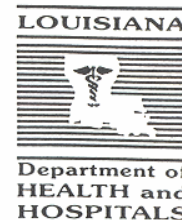




Edwin W. Edwards
GOVERNOR

Louisiana Morbidity Report

Louisiana Office of Public Health - Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 (504) 568-5005



Rose V. Forrest
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July-August 1994

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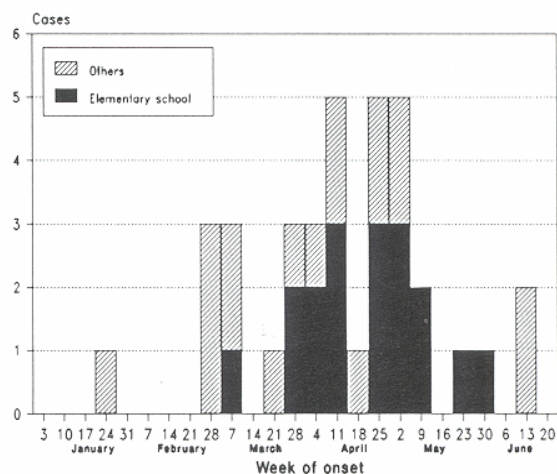
Hepatitis A Among Elementary School Students

During the period February-June, 1994, OPH received reports of 35 cases of hepatitis A in Calcasieu and Cameron parishes (Figure 1). Interviews with case-patients did not uncover a method of transmission to explain a majority of cases. Eighteen (51%) of these cases occurred in children attending a single elementary school in Sulphur (Figure 1). Although it is thought that person-to-person transmission is unusual in school-age children who are toilet-trained, the lack of another explanation for transmission continuing within the school raised the possibility of person-to-person transmission within that school. During the week of April 25, 1994 immune globulin was given to children in that school in the six classes in grades K-2 with at least one case of hepatitis A.

The school is one of six elementary schools in Sulphur (Calcasieu parish), and has classes in grades pre-K through 5. The attack rate for hepatitis A in this school was 28.5/1000 students; the school-specific attack rates for the other schools in Sulphur ranged from 0 to 3.2/1000 students.

To investigate the possibility of person-to-person transmission in the school with the high attack rate, and to rule out other methods of transmission, on June 13-14, 1994 a team from OPH interviewed children from the six classes in the school in grades K through 2 with at least one case of hepatitis A. Blood samples were also collected from these

Figure: Cases of hepatitis A by date of onset, January-June 1994



children and teachers for testing for total and IgM antibody to hepatitis A.

Of the 137 students in these classes, 91 (66%) attended our clinic. Four new cases among students were identified by our blood testing. Having a sibling in a mother's day out program was significantly related to illness, although only two (13%) of the 15 ill persons answering this question had siblings in such a program. Having a sibling in other kinds of childcare programs was not significantly associated with illness. No other exposures in school or in the community were associated with illness. The nine cafeteria workers in the school were tested for evidence of recent hepatitis A infection, and all nine were negative.

Each of the six classes included in the clinic had one or two cases, except for one class, which had eight cases. The teacher of that class had a negative blood test for both total and IgM antibodies to hepatitis A. Compared to students in that class who were not cases, students in the class who were cases did not report more frequent contact with previous cases. Cases in that class also were evenly distributed into the three reading groups in that class.

From our investigation so far we conclude that although this outbreak appeared to be spreading throughout the Sulphur community, the focus of illness at single school, especially in a single class, suggests that the school was an important site for transmission of illness. The most likely explanation for the epidemic appears to be person-to-person transmission in school, (Continued on page two)

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Hepatitis A Among Elementary School Students (Cont.)

although this would be unusual in toilet-trained children of this age. The fact that cases did not occur in other classes after the administration of gamma globulin to the classes with cases raises the possibility that the gamma globulin may have interrupted spread of this outbreak. OPH is continuing to investigate this outbreak.

