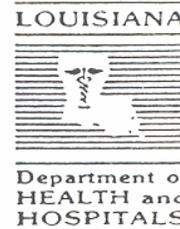




Buddy Roemer
GOVERNOR

Louisiana Morbidity Report

Louisiana Office of Public Health - Epidemiology Section
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SECRETARY

May-June 1991

Volume 2 Number 3

HIV Infection Increasing in Louisiana Women

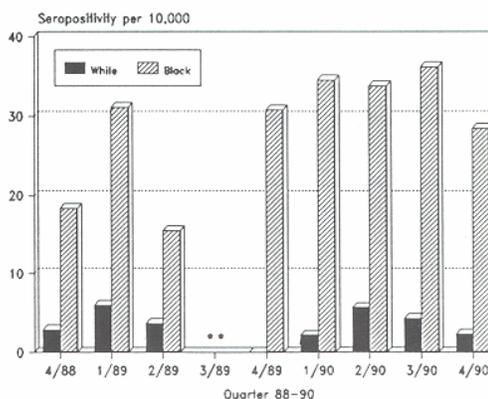
Seroprevalence surveys of newborns carried out since 1988 show that HIV infection in childbearing women is increasing in Louisiana. These results are a strong indicator that the virus that causes AIDS is spreading in the state's population. Because persons infected with HIV do not develop symptoms for years, the data indicate that AIDS cases in women and children will continue to increase in the next decade.

Newborn HIV seroprevalence data is collected in a blinded survey of most infants born in the state as part of a national survey funded by the Centers for Disease Control. Blood collected for genetic disease screening is tested for HIV antibodies after identifying data are removed. Since HIV antibodies cross the placenta, the surveys are measuring HIV infection in the mothers, not the infants.

The surveys show an increase in HIV seroprevalence from 9.5 per 10,000 women in the fourth quarter of 1988 to 16.2 per 10,000 in the last quarter of 1990 ($p=0.03$). The rate of infection is 7.4 times higher in black than in white women (28.6 vs 3.9 per 10,000, $p<0.001$). The increase in seroprevalence from 1988 to 1990 was limited to black women (from 18.4 to 28.5 per 10,000, $p=0.04$, Figure 1). HIV infection was not limited to urban areas but was seen increasingly in rural areas of the state (Figures 2-4).

(Continued on page 2)

Figure 1: HIV seropositivity in childbearing women by quarter, 1988-1990



** Data not available

CORRECTIONS

We were so pleased with the new format of the Morbidity Report that we failed to proofread the last issue carefully enough, and two key errors were missed:

1) The abbreviated designations for the new Hib vaccines on the bottom of page 2 should read as follows:

- HbOC for HibTITER from Lederle/Praxis
- PRP-D for ProHIBit from Connaught
- PRP-OMP for PedvaxHIB from Merck

2) The data in the table of page 5 regarding survival time in AIDS patients by transmission category is incomplete and the text is incorrect. The table should read as follows:

Transmission Category	Median Survival Time
Homo/Bisexual	12.6
IVDU	12.8
HB/IVD	15.3
Heterosexual	18.9
Transfusion	7.7

The text should read "Within the major transmission risk groups, survival was longest for heterosexuals (18.9 months) and shortest for persons infected through transfusions (7.7 months)."

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HIV (Cont.)

These surveys are the first indicator that HIV infection is still increasing in Louisiana. AIDS case rates have increased yearly since the epidemic began, but AIDS rates are primarily indicative of infection many years ago, before AIDS prevention programs began. The information from these surveys can be used to plan AIDS prevention programs that target groups at higher risk for HIV infection.

