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Louisiana Morbidity Report

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Seasons Greetings

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Hurricane Andrew-related Injuries and Illnesses

On August 26, 1992, Hurricane Andrew struck south central Louisiana (Figure 1). In anticipation of injuries and illnesses caused by the hurricane, the Epidemiology Section asked personnel in hospital emergency rooms and coroners' offices in 19 parishes to report hurricane-related health problems. Surveillance was carried out from August 24 until

September 21, and included all injuries or illnesses resulting from the hurricane or from the preparation for or clean-up after the hurricane.

Twenty-one of 42 (50%) enrolled hospitals, one public utility, and five coroners offices reported 462 hurricane-related events, including 17 deaths. Of the non-fatal events, 383/445 (86%) were injuries and 62/445 (14%) were illnesses. The date of occurrence of the reported injuries and illnesses is shown in Figure 2. Only 17% occurred during the hurricane; the large majority (79%) occurred during the aftermath. Three hundred and nineteen (72%) of 445 non-fatal events occurred in men and 126 (28%) occurred in women.

Figure 1: Path of Hurricane Andrew - Florida and Louisiana, August 24-26, 1992

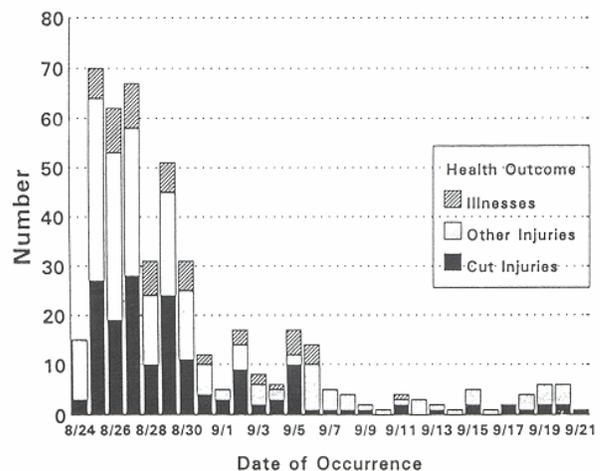


Most events (237/343[69%]) happened in or around the home. The most common non-fatal injury was a cut/laceration/puncture wound (184/445 [41%]), followed by a strain/sprain (49 [11%]) (Table). Twenty-three persons experienced insect bites or stings and 23 persons experienced a rash. Among the 17 deaths, there were six drownings and three caused by contusion/impact.

St. Mary, St. John, and Iberia parishes had the highest injury rates (Figure 3). Future planning for hurricanes should take into account the high rate of lacerations, particularly during the clean-up phase.

(Continued on page 2)

Figure 2: Injuries and illnesses related to Hurricane Andrew by date of occurrence



N = 393

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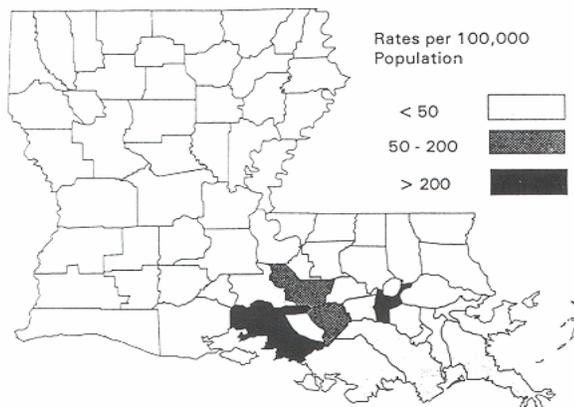
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Hurricane Andrew-related Injuries and illnesses (Cont.)