Chemicals in Louisiana Fish & Shellfish

In some Louisiana waters, fish and shellfish contain chemical contaminants. Ingestion of contaminated fish or seafood may be harmful if too much is eaten over a lifetime. Fish contamination data is provided to the Louisiana Office of Public Health's Section of Environmental Epidemiology (SEE) by various state agencies. SEE evaluates the amount of chemicals in fish to determine the amount that is safe to consume and issues an advisory when unacceptable levels of chemical contaminants have been found.

Currently, there are 12 fishing advisories in specific Louisiana waterways located in the following parishes: Calcasieu, Caldwell, Cameron, East Baton Rouge, Franklin, Madison, Morehouse, Natchitoches, Ouachita, Richland, St. Tammany, Tensas and Union. A brochure available at parish health units and through SEE lists the advisories and recommendations on how to prepare seafood to reduce human exposure.

In order to determine if an advisory is needed, SEE estimates the absorbed dose from fillet samples using the U.S. Environmental Protection Agency (EPA) risk assessment methodology. If the estimated dose exceeds safe levels, a site-specific evaluation is made by LOPH and SEE. A consumption advisory is issued if the evaluation indicates that human exposure is occurring at an elevated dose.

When new sampling data becomes available, the advisory is reviewed and maintained, expanded, or lifted. For the advisory to be lifted, the calculated dose must be at acceptable levels for a minimum of two years. A news release is distributed to inform the public of any new or changed advisories.

Health Advice and Guidelines

The contaminants that are found in Louisiana fish can be grouped into two categories: Organic chemicals (e.g. PCB, Dioxin, and DDT) and metals (e.g. mercury, arsenic, and lead). Organic contaminants are concentrated in the fatty tissues of fish; however, metals are distributed relatively evenly throughout the fish.

Fish are a low-fat, high protein, food source. Therefore, the health benefits from eating fish must be weighed against the risks of ingesting contaminated fish. The following advice on preparing fish may be given to reduce the amount of contamination present, and therefore reduce the risk.

- Remove all organs and skin. Organs and skin can be high in fat and organic chemicals.
- Trim off the fatty areas shown in black on the drawing on page three. Organic contaminants concentrate in the fat.
- Bake or broil skinned, trimmed fish on a rack or grill so fat drips off. Throw away drippings.
- When fish is poached or fried, throw away the broth or oil.
- Keep smaller fish to eat. Usually, younger smaller fish are less contaminated than larger older fish.
- Eat fewer predator fish such as bass, gar or pickerel. Contaminants will bioaccumulate in predator fish.
- Vary diet by eating a variety of fish, seafood, meat and poultry from different sources.

Report suspected chemical contamination in store-bought or caught fish and shellfish to LOPH, Seafood Sanitation at (504) 568-8227 or (800) 256-4609. Questions regarding oysters should be directed to the Oyster Water Program at (504) 896-1378 or (800) 256-2775. For questions about the fish advisories call LOPH, Environmental Epidemiology at (504) 568-8537 or (800)256-4609.

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Assistant Secretary, OPH

Eric Baumgartner, MD MPH

State Epidemiologist

Louise McFarland, DrPH

Editors

Thomas Farley, MD MPH
Karen Kelso, RNC MS

Production Manager

Ethel Davis, CST

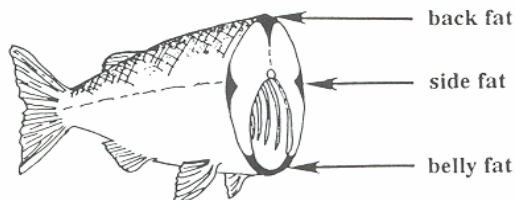
Contributors

Susan Wilson, BSN
Christopher Murrill, MPH
Mel Kohn, MD
Laura Fadil, MPH
Meg Lawrence, MD MPH

The following chart lists the current fishing advisories in Louisiana.

