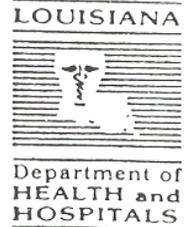




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GOVERNOR

Louisiana Morbidity Report

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SECRETARY

September-October 1993

Volume 4 Number 5

Early Outbreaks of Influenza A

In August the Office of Public Health investigated reports of influenza A among residents of two nursing homes and workers on a dredging barge.

Outbreak 1: During August 12-30, 79 (64%) of 124 residents of a nursing home had acute respiratory illness (Figure 1), of whom 40 had a documented temperature > 100 F (37.8 C) and cough. Onset of similar symptoms was reported by 20 of 100 staff members during the same period. Twenty-five ill residents were hospitalized; two had radiographic signs of pneumonia.

Influenza A was isolated from four nasopharyngeal culture. The strain was most closely related to the A/Beijing/32/92 (H3N2) strain circulating at the end of the 1992-3 influenza season and included in the 1993-4 vaccine.

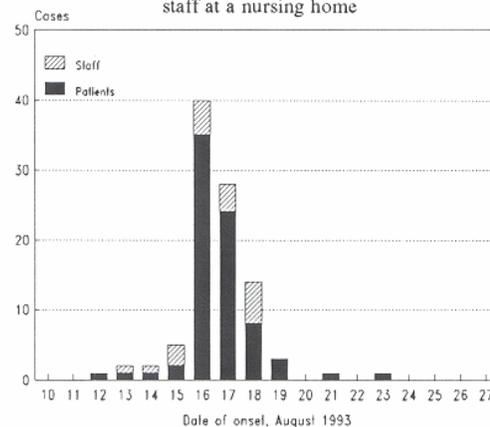
Outbreak 2: In late August another nursing home in southern Louisiana reported influenza-like illness in 26 (46%) of 57 residents; ten of 40 employees also reported illness. Of the 26 ill residents, 25 (96%) had cough, 24 (92%) had fever and 19 (73%) had headache. Two employees were hospitalized. Five of five paired acute and convalescent-phase serum specimens showed a fourfold or greater rise in antibody titer to influenza A.

Outbreak 3: On September 2 OPH received a report of acute respiratory illness among persons living and working on a dredging barge. Of 51 persons who had worked on the barge, 28 (55%) reported onset of illness consisting of cough

(89%), fever (82%), headache (82%), myalgias (82%) or sore throat (79%). Four were hospitalized. Influenza A was isolated from cultures obtained from five ill persons. Amantadine was administered for treatment to all ill persons and for prophylaxis to well persons remaining on the barge. Since the start of amantadine only one additional person became ill on the barge.

On September 1 OPH contacted 116 (34%) of the 343 nursing homes, nine hospital emergency departments and nine sentinel physicians in the state to look for other outbreaks of

Figure: Cases of influenza-like illness in patients and staff at a nursing home



influenza. Only twelve nursing homes reported cases of influenza-like illness and all of these had very low attack rates. The emergency departments and physicians reported low numbers of persons with similar illnesses.

Although sporadic cases of influenza may occur in the United States throughout the year, outbreaks of influenza during the summer are rare. No other states reported influenza outbreaks during August or September. The Advisory Committee on Immunization Practices (ACIP) recommends that vaccination campaigns begin as soon as vaccine is available if regional influenza activity is expected to begin earlier than December. Because of the early influenza activity in Louisiana, the Secretary of Health and Human Services, Dr. Donna Shalala, recommended on September 30 that high-risk persons get vaccinated early. Influenza vaccine has been available to high-risk persons in Parish Health Units since September 27. (Continued on page two)

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Early Outbreaks of Influenza A (Cont.)

Another measure for control of influenza A is the use of amantadine early in the illness or as prophylaxis. Recommendations for the use of amantadine are available by fax through the CDC Voice Information System, telephone (404) 332-4555.