Figure 2: HIV seropositivity in childbearing women by parish, first two quarters of 1989

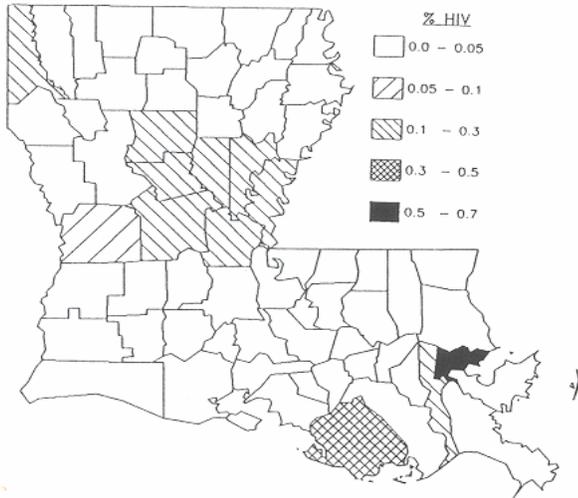


Figure 3: HIV seropositivity in childbearing women by parish, first two quarters of 1990

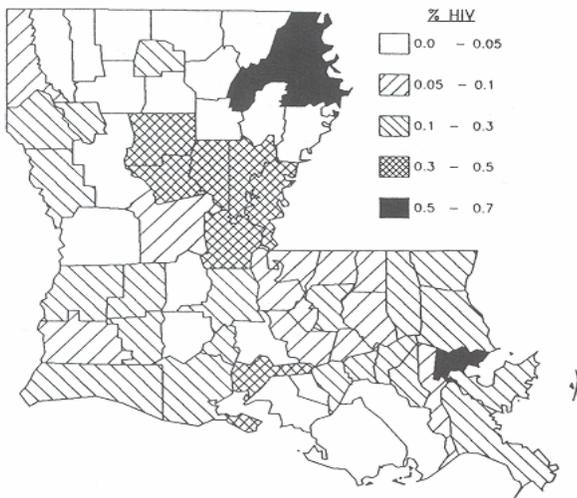
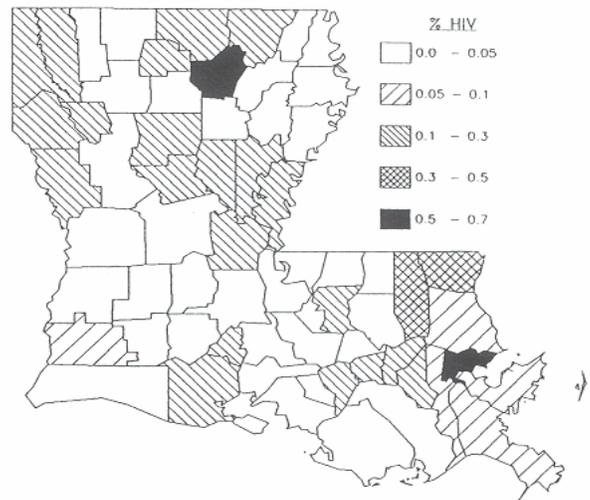


Figure 4: HIV seropositivity in childbearing women by parish, last two quarters of 1990



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The Louisiana Morbidity Report is published bimonthly by the 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, Epidemiology Section, Louisiana Department of Health and Hospitals, P.O. Box 60630, New Orleans, LA 70160.

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Hepatitis A Outbreak Associated with Day Care Centers

In March we were notified of three children from a single elementary school who had developed hepatitis A. Because of the concern about possible transmission of the disease in the school, nurses from the parish health unit investigated further.

Interviews with the families of these children and increased surveillance identified ten persons with confirmed and three persons with suspected hepatitis A in two neighboring towns who developed symptoms between February 1 and March 19. Of the 13 total cases, ten (77%) were children. Five of the 13 cases attended or worked in one of three different day care centers; one child attended two of these day care centers. Of the other cases, two were family members of children attending these day care centers, and the remaining six had had direct contact with other confirmed cases. All of the cases had contact with other cases in either daycare or household settings; no cases occurred in schoolchildren whose only contact to other cases was in school.

Immunoglobulin was provided to household members of all cases and all non-ill children and staff in the two smaller day care centers (serving 19 and six children, respectively). Parents of children in the other day care center, which served 187 children, were informed of the problem and referred to their private physician for consideration of immunoglobulin prophylaxis. No cases have been identified in the month since this prophylaxis was carried out.