3-22-94

BANS/ADVISORIES	LOCATION	POLLUTANT
Information on fish consumption	Calcasieu Estuary	HCb, HCBd, PCB
Fish & shellfish consumption limits; swimming & water sports & contact with bottom sediments	Bayou d'Inde	HCb, HCBd, PCBs
Sediment contamination chemicals	Bayou Olsen at Lake Charles	chloroform, misc.
No fish consumption/Sediment contamination	Capitol Lake in Baton Rouge	PCBs
Fish consumption of no more than 2 meals a month, water contact sports swimming arsenic.	Devil's Swamp, Devil's Swamp Lake and Bayou Baton Rouge northwest of Baton Rouge	HCb, HCBd, PCBs, mercury, lead, Superfund site.
No fish sale & consumption	Sibley Lake at Natchitoches	PCBs
No Bass fish consumption; Other fish species no more than 2 meals a month	Ouachita River, LA/AR border to lock at Columbia	Mercury
No Crappie fish consumption; other fish species no more than 2 meals per month	Bayou Lafourche from Highway 80 Overpass downstream to Interstate 20	Dioxin
Fish consumption of two meals or less per month of small mouth buffalo; no limit of consumption on other species	Lake Irwin from one mile upstream of the Morehouse Parish Road Overpass downstream to the weir.	Dioxin
No fish consumption	Wham brake near Swartz	Dioxin
No fish consumption, swimming, sediment Site.	Bayou Bonfouca, Slidell contact	Creosote, Superfund
No fish consumption	Tensas River	DDT, Toxaphene



*Trim away these fatty areas.

Rabies Update

As of July 20, 1994, a total of 58 cases of rabies in animals has been reported in Louisiana. Except for one cat from Caddo parish and two dogs, one each from Morehouse and Rapides parishes, all cases have been in wild animals. The majority of cases are still being reported from southwestern Louisiana. Laboratory specimens forwarded to the Centers for Disease Control for additional studies identified the species of rabies as skunk rabies. Some of the increase in reported cases are as a result of the inclusion of positive test results obtained by the LSU Veterinary School in Baton Rouge, as well as, the increase in requested specimen testing. For more information contact the Epidemiology Section.

Tuberculosis in 1993

In 1993 there were 368 cases of tuberculosis reported, for a case rate of 8.7 per 100,000. The case rate for tuberculosis is virtually unchanged since 1984, when the decline seen in the previous thirty years stopped (Figure 1). As in previous years, case rates per 100,000 were higher in blacks than whites (15.6 vs 4.9) and higher in men than women (13.2 vs 4.4). The age groups with the most rapidly increasing rates were 25-34 and 35-44 years (Figure 2). Among larger parishes, the highest case rates were seen in Orleans and Ouachita parishes (24 and 19 cases per 100,000). In Orleans and Jefferson Parishes, where the HIV rates are the highest, cases of tuberculosis increased 55% from 1987 to 1993 (Figure 3).

HIV results were available for 211 (57%) of the 368 cases; of these, 42 (20%) were positive. The HIV-positivity was higher for persons in Orleans and Jefferson Parishes (33/70, 47%). By applying estimates of HIV positivity to those for whom test results are unknown, we estimate that the total number of HIV-infected persons with tuberculosis in the state