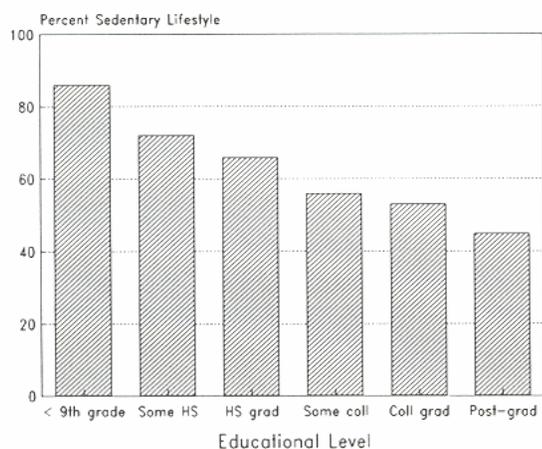
Sedentary Lifestyle in Louisiana

Sedentary lifestyle is an important risk factor for cardiovascular disease. The frequency of this risk factor has been measured in Louisiana using the Behavioral Risk Factor Surveillance System (BRFSS), a telephone survey that assesses the frequency of many risk factors for chronic diseases. In this survey, sedentary lifestyle is defined as physical activity for less than 20 minutes per session and/or activity for less than three times per week during the past month.

Of the 1,662 persons in Louisiana surveyed in 1992, 66% led a sedentary lifestyle. This percentage did not differ substantially by sex, age, or race. However, sedentary lifestyle was more common in persons with lower education; 86% of those who had less than a 9th grade education had a sedentary lifestyle, compared to only 45% of those with a postgraduate college education.

This survey is subject to some bias. In particular, it may not completely account for the physical activity associated with low-income occupations. Nonetheless, it suggests that many Louisiana citizens - particularly those with low educational level - are at increased risk for cardiovascular disease because of low physical activity. The data indicate the need to increase the awareness of the benefits of physical activity across all population groups in Louisiana.

Figure: Percent of Louisiana residents with sedentary lifestyle as reported by the Behavior Risk Factor Surveillance System



Tuberculosis Legislation

During the 1993 Legislative Session, three bills were passed concerning issues in tuberculosis care and control. These bills became Acts 180, 190 and 289. The state's Sanitary Code is currently being revised and a Notice of Intent will be published in the Louisiana Register.

The new laws require that students in the healthcare professions and volunteers who care for patients in healthcare institutions be tested for tuberculosis. Hospitals and nursing homes that care for patients with infectious tuberculosis must care for them in rooms with proper air handling to avoid the spread of the disease to the staff and other patients. Tuberculosis testing of prison and jail inmates is required to avoid spreading the disease within the prisons and jails.

Patients infected with HIV are to be tested for tuberculosis as part of their care for HIV infection. This is a national standard of care for HIV-infected individuals because they are at high risk of becoming ill with tuberculosis if they are infected. The laws also detail the process of isolation or quarantine for tuberculosis so that the steps in this process will be clearer to those who become involved. Isolation or quarantine of individuals who won't comply with tuberculosis treatment and continue to expose others to infection is not a new process, but has been clarified further to provide a reference to the legal steps necessary.

Questions should be directed to Dr. Meg Lawrence, Medical Director, Tuberculosis Control, at 504-568-5015.

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Vibrio Cholerae Serogroup 0139: A New Toxigenic Serogroup

In October 1992, an epidemic of cholera-like illness occurred in Madras, India. In early 1993, similar strains of toxigenic non-01 *V. cholerae* were isolated from epidemics that began in Calcutta, India and in Dhaka, Bangladesh. Strains of *V. cholerae* isolated produced cholera toxin, but did not agglutinate in any of the 138 known typing antisera. Antiserum was produced in rabbits and the strains were determined to represent a new serogroup, 0139. Although the full extent of the epidemic is unclear, this strain is now associated with epidemic cholera-like illness and is rapidly replacing *V. cholerae* 01 strains in the affected areas.

This shift is unexpected. Until now, only toxigenic *V. cholerae* serogroup 01 was believed to be capable of causing epidemic cholera. The other 137 serogroups, collectively called the "non-01" serogroups, were not thought to have epidemic potential, and included only organisms that cause sporadic diarrheal and extraintestinal illness or occasional limited outbreaks.

The newly emerging 0139 serogroup has already been recognized in the United States. In February 1993, the first imported case of *V. cholerae* 0139 infection occurred in a California resident who had traveled to Hyderabad, India in January. In the U.S., widespread transmission of *V. cholerae* 0139 is extremely unlikely because the vast majority of people have access to safe water and proper sewage disposal. However, as with toxigenic *V. cholerae* 01, focal outbreaks might occur following introduction in areas with poor water supplies and inadequate sanitation.