This cluster demonstrates the way in which hepatitis A can be transmitted widely by contact within day care centers and contact between children attending day care centers and their parents, siblings, or playmates. Young children with hepatitis A frequently display no symptoms or only mild symptoms, so cases may be identified only in older family members. When these secondary cases occur in older children, a false impression may be given that transmission is occurring in other settings such as schools; in this outbreak, as in nearly all outbreaks, school transmission did not appear to occur. Prevention of spread of hepatitis A in this type of outbreak is best accomplished by halting transmission in the implicated day care center(s) through education about hygiene and provision of immunoglobulin to susceptible children and staff.

Infectious Diseases to Return from Middle East

The thousands of Louisiana residents who are now returning from Operation Desert Storm are likely to bring with them a variety of infectious diseases that are prevalent in the Middle East but unfamiliar to many of us. Below is a summary* of diseases that physicians can anticipate:

Diarrheal disease

Diarrheal diseases are common in any military operation in which water and food sanitation is poor. Early reports from Saudi Arabia indicate that as many as 10% of soldiers per week had been ill with diarrhea, and that the major causes were enterotoxigenic *E. coli* and *Shigella*. Many if not most of these pathogens are resistant to trimethoprim and sulfamethoxazole, antibiotics that have been used heavily in that area. Most patients with these infections can be treated with simple hydration and without antibiotic therapy; for those patients with invasive disease, norfloxacin or ciprofloxacin is recommended.

Leishmaniasis

Cutaneous leishmaniasis, known also as the Baghdad boil, is a parasitic skin infection that is common in Iraq, Kuwait, and Saudi Arabia. The infecting organism (*Leishmania major* or *Leishmania tropica*) is transmitted from desert rodents to humans through the bite of the sandfly. The disease develops 2-8 weeks after infection in the form of a painless erythematous nodule that enlarges and eventually ulcerates. Without treatment, the ulcer heals over a period of months, leaving a scar. Diagnosis can be made by culture or by microscopic examination of a biopsy or a scraping of the ulcer base. The standard treatment is sodium stibogluconate (available through the Centers for Disease Control), but ketoconazole has been recommended for Operation Desert Storm participants.

Typhoid fever

Typhoid fever is endemic throughout the Middle East. It should be suspected in servicemen who develop prolonged or recurrent high fever. The fever may be accompanied by diarrhea, although constipation is more common. Cough may be present, leading some physicians to make the diagnosis of pneumonia. Rose spots develop in 10-20% of patients at the end of the first week of illness. *Salmonella typhi* can be isolated from stool, blood, bone marrow, or the rose spots, but bone marrow cultures give the highest yield. Since many strains of this organism from the Middle East may be resistant to ampicillin, chloramphenicol, and TMP/SMX, physicians should check antibiotic sensitivities and may need to treat patients with quinolones or third-generation cephalosporins.

Sandfly fever

Sandfly fever is a viral illness transmitted by the sandfly *Phlebotomus papatasi* and characterized by the sudden onset of high fever, often accompanied by headache, retro-orbital pain, and myalgias. The disease is self-limited over 2-4 days and does not lead to significant complications or mortality.

Crimean-Congo hemorrhagic fever

Crimean-Congo hemorrhagic fever is a viral zoonosis that causes a frequently-fatal hemorrhagic illness in man. The illness is characterized by prolonged fever, sometimes with myalgias, sore throat, photophobia and diffuse abdominal pain. After 3-6 days a petechial rash and hemorrhagic manifestations are seen. The causative virus infects sheep, goats, and other farm animals throughout the Middle East and eastern Europe. The disease is transmitted to man through tick bites, although a recent report from Saudi Arabia suggested that slaughterhouse workers were at risk through direct exposure to animal carcasses. Since the disease can also be transmitted nosocomially during surgery, cases should be isolated and extreme caution should be taken in performing medical procedures. Although no drugs have been proven effective in treatment of this disease, ribavirin is recommended.