Figure 1: Rate of tuberculosis in U.S. and Louisiana, 1960-1993

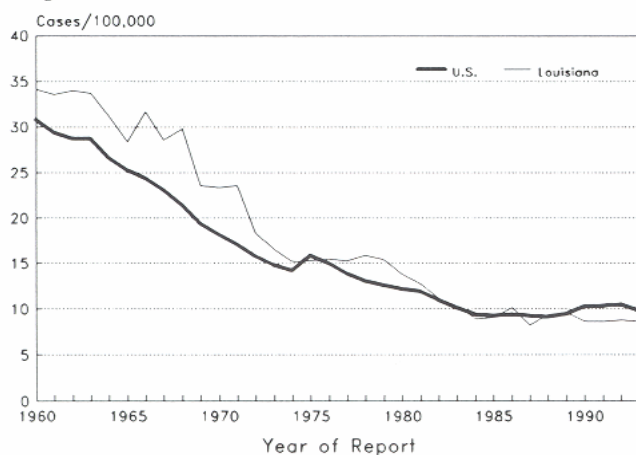
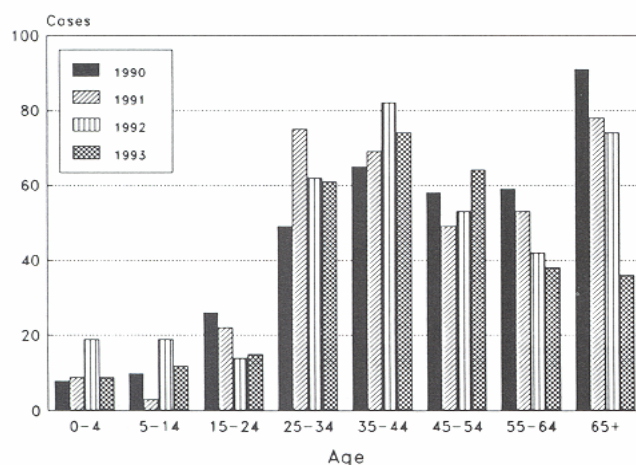


Figure 2: Cases of tuberculosis by age, 1990-1993



in 1993 was 77, approximately the same as in 1992 (Table 1).

For the first time in 1993, lifestyle risk factors for tuberculosis were recorded on cases. Of those for whom information was available, 5 (3%) of 191 were injecting drug users, 9 (3%) of 311 were homeless, and 7 (2%) of 360 had been incarcerated in the previous 12 months.

Three cases reported in 1993 had primary multi-drug resistance (two resistant to INH and Rifampin, one resistant to INH and Ethambutol).

Comment:

There has been an increase in tuberculosis in many areas of the country, primarily as a result of HIV infection but also as a result of deterioration of tuberculosis control programs. In Louisiana, case rates for the disease are level, but there is an underlying shift from older HIV-negative persons to younger HIV-positive persons. Outbreaks of multidrug-resistant tuberculosis seen in other areas have not occurred in Louisiana so far, however, a small number of cases of primary and secondary (after treatment) drug resistance occur every year. Efforts are underway to improve compliance of persons with drug-sensitive tuberculosis to limit the development of these resistant strains. These efforts focus on the use of directly observed therapy supervised by outreach workers.

Figure 3: Cases of tuberculosis in Orleans and Jefferson Parishes, 1983-1993

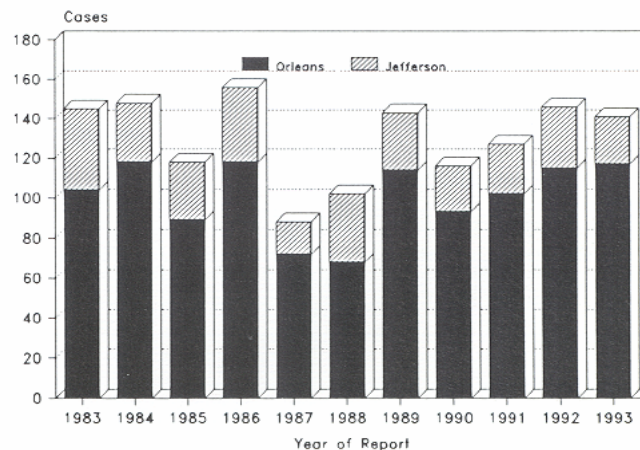


Table 1. HIV status of patients reported with tuberculosis, 1991-1993, with estimates applied to cases of unknown HIV status