One notable epidemiologic difference is that the new epidemics are affecting persons of all ages in an area where most of the population except for young children has acquired immunity to *V. cholerae* 01. This suggests that prior immunity to 01 does not protect against 0139 infections. It also suggests that existing and experimental cholera vaccines will have no utility against this strain.

Physicians should continue to consider cholera in the differential diagnosis of any severe diarrheal illness, to specifically request *V. cholerae* cultures from laboratories when cholera is suspected, and to use appropriate rehydration therapy. Hospital laboratories should use TCBS agar on suspected cases and submit cultures to the state laboratory for further analysis. All cases should be reported to the Epidemiology Section at 504-568-5005 or 1-800-256-2748.

Child Care Health Consultant Seminar

The Office of Public Health has been working with day care centers, child care advocates, the Department of Social Services, Bureau of Licensing, legislators, and concerned citizens to improve the health and safety of children in out-of-home child care settings. There are over 1700 centers in operation now and thousands more family day care homes. There is a shortage of trained professionals with credentials and experience in the field and a 25% turnover rate among day care center staff. As part of our effort to promote quality child care, OPH will be conducting a "Train the Trainer" program for health care professionals. The training will focus on child care health and safety consultation issues. Over ninety participants will be trained from all parts of the state. Dr. George Sterne and Dr. Keith Perrin, two New Orleans pediatricians have been working closely with OPH and are donating their time to assisting OPH in promoting the health and well-being of Louisiana's children.

The American Academy of Pediatrics is recommending that pediatricians should work to improve the quality of child care in their communities by serving as consultants to and as advocates for early childhood education programs. Interested pediatricians may contact Dr. George Sterne at 504-889-0880 or 504-897-4242 for more information.

New Combination Vaccine Approved

Earlier this year, the Food and Drug Administration (FDA) approved a new product which combines vaccines for diphtheria, tetanus and pertussis (DTP) with a conjugated vaccine for *Haemophilus influenzae* B (Hib). This new vaccine, called Tetramune, is approved for use in infants and young children in place of separate DTP and Hib vaccinations. Tetramune has been shown to provide equal or higher antibody responses than DTP and Hib given separately. The new vaccine is manufactured by Lederle-Praxis and is available to private medical providers currently. It will be available through the public health clinics when a federal purchase contract is established through the CDC.

This combination vaccine is recommended for use in place of DTP and Hib vaccines at the 2, 4, 6, and 15 month visits and for the preschool booster at 4-6 years of age. The Standards for Pediatric Immunization Practices approved by the U.S. Public Health Service and the American Academy of Pediatrics recommend that providers administer simultaneously all vaccine doses for which a child is eligible at the time of each visit. This vaccine will help eliminate one injection at each immunization visit. This should make life a little more pleasant for babies, parents and providers alike.

Survey of Hepatitis B Vaccination of Southeast Asian Children

Children of southeast asian descent are at particularly high risk for infection with hepatitis B. In 1991, the Office of Public Health (OPH) carried out a serosurvey of Vietnamese children in a neighborhood in New Orleans to assess the percent of children that were infected by horizontal transmission in early childhood. Forty-five percent of children age 10-12 born to mothers who were not carriers of hepatitis B in this study were found to have been exposed to hepatitis B (Louisiana Morbidity Report Nov-Dec 1991). Because of this risk, a special program to immunize all of these children with hepatitis B vaccine was begun throughout the state in November 1991. The recommended vaccination schedule was birth, two months, and six months. Through the program, infants of southeast asian descent were provided hepatitis B vaccine in public clinics. The Office of Public Health also worked with hospitals to provide the first dose of vaccine and private physicians to provide doses of vaccine to infants not seen in public clinics. [Note: routine hepatitis B vaccination was expanded to include all infants after July 1, 1992.] In the spring of 1993, a survey was carried out throughout the state to see how successful the vaccination program was in vaccinating southeast asian infants born between November 1991 and August 1992.

One hundred seventy-five children of southeast asian descent were identified by a search of computerized birth certificate records. Of these, 121 were located and their immunization records abstracted from parents and/or medical providers. At the time of the survey, the children ranged in age from 8 months to 17 months. Eighty-six (61%) lived in Orleans, Jefferson, or Plaquemines parishes. Of these, 46 (38%) lived in Orleans Parish, of which 30 (25%) lived in the neighborhood in which the 1991 survey was done. Only ten children lived in households that had been included in this survey.