Schistosomiasis

Schistosomiasis is a parasitic infection caused by *Schistosoma mansoni* or *Schistosoma haematobium*, and acquired by swimming or wading in water contaminated by the cercarial forms of these organisms. The infection can cause a variety of symptoms, including a dermatitis (shortly after skin penetration), Katayama fever (caused by the deposition of eggs 4-6 weeks later), hematuria, and chronic liver disease (years after infection). Infection can be confirmed by identifying the eggs in stool or urine, and can be treated with praziquantel.

The Epidemiology Section would like case reports of any patients with these illnesses.

*Abstracted from Oldfield EC et al: Endemic Infectious Diseases of the Middle East. Reviews of Infectious Diseases 1991;13:S197-S217.

CDC Voice Information System - Hospital Infections

CDC's Hospital Infections Program has a new automated telephone system that can provide callers with information on hospital-acquired infections, including the guidelines for prevention and control of nosocomial infections, disinfection or sterilization procedures and nosocomial infection rates. Call (404) 332-4555.

Pre-Discharge Neonatal Screening Required

Effective April 1991, the Office of Public Health (OPH) requires hospitals with delivery units to screen all newborns for genetic diseases before discharge, regardless of the infant's length of stay in the hospital. This new regulation also requires rescreening for infants initially screened in the first 24 hours after birth, because cases may be missed by a screening test so soon after delivery. The repeat screening test should be completed no later than the third week of life.

The OPH Central Laboratory currently performs filter paper screening for hyperphenylalaninemia (PKU), congenital hypothyroidism, and in non-whites, sickle cell disease (screening of all newborns for sickle cell will be phased in soon). The majority of the newborn genetic screening in Louisiana is carried out by this laboratory. Testing large numbers of samples in one central laboratory helps maintain quality control and streamlines medical follow-up. For these reasons, use of the State Laboratory is recommended.

Reporting of positive neonatal screening results is required by state law, but those hospitals that send blood samples to the OPH Central Laboratory for testing need not send separate reports because positives are already known to the agency. For information contact Charles Meyers, Administrator of the Genetic Section at (504) 568-5070.

BULLETIN

Vibrio Illnesses in Summer Months

Vibrio organisms, except *Vibrio cholera*, are now considered to be part of the normal marine environment. Infections occur primarily in the warm months of the year and are usually accompanied by a history of consuming seafood or exposure to brackish water.

Cholera should be considered in the differential diagnosis of anyone presenting with a sudden onset of profuse, watery (rice) stools, vomiting, rapid dehydration, and acidosis. Physicians are requested to obtain stool specimens on suspected cases. Hospital laboratories are requested to use TCBS (thiosulfate citrate bile salts) agar when culturing specimens on patients with diarrhea.

Vibrio vulnificus is considered the most severe of the other vibrio infections. Symptoms include those of diarrhea, septicemia and localized wound infections. Individuals at risk for acquiring life-threatening disease associated with this organism include those with liver disease; compromised immune systems caused by cancer, chemotherapy, or prolonged steroid therapy; diabetes mellitus; AIDS and AIDS-related disorders; decreased stomach acidity and past splenectomy. Blood, stool or wound cultures should be obtained. Physicians are reminded to caution their at-risk patients to refrain from eating raw or insufficiently cooked seafood.

AIDS Update Pediatric AIDS

As of February 1991, 2,733 cases of pediatric AIDS (children less than 13 years of age) have been reported nationwide to the Centers for Disease Control. Of these, 44 cases have been reported from Louisiana, which ranks 9th among states in incidence of pediatric AIDS. Pediatric cases have increased every year since 1983, with 55% of the cases diagnosed in the past 2 years.