	1991	1992	1993
Total Cases	367	373	368
HIV status known	202	206	211
HIV positive	48	49	42
% pos. (of known status)	24%	29%	20%
% pos. (of total, estimated)	19%	22%	21%
Number of HIV pos. (estimated)	71	81	77

AIDS UPDATE: Trends in Modes of transmission by Ethnicity and Gender

In the planning of effective prevention programs and early intervention services, appropriate targeting of such efforts to specific subgroups of the population is an important component. Below are several figures which illustrate the trends in modes of transmission for diagnosed AIDS cases in the state of Louisiana by ethnicity and gender during the past decade. Currently diagnosed AIDS cases represent persons infected approximately ten years ago. Therefore the observed trends may be far more pronounced among persons recently infected.

Among Caucasian male AIDS cases, one notes that men who have sex with men (MSM) represented approximately 98% of the diagnosed AIDS cases in 1984, declining to around 77% in 1993. During the same time period, an increase in the percentage of diagnosed cases occurred among intravenous drug users (IVDU) and heterosexuals. (Fig. 1)

The percentage of Caucasian female AIDS cases attributed to heterosexual contact has increased during the past ten years along with a decrease in the percentage of cases

attributed to a past transfusion. The trends illustrated are somewhat erratic due to the small number of Caucasian females who have been diagnosed with AIDS. (Fig. 2)

Among African-American male AIDS cases, like Caucasian males, a decrease in the percentage of cases attributed to homosexual/bisexual contact occurred along with an increase among the percentage of IVDU cases. As with Caucasian males, the percentage of MSM attributed cases far surpass the percentage of cases attributed to other modes of transmission. (Fig. 3) In addition, the absolute number of African-American cases attributed to homosexual/bisexual contact has increased during this time period along with IDU cases.

The majority of diagnosed African-American female AIDS cases were attributed to intravenous drug use or heterosexual contact with the percentage of cases attributed to the latter surpassing IVDU during the past three years (Fig. 4)

Heterosexual contact and IVDU are important modes of transmission among both African American and Caucasian female AIDS cases with MSM attributed to the majority of male diagnosed cases from both ethnicities. Efforts in prevention and early intervention services should be focused on these subgroups of the population.