The percent of children who had received hepatitis B vaccine decreased from 77% for the first dose to 43% for the third dose (Figure). Forty-five percent of all children received the first dose of HBV in the hospital in the three days after birth. For all three doses, children were more likely to have received DTP vaccine than HBV vaccine. Children were more likely to have received three doses of HBV if they lived in Plaquemines Parish (72%) or Jefferson Parish (52%) than Orleans Parish (39%). Surprisingly, only 33% of children who lived in the neighborhood of the 1991 had received three doses of HBV; by contrast, 75% had received three doses of DTP.

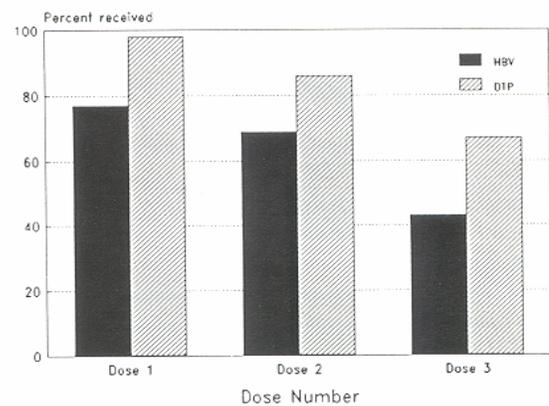
Seven (6%) of the 121 children were born to mothers who were carriers of hepatitis B surface antigen. Six of these children were appropriately vaccinated with hepatitis B immune globulin and the first dose of HBV in the first day of life;

the seventh was apparently not identified and vaccinated with HBV until he was six weeks old.

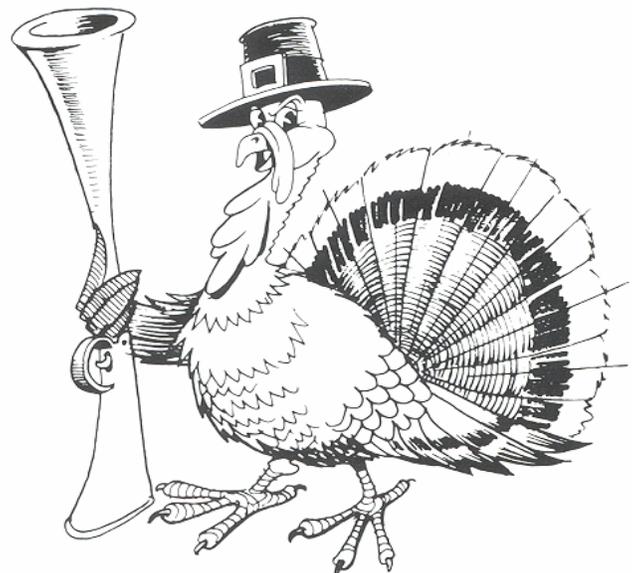
Comment:

The comparison of the infants receiving three doses of DTP vs three doses of HBV suggests that health care providers may not recognize the priority of immunization with HBV, even in children coming for vaccination. The study done in New Orleans in 1991 showed the extremely high risk faced by southeast asian children. Although universal immunization of all infants with HBV is now in effect, medical providers should pay particular attention to immunizing infants born to mothers from high risk areas of the world.

Figure: Percent of 121 Southeast Asian infants receiving hepatitis B vaccine (HBV) and DTP vaccine



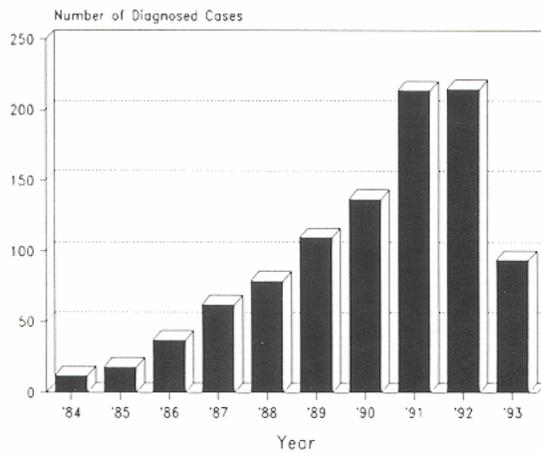
HAPPY THANKSGIVING



AIDS Update AIDS injecting Drug Users

As of June 1993, Louisiana's Office of Public Health received reports on a cumulative total of 968 AIDS cases among injecting drug users (IDU). The number of yearly diagnosed cases attributed to injecting drug use has steadily increased from 1985 to 1991 with a maximum number of 215 cases diagnosed in 1992 (Figure 1).