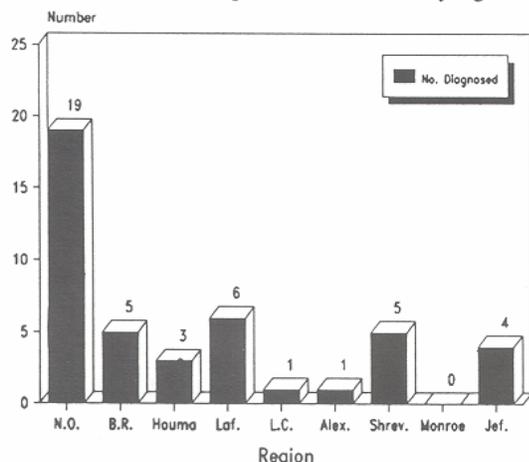
The majority (71%) of pediatric cases are under 2 years of age and most of these were infected perinatally. All children above age five became infected through contaminated blood or blood products. Approximately 50% of the cases reside in the Metro New Orleans area (Figure 1).

Following a pattern seen in the U.S. as a whole, Louisiana has a disproportionate racial distribution of pediatric AIDS cases with 27% of cases white and 73% of cases black or hispanic. The mode of transmission varies among racial groups (Figure 2). The proportion that are hemophilia patients or transfusion recipients is higher among whites; the proportion related to perinatal transmission is higher among blacks and hispanics. Many of the perinatally-acquired cases are associated with IV drug use by either the mother or her partner.

The pattern of opportunistic diseases in pediatric cases also differs from adult cases, with multiple bacterial infections and lymphoid interstitial pneumonitis occurring in highest frequency (Table 1).

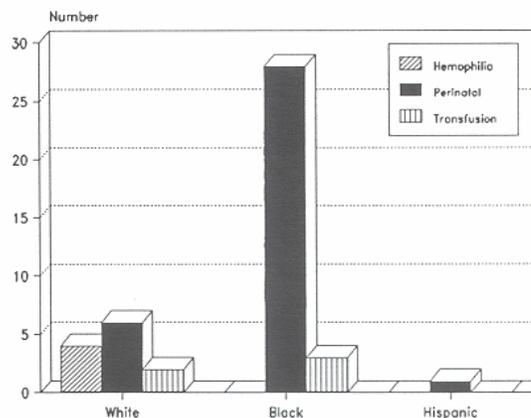
The 44 pediatric AIDS cases in Louisiana represents only a small portion of the true problem of HIV disease in children. Because of the varied clinical presentation of HIV infected children, some children die of HIV disease and some children have chronic illnesses without meeting the AIDS case definition.

Figure 1: Cumulative pediatric AIDS cases by region



04/02/91 - La. HIV/AIDS Services

Figure 2: Cumulative pediatric AIDS cases by race and risk group



04/91 - OPH/HIV/AIDS Services

Table 1: Frequency of opportunistic diseases in adult and pediatric AIDS cases

Disease	Pediatric	Adult
Multiple bacterial infections	17 (38%)	NA
Candidiasis, lung	3 (7%)	2%
Candidiasis, esophageal	4 (9%)	15%
Cryptococcal meningitis	1 (2%)	10%
Cryptosporidium	1 (2%)	4%
Cytomegalovirus	3 (3%)	3%
Dementia	9 (20%)	7%
Lymphoid Interstitial Pneumonitis	11 (34%)	NA
Mycobacterium avium	2 (5%)	7%
Mycobacterium, other atypical species	3 (7%)	2%
Pneumocystis carinii pneumonia	10 (23%)	56%
Wasting Syndrome	12 (27%)	16%

INFLUENZA, 1990-1991

Louisiana, like the rest of the United States, had a milder than usual influenza season in 1990-1991. During the period October 31, 1990 through March 31, 1991, the state identified 500 cases of flu or flu-like illnesses. Laboratory tests confirmed 17 cases of influenza type B. In the U.S. as a whole, type B predominated this year, with virus strains similar to B/Yamagata/16/88, a strain included in the 1990 vaccine.

Louisiana's Office of Public Health annually monitors influenza virus activity in order to detect and confirm the presence as well as the type of influenza circulating in all areas of the state. The tracking of influenza activity throughout the state is monitored by more than 18 physicians, 10 hospitals and 19 schools; all of which are participating voluntarily in the surveillance programs.