Table: Nature of Hurricane Andrew-related Injury and Illness, Louisiana, 1992

Nature	Deaths Frequency (%)	Injury/Illness Frequency (%)
Cut/laceration/puncture	0	184 (41)
Sprain/strain	0	49 (11)
Contusion/impact	3 (19)	46 (10)
Insect bite/sting	0	23 (5)
Rash	0	23 (5)
Fall	1 (6)	23 (5)
Crush	1 (6)	15 (4)
Burn	0	10 (2)
Anxiety	0	8 (2)
Drowning	6 (37)	0
Dog bite	0	1 (.2)
Asphyxiation	1 (6)	0
Electrocution	2 (12)	1 (.2)
Other	3 (19)	62 (14)
Total	17 (100)	445 (100)

Figure 3: Rates of injury and illness by parish



Update: Polio Eradication in the Americas

Eradication of polio from this hemisphere appears close. The last case of paralytic poliomyelitis with a wild poliovirus isolate was reported 8/91. The initiative to eradicate the indigenous transmission of wild poliovirus from the Western Hemisphere was begun in 5/85. Using national vaccination days with live oral poliovirus vaccine and intensive surveillance activities, the number of cases decreased from 1000 in 1986 to nine in 1991. Eight of the nine cases detected in 1991 occurred in Columbia during Jan-April 1991. Of the more than 6000 stool specimens collected from persons with possible polio during 1990-92, wild poliovirus was isolated from 18 persons in 1990, nine in 1991, and none thus far in 1992. If surveillance for polio is maintained at high levels and if no confirmed cases of paralytic poliovirus are detected over a 3-year period, the Americas will be certified as polio-free. However, vaccination coverage must be maintained at high levels until global eradication has been accomplished.

Polio Vaccine and HIV Infection

With HIV infection becoming increasingly common in all parts of the state, it is important to remember that Oral Poliovirus Vaccine (OPV) is contraindicated in children whose household members are immune-compromised, because of the risk of vaccine-related paralysis in individuals infected secondarily.

Oral Poliovirus Vaccine is a live, attenuated vaccine. The virus is excreted in the stool and saliva of an immunized child for up to eight weeks after a dose. Because of this, OPV administration is contraindicated in recognized immunodeficient individuals and in those who live with them. This includes persons with HIV infection or AIDS, as well as persons receiving cancer chemotherapy or taking high-dose steroids (see OPV package insert). In these individuals, a killed-virus vaccine known as Inactivated Poliovirus Vaccine (IPV) should be used. IPV is effective in inducing immunity and the shedding of live virus is avoided.



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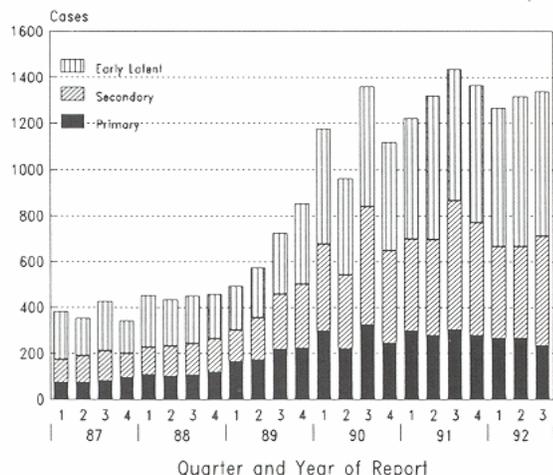
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Increase in Congenital Syphilis: Recommendations for Screening

Syphilis rates have risen in Louisiana to epidemic levels (Figure 1), and this increase has been accompanied by a dramatic increase in congenital syphilis (CS). The syphilis increase is due mostly to increased use of crack/cocaine and the associated exchange of sex for drugs.

Figure 1: Cases of early syphilis in Louisiana, 1987-1992



Louisiana has the highest U.S. rate of early syphilis in adults, and since CS cases can lag female adult cases by up to 18 months, the current increase in CS cases is expected to continue.