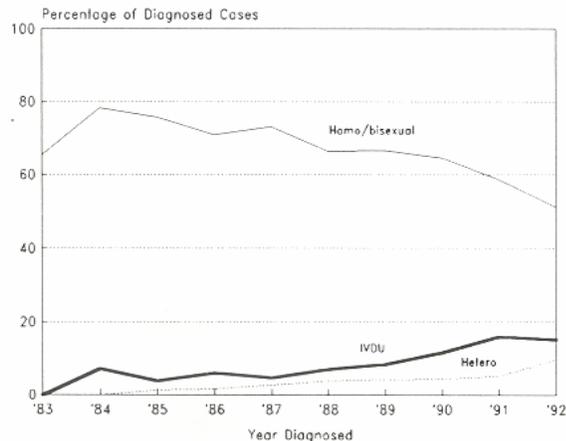
Figure 1: Trends in Louisiana's IDU AIDS Cases



The percentage of cases in IDU has increased during the last decade as compared to homosexual and heterosexual transmission categories (Figure 2). In 1991, injecting drug use represented 24% of the diagnosed AIDS cases.

Forty-seven percent of cumulative cases were diagnosed in the New Orleans region, 19% in the Baton Rouge region, and 8% in the Shreveport region (Table 1). 11% of Louisiana's IDU cases were female whereas 19% of national IDU cases were female.

Figure 2: Trends in transmission groups



Of the cumulative IDU cases in Louisiana, 42% were diagnosed with pneumocystis carinii pneumonia, 22% were diagnosed with wasting syndrome, and 20% were diagnosed with esophageal candidiasis.

Ethnic breakdowns by gender for Louisiana and national IDU cases differed. Of the Louisiana female IDU cases, 70% were African American compared to 57% of national female IDU cases. 48% of Louisiana male IDU cases were Caucasian whereas 30% of national male IDU cases were Caucasian.

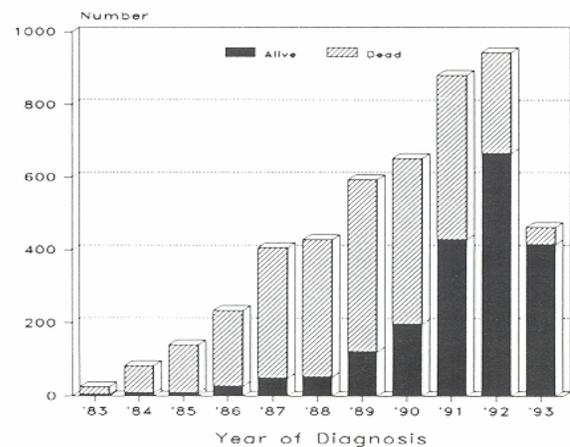
With increasing numbers of HIV infected IDU's in the state, an increase in the number of heterosexual transmission and maternal transmission to newborns is to be expected. Prevention of future infections in IDU's may be achieved through drug abuse prevention, drug treatment, and education about sterile needle use for IDU's not in treatment programs.

Table: Regional Breakdown of cumulative AIDS cases* attributed to injecting drug use

Region	Number	%
New Orleans (1)	465	47
Baton Rouge (2)	191	19
Houma (3)	33	3
Lafayette (4)	61	6
Lake Charles (5)	28	3
Alexandria (6)	39	4
Shreveport (7)	81	8
Monroe (8)	35	4
Jefferson (9)	66	7
Total	999	7