Figure 1: Trends in mode of transmission for Caucasian male AIDS cases

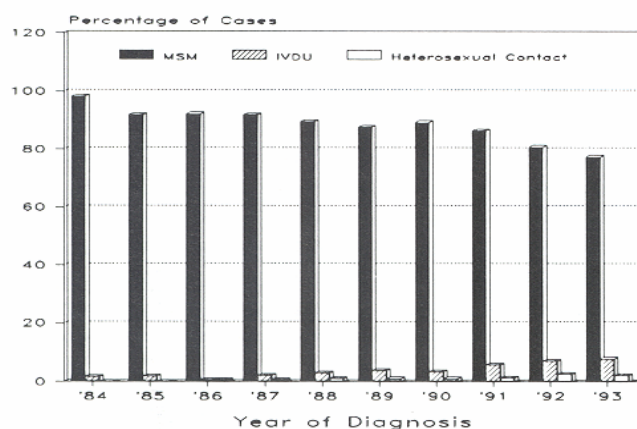


Figure 2: Trends in mode of transmission for Caucasian female AIDS cases

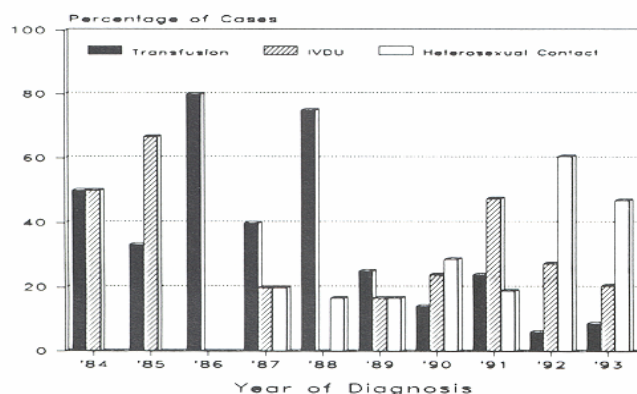


Figure 3: Trends in mode of transmission for African American male AIDS cases

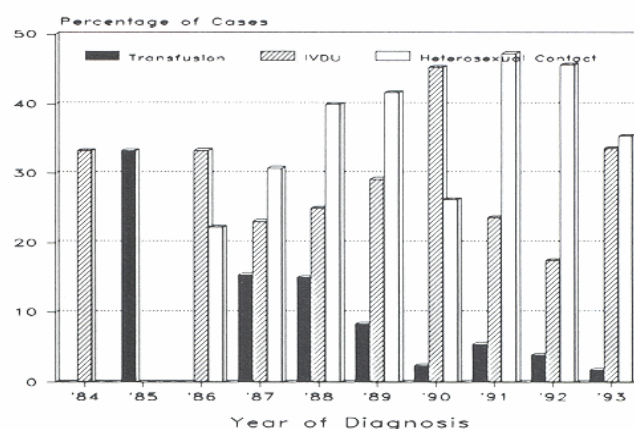
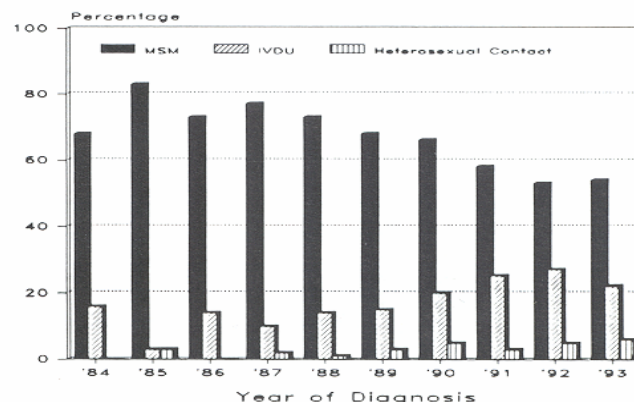


Figure 4: Trends in mode of transmission for African American female AIDS cases



LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE,
MAY - JUNE, 1994
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	May-June 1994	May-June 1993	Cum 1994	Cum 1993	% Chg
<u>Vaccine-preventable</u>														
Measles	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Mumps	4	0	0	1	0	0	2	0	1	8	5	18	11	+64
Rubella	0	0	0	0	0	0	0	0	0	0	1	0	1	--
Pertussis	0	0	0	1	0	0	1	0	0	2	1	6	5	+20
<u>Sexually-transmitted</u>														
AIDS Cases Rate ¹	26 2.4	5 0.9	3 0.8	6 1.2	2 0.8	1 0.3	1 0.2	10 2.9	2 0.6	58 1.3	179 4.2	342 7.9	584 13.5	-41
Gonorrhea Cases Rate ²	904 8.7	294 5.4	129 3.6	211 4.2	87 3.4	105 3.4	382 7.6	156 4.5	73 2.1	2341 5.6	2339 5.6	6151 14.6	6631 15.7	-7
Syphilis(P&S) Cases Rate ²	50 0.5	68 1.3	18 0.5	38 0.8	1 0.0	12 0.4	39 0.8	45 1.3	27 0.8	298 0.7	427 1.0	914 2.2	1313 3.1	-30
<u>Enteric</u>														
Campylobacter	3	6	5	8	0	2	1	1	4	30	30	51	77	-34
Hepatitis A Cases Rate ¹	4 0.5	0 --	1 0.3	2 0.4	11 4.2	1 0.3	1 0.2	0 --	1 0.2	21 0.5	12 0.3	78 1.9	43 1.0	+81
Salmonella Cases Rate ¹	23 3.1	15 2.0	11 3.6	20 3.6	7 2.7	12 3.8	18 3.3	2 0.7	16 3.6	125 3.0	59 1.4	212 5.0	140 3.3	+51
Shigella Cases Rate ¹	49 6.7	1 0.1	1 0.3	18 3.2	1 0.4	1 0.3	12 2.2	5 1.6	26 5.8	114 2.7	108 2.6	188 4.5	158 3.7	+
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vibrio, other	2	2	1	2	1	0	1	0	3	14	10	18	14	+29
<u>Other</u>														
Hepatitis B Cases Rate ¹	2 0.3	9 1.2	0 --	5 0.9	3 1.2	2 0.6	10 1.8	0 --	3 0.7	34 0.8	43 1.0	100 2.4	107 2.5	-6
<u>Meningitis/Bacteremia</u>														
H. influenzae	0	0	0	0	0	0	1	0	0	1	0	3	3	0
N. meningitidis	1	1	0	0	0	0	0	0	1	3	7	22	25	-12
Tuberculosis Cases Rate ¹	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	