COMMUNICABLE DISEASE SURVEILLANCE, March - April 1991
PROVISIONAL DATA

Table 1. Selected diseases by region

DISEASE	HEALTH DEPARTMENT REGION										Mar-Apr 1991	Mar-Apr 1990	Cum 1991	Cum 1990	%Change
	1	2	3	4	5	6	7	8	9						
Vaccine-preventable															
Measles	Cases	0	0	0	0	0	0	0	0	0	0	9	0	10	-
Mumps	Cases	0	0	1	2	0	0	0	0	0	3	26	10	60	-83
Rubella	Cases	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Pertussis	Cases	0	0	0	0	0	0	0	0	0	0	1	2	1	+100
Sexually-transmitted															
Gonorrhea	Cases	925	279	118	301	133	118	358	218	237	2687	1881	4790	4262	+12
	Rate**	11.9	3.6	3.8	5.3	5.0	3.7	6.2	6.9	5.1	6.1	4.3	1.1	9.7	
Syphilis (P&S)	Cases	94	72	19	42	5	34	45	31	39	381	405	902	767	+18
	Rate**	1.2	0.9	0.6	0.7	0.2	1.1	0.7	1.0	0.8	0.9	0.9	2.1	1.8	
Enteric															
Campylobacter	Cases	1	3	2	1	0	2	1	0	2	12	22	13	35	-63
Hepatitis A	Cases	5	13	2	3	0	1	2	0	1	27	26	47	42	+12
	Rate*	0.6	1.7	0.6	0.5	-	0.3	0.3	-	0.2	0.6	0.6	1.1	0.9	
Salmonella	Cases	18	19	7	12	4	7	15	4	10	97	55	131	163	-20
	Rate*	2.3	2.5	2.3	2.1	1.5	2.2	2.6	1.3	2.1	2.2	1.3	3.0	3.7	
Shigella	Cases	4	0	1	5	0	0	7	3	3	23	19	38	53	-28
	Rate*	0.5	-	0.3	0.9	-	-	1.2	0.9	0.6	0.5	0.4	0.9	1.2	
Vibrio Cholera	Cases	0	0	0	1	0	0	0	0	0	1	0	1	0	-
Vibrio, other	Cases	1	0	0	2	0	0	0	0	2	5	4	7	6	+17
Other															
Hepatitis B	Cases	5	12	2	6	1	1	6	1	4	38	53	63	90	-30
	Rate*	0.6	1.6	0.6	1.1	0.4	0.3	1.0	0.3	0.9	0.9	1.2	1.4	2.0	
Meningitis/Bacteremia	Cases	0	0	1	0	0	0	2	0	0	3	18	10	35	-71
H. Influenza	Cases	0	0	1	0	0	0	2	0	0	3	18	10	35	-71
N. Mening.	Cases	0	1	1	2	0	0	0	0	1	5	10	12	19	-37
Tuberculosis	Cases	8	4	2	5	3	0	2	4	1	27	48	49	91	-46
	Rate*	1.0	0.5	0.6	0.9	1.1	-	0.3	1.3	0.2	0.6	1.1	1.1	2.0	

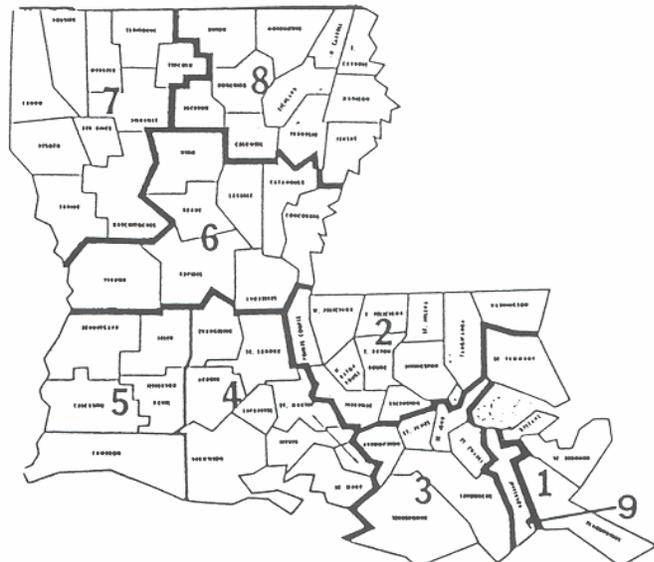
* Cases per 100,000 population
** Cases per 10,000 population