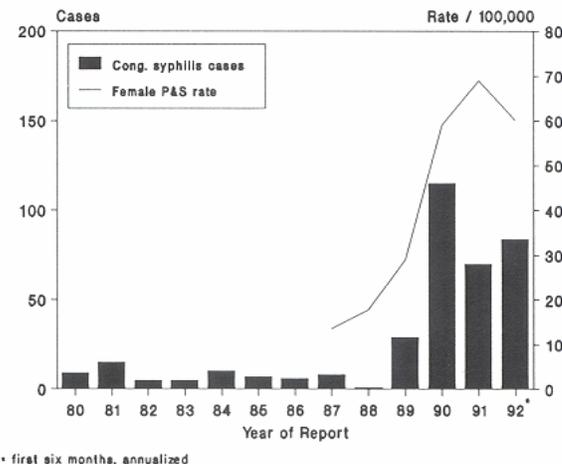
Figure 2 shows the number of CS cases by year and the increasing trend in women with early syphilis. From 1980 to 1988, the average CS case rate was 10 per 100,000 live births. Since 1989, the average case rate has increased to 104 per 100,000 live births.

Demographic features of the 224 CS cases from 1990-1992 show that one half (55%) of the mothers delivering CS babies are 24 years old or less and 89% are single. The racial distribution is 93% Black, 3% Hispanic and 3% White. Mothers living in Orleans or Jefferson Parish comprise 84% of the cases. Stillbirths and perinatal deaths account for 10% of reported cases.

Lack of prenatal care and maternal drug use have been important in contributing to the rise of CS. Of all CS cases, 47% of the mothers did not receive any prenatal care. Maternal drug use was found in 44% of the cases with 74% of these mothers receiving no prenatal care. This signifies that women using drugs are less likely to obtain prenatal services.

As shown in Figure 3, 77% of CS infants were asymptomatic at birth. Classic signs of CS include cutaneous

Figure 2: Rates of primary and secondary syphilis in women and cases of congenital syphilis, 1980-1992

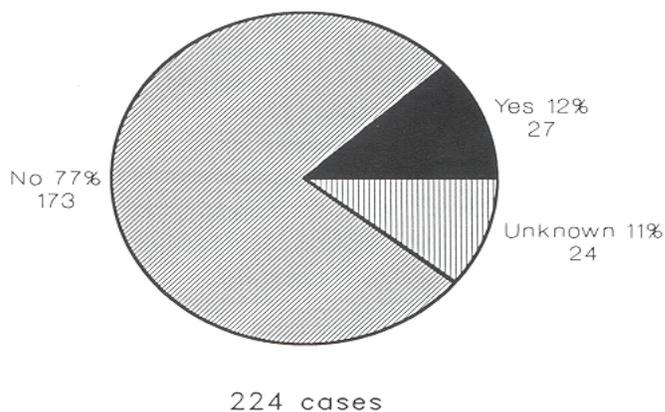


rashes and lesions, snuffles, hepatosplenomegaly, condylomata, osteitis and jaundice from syphilitic hepatitis.

Of all CS case mothers, 42% received no therapy for syphilis before or during pregnancy. CS can be prevented with timely screening and adequate therapy. All pregnant women should be screened for syphilis during the first and third trimesters and again at delivery. It is especially important that this screening be done for women with a history of drug use or inadequate prenatal care.

When screening newborns at delivery is indicated, the infant's blood is preferable to cord blood. Penicillin is the drug of choice, and if mothers are allergic to Penicillin, skin testing and desensitization needs to be done. Penicillin is not effective when given 30 days or less prior to delivery. Monthly titers should be drawn for the remainder of pregnancy to ensure an adequate response. Because most infants will be asymptomatic at birth, health care providers must maintain suspicion of CS until all appropriate serologic and radiographic tests have been performed.