* As of September 30, 1993

AIDS CASE TRENDS



LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE,
JULY - AUGUST, 1993
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	Jul-Aug 1993	Jul-Aug 1992	Cum 1993	Cum 1992	% Chg	
<u>Vaccine-preventable</u>															
Measles	0	0	0	0	0	0	0	0	0	0	0	1	0	--	
Mumps	0	2	0	1	0	0	1	0	0	4	3	15	20	-25	
Rubella	0	0	0	0	0	0	0	0	0	0	0	1	0	--	
Pertussis	0	0	0	0	0	0	0	1	1	2	3	7	6	+17	
<u>Sexually-transmitted</u>															
AIDS	Cases	54	27	2	5	6	7	12	5	15	133	135	744	552	+35
	Rate ¹	7.4	3.6	0.7	0.9	2.3	2.2	2.2	1.6	3.3	3.2	3.2	17.7	13.1	
Gonorrhea	Cases	976	250	80	188	82	153	273	131	158	2291	2576	8913	9411	-5.3
	Rate ²	13.3	3.3	2.6	3.4	3.2	4.9	4.9	4.3	3.5	4.6	5.2	17.8	18.8	
Syphilis(P&S)	Cases	74	146	23	47	8	22	60	54	22	456	471	1769	1812	-2.4
	Rate ²	1.0	1.9	0.8	0.9	0.3	0.7	1.1	1.8	0.5	0.9	0.9	3.6	3.6	
<u>Enteric</u>															
<i>Campylobacter</i>		5	3	6	3	0	6	3	1	6	35	51	112	154	-27
Hepatitis A	Cases	7	0	0	2	0	0	2	2	2	15	72	57	159	-64
	Rate ¹	1.0	--	--	0.4	--	--	0.4	0.7	0.4	0.4	1.7	1.4	3.8	
<i>Salmonella</i>	Cases	13	5	8	11	14	19	12	5	12	113	114	250	294	
	Rate ¹	1.8	0.7	2.6	2.0	5.4	6.1	2.2	1.6	2.7	2.7	2.7	5.9	7.0	
<i>Shigella</i>	Cases	7	5	15	12	10	37	10	3	6	113	14	272	60	+353
	Rate ¹	1.0	0.7	5.0	2.2	3.9	11.9	1.8	1.0	1.3	2.7	0.3	6.5	1.4	
<i>Vibrio cholera</i>		1	0	0	0	0	0	0	0	0	1	0	1	0	--
<i>Vibrio, other</i>		0	2	2	0	0	0	0	0	3	8	5	22	21	+5
<u>Other</u>															
Hepatitis B	Cases	6	10	1	10	2	2	9	1	4	46	18	156	121	+29
	Rate ¹	0.8	1.3	0.3	1.8	0.8	0.6	1.6	0.3	0.9	1.1	0.4	3.7	2.9	
Meningitis/Bacteremia															
<i>H. influenzae</i>		0	0	0	0	0	0	0	0	0	0	0	3	0	--
<i>N. meningitidis</i>		1	0	0	0	0	0	2	0	1	4	2	29	23	+26
Tuberculosis	Cases	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--
	Rate ¹	--	--	--	--	--	--	--	--	--	--	--	--	--	

1 = Cases per 100,000

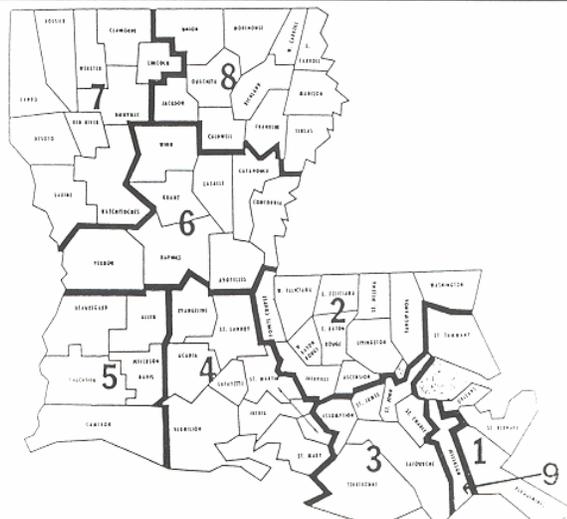
2 = Cases per 10,000

Table 2. Diseases of Low Frequency

Disease	Total to Date
Blastomycosis	6
Brucellosis	0
Histoplasmosis	0
Lead Toxicity	0
Legionellosis	2
Lyme Disease	1
Malaria	2
Rocky Mountain Spotted Fever	1
Tetanus	0
Typhoid	1

Table 3. Animal Rabies (Jul-Aug, 1993)

Parish	No. Cases	Species
Ouachita	1	Fox
Bossier	1	



Annual Summary Shigellosis 1992

In 1992, there were 192 cases of shigellosis reported to the Epidemiology Section. The overall state case rate was 4.5 per 100,000. *Shigella* cases have continued on a gradual decline with a decrease of nearly 7% from 1991 (Figure 1). Sex-specific rates were similar between males and females (4.0 vs 4.8 per 100,000) and race-specific rates were twice as high for blacks than for whites (4.1 vs 2.0 per 100,000). Age-sex specific rates were highest among the 0-4 and 5-9 year age groups for both males and females. A second peak occurred within the 20-34 year age groups with female predilection. Six parishes with the highest case rates per 100,000 were: Bienville (19), Terrebonne (14), Vernon (11), St. James (10), Sabine (9), St. John (8, Figure 2).

