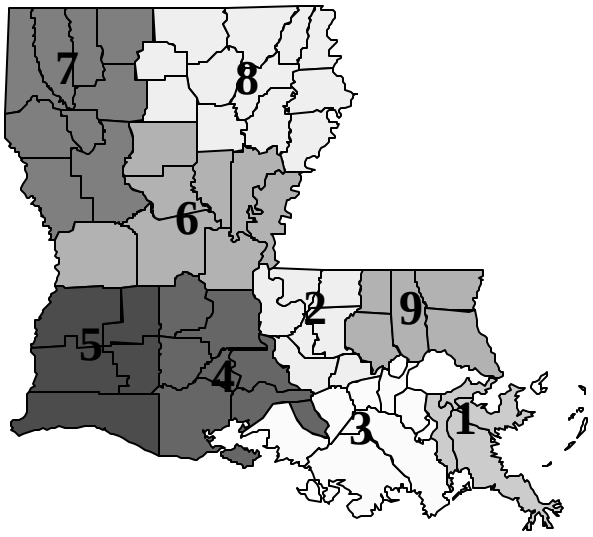
2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected.

Table 2. Diseases of Low Frequency

Disease	Total to Date
Legionellosis	4
Lyme Disease	5
Malaria	4
Rabies, animal	6
Varicella	23

Table 3. Animal rabies (Sep-Oct)

Parish	No. Cases	Species
Calcasieu	4	3 bats, 1 horse
Acadia	1	skunk
Lafayette	1	skunk



Sanitary Code - State of Louisiana
Chapter II - The Control of Disease

"It is hereby made the duty of every physician practicing medicine in the State of Louisiana to report to the State Health Officer, through the Health Unit of the parish or municipality wherein such physician practices, any case of suspected case of reportable disease which he is attending, or has examined, or for which such physician as prescribed. The report shall be made promptly at the time the physician first visits, examines or prescribes for the patient, and such report shall state the name, age, sex, race, usual residence, place where the patient is to be found, the nature of the disease and the date of onset." In addition to physician reporting, laboratories are required to report the results of tests which either confirm or suggest the occurrence of reportable diseases as specified by law. Additionally, Section 2:006 states "It shall be the duty of every osteopath, coroner, medical examiner, dentist, homeopath, infection control practitioner, medical records director, nurse, nurse midwife, nurse practitioner, pharmacist, physician assistant, podiatrist, social worker, veterinarian, and any other health care professional to report a confirmed case of reportable disease as specified in Section 2:003 in which he or she has examined or evaulated, or for which he or she is attending or has knowledge."

2:003 The following diseases 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
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Haemophilus influenzae (invasive infection)
- Measles (rubeola)
- Neisseria meningitidis (invasive infection)
- Plague
- Rabies (animal & man)
- Rubella (German measles)
- Rubella (congenital syndrome)
- Smallpox
- Tularemia
- Viral Hemorrhagic 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.

- Arthropod-borne encephalitis
- Aseptic meningitis
- Chancroid[1]
- E. Coli 0157:H7
- Hantavirus Pulmonary Syndrome
- Hemolytic-Uremic Syndrome
- Hepatitis A (acute illness)
- Hepatitis B (carriage in pregnancy)
- Herpes (neonatal)
- Legionellosis
- Malaria
- Mumps
- Pertussis
- Salmonellosis
- Shigellosis
- Syphilis[1]
- Tetanus
- 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 work week after the existence of a case, suspected case, or a positive laboratory result is known.

- Acquired Immune Deficiency Syndrome (AIDS)
- Blastomycosis
- Campylobacteriosis
- Chlamydial infection[1]
- Cryptococcosis
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- EHEC serogroup non 0157
- EHEC + shiga toxin not serogrouped
- Enterococcus, Vancomycin Resistant; (VRE)
- Giardia
- Gonorrhea[1]
- Hansen Disease (leprosy)
- Hepatitis B (acute)
- Hepatitis C (acute)
- Human Immunodeficiency Virus (HIV)
- Listeria
- Lyme Disease
- Lymphogranuloma venereum[1]
- Psittacosis
- Rocky Mountain Spotted Fever (RMSF)
- Staphylococcus aureus, Methicillin/ oxacillin or vancomycin resistant (MRSA)
- Streptococcus pneumoniae (invasive infection; penicillin resistant (DRSP)
- Streptococcus pneumoniae (invasive infection in children < 5 years of age)
- Varicella (chickenpox)
- Vibrio infections (except cholera)

Other Reportable Conditions:

- Cancer
- Complications of abortion
- Congenital hypothyroidism*
- Galactosemia*
- Hemophilia*
- Lead Poisoning*
- Phenylketonuria*
- Reye's Syndrome
- Severe traumatic head injury**
- Severe undernutrition (severe anemia, failure to thrive)
- Sickle cell disease (newborns)*
- Spinal cord injury**
- Sudden infant death syndrome (SIDS)

Case reports not requiring special reporting instructrions can be reported by Confidential Disease Case Report forms EPI-2430, facsimile (504-568-5006), phone reports (504-568-5005 or 1-800-256-2748), or electronic transmission.

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

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

*Report to the Louisiana Genetic Diseases Program Office by telephone (505) 568-5070 or FAX (504) 568-7722.

**Report on DDP-3 form; preliminary phone report from ER encouraged (504) 568-2509. Information contained in reports required under this section shall remain confidential in accordance with the law.

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