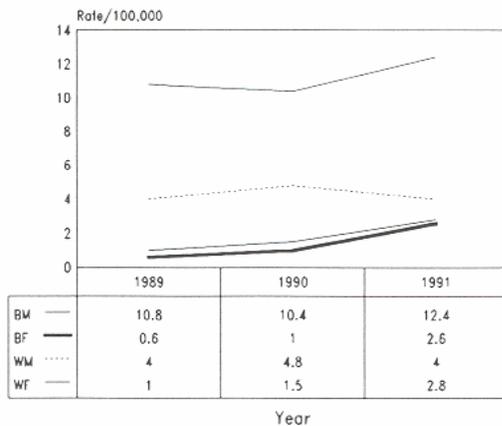
Figure 3: Presence of classic signs of congenital syphilis among cases reported 1991-1992



Traumatic Spinal Cord Injuries to Louisiana Residents, 1991

In 1991, 194 spinal cord injuries (SCI) were reported in Louisiana residents. This represented a 22% increase from 1990 and a 28.5% increase from 1989. The case rate was 4.6 per 100,000. Males were injured at a rate two times that of females (6.5/100,000 vs 2.7/100,000). Black males had the highest rate (12.4 per 100,000). Among white males the rate was 4.0 per 100,000, black females 2.6 per 100,000 and white females 2.8 per 100,000; Figure 1). The ratio of black females to black males was 1:5. The ratio of white females to white males was 1:1.5. This was higher than the national average of 1:4. Motor vehicle related injuries contributed to most of this excess.

Figure 1: Rates of non-fatal spinal cord injuries by race and sex, 1989-1991



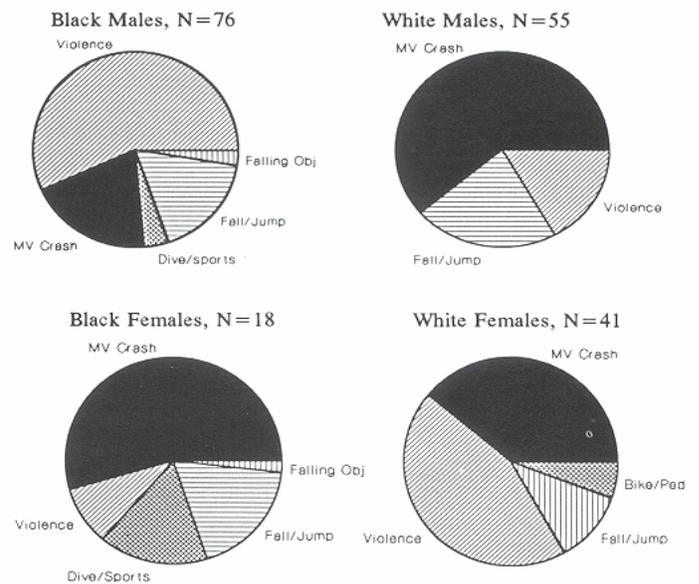
The causes of spinal cord injury to the population as a whole were motor vehicle crashes (40%), violence (33%), falls/jump (18%), sports (6%), and falling objects (2%). However, these causes differed by race and gender. Violence was the major cause of spinal cord injury in both black males and black females followed by motor vehicle crashes, while motor vehicle crashes were the leading cause of SCI in both white males and white females followed by falls (Figure 2). Young adults (15-29) and adults (30-44) had the highest rate of spinal cord injuries regardless of gender and race (8.4/100,000 & 5.4/100,000).

Of the 194 SCI 46% resulted in quadriplegia (41% complete and 30% incomplete), 51% resulted in paraplegia (38% complete, 26% incomplete and 19% complete recovery). The extent of injury was not reported in 3% of cases. The funding for medical care for a majority (56%) of these injured persons was paid through government reimbursement (Medicare/Medicaid) and indigent care. Private insurance (including HMOs) and workmen's compensation supported

28% of medical cost. The source of payment was reported as unknown in 14% of cases. Most of these cases probably had no insurance.

In view of the enormous costs to the government in both

Figure 2: Non-fatal spinal cord injury by cause, 1991



direct first year expenses and lifetime expenses, increased emphasis must be placed on developing intervention programs and activities that will effectively reduce the incidence of SCI.