Comment:

Despite the decline in cases from previous years, there are early indications from the 1993 surveillance data which show a significant increase of shigellosis in Louisiana. Since the only natural hosts for *Shigella* are humans and a few nonhuman primates, more than 99% of all *Shigella* isolates in the United States are from human sources. Thus, the route of transmission is inevitably traceable to an infected human. The route can be further described as a circle from the stool to the mouth and back to the stool again, and indeed, shigellosis is most frequently spread by person-to-person contact. Shigellosis should be suspect when a febrile, bloody, mucoid diarrhea or dysentery syndrome occurs. The definitive diagnosis of shigellosis depends on isolation of the organism from a stool specimen. Early treatment can markedly shorten the duration and intensity of symptoms in severely ill patients.

Figure 1: Shigellosis cases by year, 1983-1992

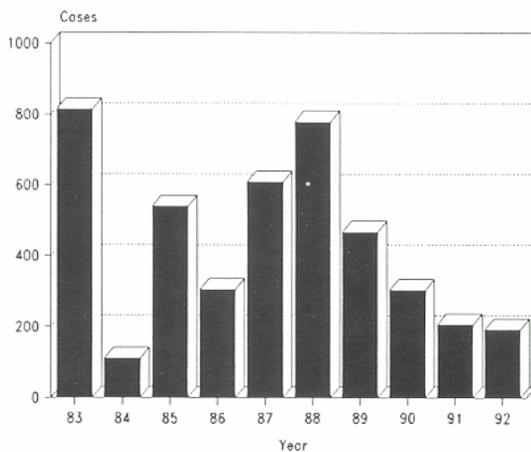
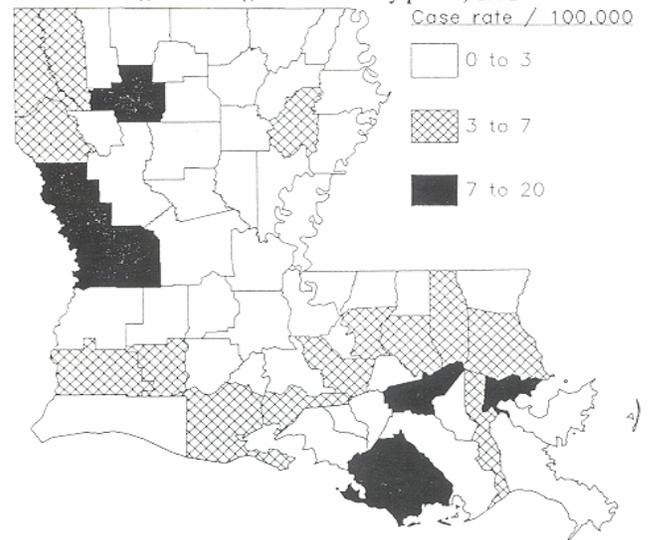


Figure 2: Shigellosis cases by parish, 1992



LOUISIANA FACTS

Between 1765 and 1766, two epidemics resembling yellow fever occurred. Yellow fever is believed to have existed practically every year up to the date of American domination in 1803. Because of the persisting epidemics of the disease, Governor Claiborne in 1804 urged the Legislative Council to consider a scheme of city planning suggested by the President of the United States, Thomas Jefferson. The latter observed that yellow fever prevailed in congested areas, particularly on the water side. He advised that New Orleans be developed on a checker board plan, the white squares to be built up as the city progressed, the black squares to be planted with trees. (Excerpted from the "Health and Sanitary Survey of the City of New Orleans, 1918-1919.")

LIST OF REPORTABLE DISEASES/CONDITIONS

	REPORTABLE DISEASES		OTHER REPORTABLE CONDITIONS
Acquired Immune Deficiency Syndrome (AIDS)	Granuloma Inguinale**	Plague*	Cancer
Amebiasis	Hepatitis (Specify type)	Poliomyelitis	Complications of abortion
Anthrax	Herpes (genital/neonatal)**	Psittacosis	Congenital hypothyroidism
Aseptic meningitis	Human Immuno-deficiency Virus (HIV)	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)	
Gonorrhea**	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 FAX # 504-568-3206

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