1 = Cases per 100,000

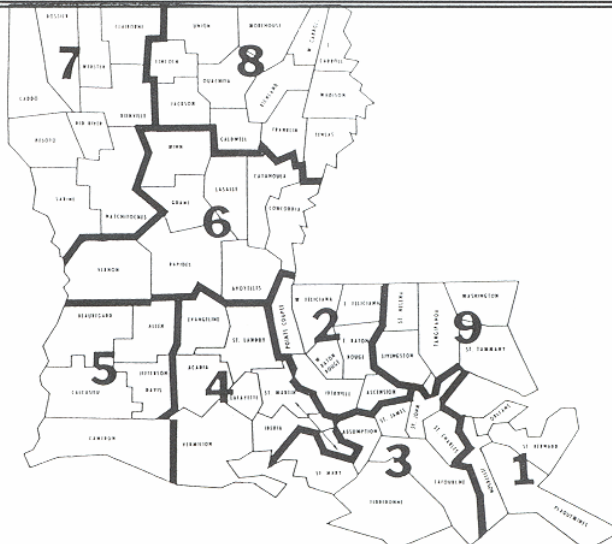
2 = Cases per 10,000

Table 2. Diseases of Low Frequency

Disease	Total to Date
Brucellosis	2
Histoplasmosis	1
Lead Toxicity	0
Legionellosis	5
Lyme Disease	0
Malaria	3
Tetanus	0
Typhoid	3

Table 3. Animal Rabies (May-June, 1994)

Parish	No. Cases	Species
Caddo	1	Cat
Calcasieu	4	Bats
Bossier	1	Skunk
Lafayette	3	Skunks
Rapides	1	Dog
Vernon	1	Bat