New Hypertension Reports To Be Released Soon

The National High Blood Pressure Education Program's report on primary prevention of hypertension provides guidelines on the management of hypertension for practicing physicians and other health professionals. The report has several new features, including new blood pressure classification terminology, a new treatment algorithm, an update of pharmacologic tables that include new drugs, and a section on primary prevention.

The "Working Group Report on Primary Prevention of Hypertension" examines the efficacy and feasibility of implementing new approaches that could be considered for use as population and targeted strategies aimed at the prevention of hypertension. Weight loss, reduced sodium intake, increased physical activity, and avoidance of excessive alcohol consumption appear to be the best approaches.

For pre-publication copies, please contact the Chronic Disease Control Program, P.O. Box 60630, New Orleans, LA 70160.

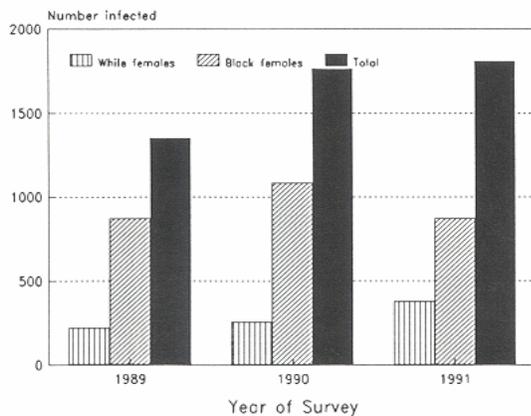
AIDS Update

Prevalence of HIV Infection in Women of Childbearing Age

At this time, HIV infection is not reportable in Louisiana. Therefore, estimates of the prevalence of HIV infection can only be made using available serosurveys, in particular, the survey of childbearing women.

This statewide survey to assess the impact of HIV infection in women began in Louisiana in mid-1989. The blinded study utilizes blood samples from the PKU testing of newborns to measure antibodies for HIV infection [maternal antibodies]. To estimate the number of HIV infected women, we applied the infection rates of child-bearing women to the population census for women 15-44 years of age. The estimated number of HIV-infected women increased from 1,351 in 1989 to 1,807 in 1991 (Figure 1).

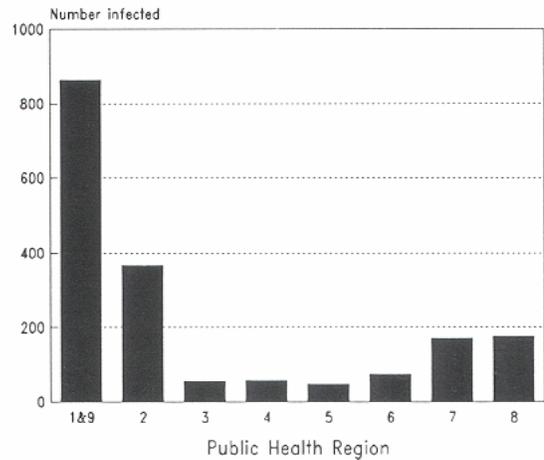
Figure 1: Estimated prevalence of HIV infection in women, ages 15-44 racial distribution



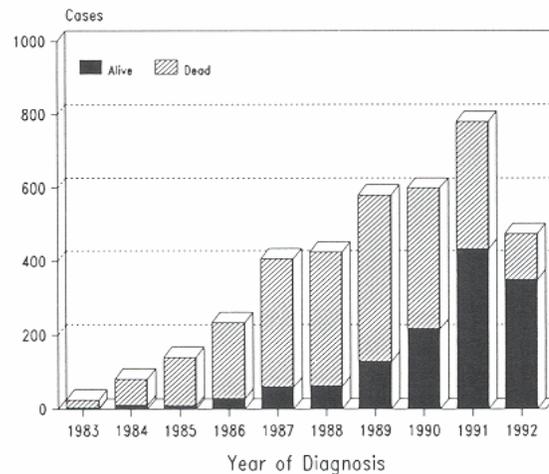
The racial distribution of the prevalence of HIV infection was similar to that of AIDS case reports for women and children in that the majority of cases occurred in the black population. However, the numbers in HIV-infected white women increased each year. Estimates were also calculated for the geographic regions in the state for 1991 (Figure 2). The metro New Orleans area had the highest number of HIV infected women. The Baton Rouge area (Region 2) and the northern part of the state have had the most significant increases over the three year study period.