Table 2. Diseases of low frequency, 1991

Disease	Total to date
Blastomycosis	1
Brucellosis	0
Histoplasmosis	1
Lead Toxicity	2
Legionellosis	4
Leprosy	1
Lyme Disease	0
Malaria	3
Rocky Mountain Spotted Fever	0
Tetanus	0
Typhoid	1

Table 3. Animal rabies - March - April, 1991

Parish	Species	No. Cases
St. Tammany	Bat	1



Annual Summary

Non-Cholera-01 Vibrio Infections

During 1990, the Epidemiology Section received reports of 32 culture-confirmed *Vibrio* infections (case rate 0.7 per 100,000) caused by species other than cholera serovar-01. Race specific rates were over two times higher for whites (0.8 per 100,000) than for blacks (0.3). Sex-specific rates were similar for males (1.0) and females (0.9). Over 90% of the cases occurred in the adult age groups (Figure 1). Six species were identified: *V. fluvialis* (1), *V. hollisae* (3), *V. mimicus* (5), *V. cholerae non-01* (13), *V. parahaemolyticus* (7), and *V. vulnificus* (3). Of the three *V. vulnificus* cases, two cases were as a result of sustaining a wound while handling shellfish and the third case was associated with consumption of raw oysters. Cases were clustered mainly in the southeast areas of Louisiana (Figure 2).

Vibrio species occur naturally in saltwater or brackish water and are more numerous in warmer months. *Vibrio* infections result from ingestion of shellfish or other seafood or from direct contact with water. The consumption of shellfish can produce mild to severe gastrointestinal illness or a life-threatening primary septicemia. Direct exposure to water may result in wound infections ranging from mild to life-threatening. Pathogenicity and severity of *Vibrio* illness increases for susceptible individuals with underlying conditions such as cirrhosis or gastric illness.

Table: Frequency of non-cholera vibrio species, 1990

Species	Frequency
Fluvialis	1
Hollisae	3
Mimicus	5
Non-01	13
Parahaemolyticus	7
Vulnificus	3
Total	32

Figure 1: Cases of non-cholera vibrio infections by age group, 1990

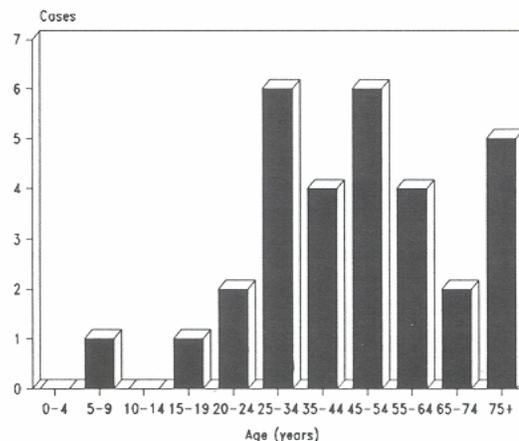


Figure 2: Distribution of non-cholera-01 vibrio cases by parish, 1990



LOUISIANA FACTS

Did you know that the last case of human rabies in Louisiana was reported from Orleans Parish in 1952?

Do you have any interesting facts 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.



CURRENT LIST OF REPORTABLE DISEASES/CONDITIONS

An outdated list of reportable diseases/conditions from the Epidemiology Section, Office of Public Health, was included in the physicians' annual renewal notice packet which was sent out in October 1990. We apologize for this error. Below is the correct list. Please make a note of the changes.

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

*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 on CDC 72.5 (f 5.2431) card

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

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