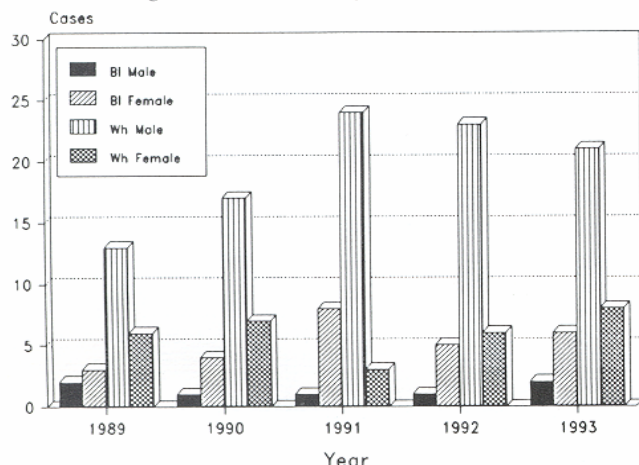
Annual Summary Vibrio Infections, 1993

Thirty-nine vibrio cases were reported for 1993, an overall case rate of 0.9 per 100,000. One case of *V. cholera*-01, nontoxigenic was also reported. Sex-specific rates were higher in males than females (1.2 vs 0.7 per 100,000). Race-specific rates were higher among whites than blacks (1.0 vs 0.6 per 100,000). The case of nontoxigenic *V. cholera*-01 was reported from Orleans Parish, in which acquisition was possibly related to shellfish exposure. As in the past, race-sex specific rates are highest among white males (Figure 1). Of seven serotypes identified, 36% were identified as *V. vulnificus* followed by *V. parahaemolyticus* (23%). Twenty one of 39 cases had underlying medical conditions such as liver disease, alcoholism and peptic ulcer disease. Seventeen cases reported with gastroenteritis, 9 reported primary septicemia and 9 resulted from wound infections. Twelve of 23 cases associated with shellfish consumption were also associated with raw oysters. May through October is the peak season for *Vibrio* infections. Three deaths from *Vibrio* infections were reported. Parishes reporting the highest number of cases include Jefferson (10), Orleans (10) and Terrebonne (8).

Comment:

In mid 1988, vibrio infections was mandated as a reportable disease (Louisiana Sanitary Code, Chapter 2, Section 2:004). Over the past five years (1989-1993), the mean annual number of vibrio infections reported is 38 cases. The five-year mean case rate is 0.9 per 100,000. There were no outbreaks of vibrio illnesses identified during this time period, which may further support the selectivity of disease response in susceptible high risk individuals (ie. those with underlying medical conditions).

Figure 1: Vibrio cases by race, 1989-1993



Vaccines For Children

Members of the private medical community are invited to enroll in the Vaccines for Children Program. This nationally funded program will provide federally purchased vaccines free to providers who care for eligible children. The vaccine would cost approximately \$270 per child for the full series. The program was created to provide relief from high vaccine costs for children receiving their care through private medical providers and to encourage private providers to administer vaccinations as part of the child's routine care at their medical home.

Vaccines obtained through this program will be free for children through age 18 years who are enrolled in Medicaid, who do not have health insurance, or who are American Indian or Alaskan Native. In addition, children with health insurance who are served by federally qualified health centers or rural health clinics also will be able to receive free vaccine if their insurance does not cover vaccinations.

Providers who give VFC vaccines will be able to charge an administration fee for giving these vaccines, with a maximum fee cap set at \$14.60 per vaccination. They will not be able to charge for the vaccine itself, which will be supplied to the providers without charge.

Private health care providers should enroll now to receive their shipment of vaccine before the program begins on October 1, 1994. For more information regarding enrollment in the program, providers should contact the Immunization Program of the Office of Public Health at (504) 483-1900.

LOUISIANA FACTS

Drinking Water of Earlier Days: Part 2

By 1892, practically the whole city depended on rain water caught on their roofs and stored in cisterns as the source of drinking water. When the present water system started in 1905 there were only 125 miles of water mains in the city with about 5000 connections to the system. The water was river water drawn from the Mississippi River. Many of these 5000 connections supplied water to their own neighbor's cisterns in time of drought, but its principal use was for watering lawns or for bathing purposes. A few homes filtered this water with gravity stone filters and in some instances larger pressure stone filters were employed, the filtered water being stored in elevated tanks. Artesian water was used for some of the larger supplies but the water was highly colored and contained considerable soda. Artesian water is still used for boiler and other plant uses, and is highly desirable in that it never forms any hard scale. (*Report of 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)	Polio myelitis	Complications of abortion
Anthrax	Herpes (genitalis/ 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,
Chancroid**	Lymphogranuloma venereum**	Shigellosis	failure to thrive
Cholera*	Malaria	Syphilis**	Sickle cell disease (newborns)
Chlamydial infection**	Measles (rubeola)*	Tetanus	Spinal cord injury +
Diphtheria*	Meningitis, Haemophilus	Trichinosis	Sudden infant death syndrome (SIDS)
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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