The serosurvey data also enables us to estimate the number of children born each year to HIV-infected women, and the number who themselves are HIV infected. The number of infected children will increase with the number of infected women. An estimated 115 infected women delivered children in 1991. Assuming a mother to child transmission rate of 30%, approximately 35 of these children were HIV infected. These infected children came from every region of the state.

Figure 2: Estimated prevalence of HIV infection in women, ages 15-44 by region, 1991



AIDS Case Trends



**LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE,
SEPTEMBER - OCTOBER, 1992
PROVISIONAL DATA**

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD					
	1	2	3	4	5	6	7	8	9	Sept-Oct 1992	Sept-Oct 1991	Cum 1992	Cum 1991	% Chg	
<u>Vaccine-preventable</u>															
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
Mumps	1	0	0	0	1	0	0	0	0	2	7	22	27	-19	
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	--	
Pertussis	1	0	0	1	0	0	0	1	0	3	3	9	11	-18	
<u>Sexually-transmitted</u>															
AIDS	Cases	39	15	1	8	5	5	8	9	7	100	124	611	621	-2
	Rate ¹	5.3	1.9	0.3	1.4	1.9	1.9	1.4	2.8	1.5	2.3	2.9	14.4	14.7	
Gonorrhea	Cases	1086	283	125	202	103	110	431	149	146	2797	2897	12166	13241	-8
	Rate ²	14.8	3.7	4.1	3.6	4.0	3.5	7.9	4.9	3.3	6.6	6.9	28.9	31.4	
Syphilis(P&S)	Cases	109	127	39	31	9	20	85	41	42	503	683	2286	2620	-13
	Rate ²	1.5	1.7	1.3	0.6	0.3	0.6	1.6	1.3	0.9	1.2	1.6	5.4	6.2	
<u>Enteric</u>															
<i>Campylobacter</i>		8	11	5	7	0	0	0	0	10	41	19	196	73	+168
Hepatitis A	Cases	10	3	0	4	0	0	5	2	4	28	12	188	103	+83
	Rate ¹	1.4	0.4	--	0.7	--	--	0.9	0.7	0.9	0.7	0.3	4.5	2.4	
<i>Salmonella</i>	Cases	28	12	16	25	2	3	12	3	7	108	268	390	604	-35
	Rate ¹	3.8	1.6	5.3	4.5	0.8	1.0	2.2	1.0	1.6	2.6	6.1	9.2	13.8	
<i>Shigella</i>	Cases	6	5	1	2	2	0	1	0	7	24	40	85	164	-4
	Rate ¹	0.8	0.7	0.3	0.4	0.8	--	0.2	--	1.6	0.6	0.9	2.0	3.7	
<i>Vibrio cholera</i>		0	0	0	1	0	0	0	0	0	1	0	1	0	--
<i>Vibrio, other</i>		0	0	0	0	0	0	0	0	0	0	4	26	37	-30
<u>Other</u>															
Hepatitis B	Cases	6	6	0	6	1	2	6	0	1	28	62	150	248	-40
	Rate ¹	0.8	0.8	--	1.1	0.4	0.6	1.1	--	0.2	0.7	1.4	3.6	5.7	
<u>Meningitis/Bacteremia</u>															
<i>H. influenzae</i>		0	0	0	0	0	0	0	0	0	0	1	0	19	--
<i>N. meningitidis</i>		1	0	0	1	0	0	0	0	0	2	8	25	28	-11
Tuberculosis	Cases	5	0	0	1	0	1	10	3	0	20	13	197	197	0
	Rate ¹	0.7	--	--	0.2	--	0.3	1.8	0.9	--	0.4	0.3	4.7	4.5	

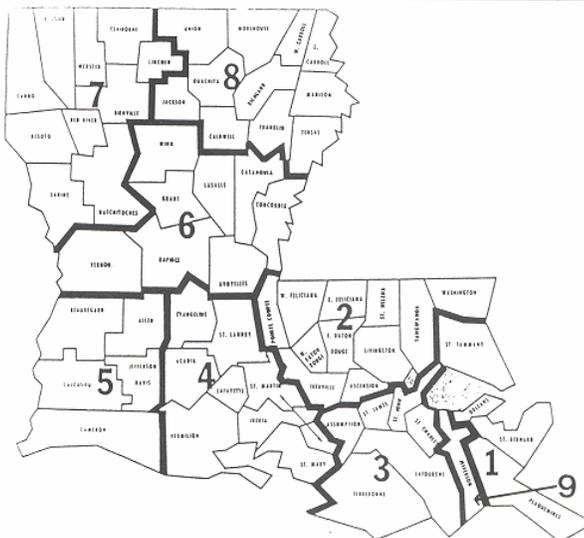
1 = Cases per 100,000
2 = Cases per 10,000

Table 2. Diseases of Low Frequency

Disease	Total to Date
Blastomycosis	5
Brucellosis	1
Histoplasmosis	0
Lead Toxicity	18
Legionellosis	4
Lyme Disease	5
Malaria	1
Rocky Mountain Spotted Fever	0
Tetanus	0
Typhoid	1

Table 3. Animal Rabies (Sept-Oct, 1992)

Parish	No. Cases	Species
Rapides	1	Bat
Lincoln	1	Bat



Annual Summary Hepatitis B 1991

For 1991, there were 362 cases of hepatitis B reported to the Epidemiology Section, a case rate of 8.6 per 100,000. Reported cases of acute hepatitis B have ranged between 300 - 400 for eight of the past ten years including 1991. Case rates by race continued to show rates for blacks were three times higher than whites (15.6/100,000 vs 5.1/100,000). Males had higher rates in all age groups except the 55-64 and 15-19 age groups (Figure 1). Forty percent of the total cases were reported from seven parishes with case rates greater than or equal to 14/100,000: Orleans (17), Madison (16), Plaquemines (16), Caddo (15), Evangeline (15), Natchitoches (14) and Vermilion (14; Figure 2).

Comment:

Hepatitis B infection is a major cause of acute and chronic hepatitis, cirrhosis, and primary hepatocellular carcinoma. It is uncommon among the general adult population, but it is highly prevalent in certain risk groups. Despite the availability of the hepatitis B vaccine since 1982, cases continued to increase, mainly due to difficulties in reaching risk groups. In August 1992, the Office of Public Health initiated universal immunizations for hepatitis B to all newborns. With this strategy, there should be a gradual reduction in the prevalence of chronic hepatitis B infection.

Figure 1: Cases of hepatitis B by age and sex, 1991

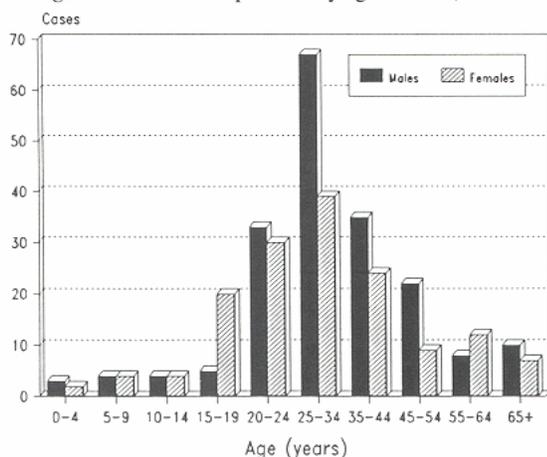
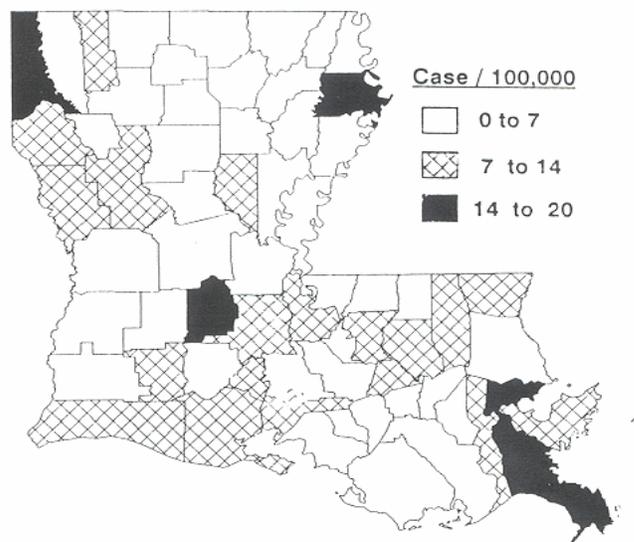


Figure 2: Rates of acute hepatitis B by parish, 1991



LOUISIANA FACTS

The Lake Pontchartrain Causeway is the longest overwater span in the world. The southbound lane is 23.86 miles (125,980.8 feet); the northbound lane is 23.87 miles (126,033.6 feet).

Do you have an interesting fact about Louisiana that you would like to see published in the Louisiana Morbidity Report? Send facts and source to: Louisiana facts, DHH-OPH-Epidemiology Section, P.O. Box 60630, New Orleans, LA 70160.

LIST OF REPORTABLE DISEASES/CONDITIONS

	REPORTABLE DISEASES		OTHER REPORTABLE CONDITIONS
Acquired Immune Deficiency Syndrome (AIDS)	Gonorrhea**	Plague*	Cancer
Amebiasis	Granuloma Inguinale**	Poliomyelitis	Complications of abortion
Anthrax	Hepatitis, (Specify type)	Psittacosis	Congenital hypothyroidism
Aseptic meningitis	Herpes (genitalis/ neonatal)**	Rabies (animal & man)	Lead poisoning
Blastomycosis	Legionellosis	Rocky Mountain Spotted Fever	Phenylketonuria
Botulism*	Leprosy	Rubella (German measles)*	Reye Syndrome
Brucellosis	Leptospirosis	Rubella (Congenital syndrome)	Severe Traumatic Head Injuries+
Campylobacteriosis	Lyme Disease	Salmonellosis	Severe undernutrition severe anemia, failure to thrive
Chancroid**	Lymphogranuloma venereum**	Shigellosis	Sickle cell disease (newborns)
Cholera*	Malaria	Syphilis**	Spinal cord injury+
Chlamydial infection**	Measles (rubeola)*	Tetanus	Sudden infant death syndrome (SIDS)
Diphtheria*	Meningitis, Haemophilus*	Trichinosis	
Encephalitis (Specify primary or post-infectious)	Meningococcal Infection (including meningitis)*	Tuberculosis***	
Erythema infectiosum (Fifth Disease)	Mumps	Tularemia	
Foodborne illness*	Mycobacteriosis, atypical***	Typhoid fever	
Genital warts**	Ophthalmia neonatorum*	Typhus fever, murine (fleaborne endemic)	
	Pertussis (whooping cough)	Vibrio infections (excluding cholera)	
		Yellow fever	

Report cases on green EPI-2430 card unless indicated otherwise below.

*Report suspected cases immediately by telephone. In addition, report all cases of rare or exotic communicable diseases and all outbreaks.

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

***Report on CDC 72.5 (f 5.2431) card

+Report on DDP-3 form; preliminary phone report from ER encouraged (568-2509).

The toll free number for reporting communicable diseases is
1-800-256-2748

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