Murphy J. "Mike" Foster, Jr.
GOVERNOR

Louisiana Morbidity Report

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

Bobby Jindal
SECRETARY

July-August 1997 Volume 8 Number 4

Prevention of Perinatal Hepatitis B Transmission

The Office of Public Health initiated the Immunization Program's Perinatal Hepatitis B Initiative in December, 1990 in order to ensure that all pregnant women were screened for Hepatitis B virus and that vaccine was provided to the infants born to carrier (HBsAg positive) mothers.

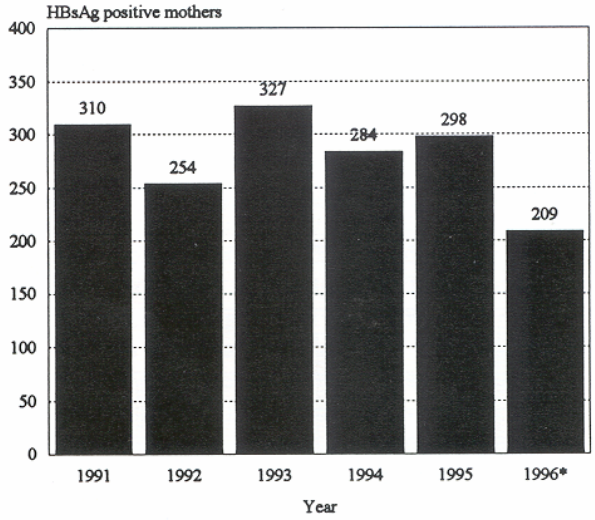
The national Hepatitis B Annual Assessment Provider Survey of 1996 estimated that in Louisiana more than 95% of pregnant women in both the public and private sector are screened for hepatitis B surface antigen. From 1991 through 1996, 1,682 mothers have been identified as HBsAg positive with an average of 280 positive mothers per year (Figure 1). The majority of HBsAg positive women reported to OPH over the past five years have been reported from the OPH Laboratory and from hospitals (Figure 2).

In Louisiana, in 1995, 98% of infants born to identified HBsAg positive mothers received the first dose of the Hepatitis B vaccine and HBIG in the hospital before discharge. However, rates of the second and third doses of Hepatitis B vaccine reported to OPH dropped to 46% and 48% respectively (Figure 3). Louisiana is lower than the other southcentral states in the percentage of children reported to be on schedule at 6 - 8 months, at 12 months, and the percentage post vaccine tested.

Today the standard of care is to screen all women at their initial prenatal visit for the Hepatitis B virus and to immunize all infants with Hepatitis B vaccine, regardless of the mother's status. Three doses of Hepatitis B vaccine beginning at birth and completed by six months is now part of the State Immunization schedule. Also, completion of the three dose series will become a requirement for Preschool and Day Care centers in the Fall of 1998.

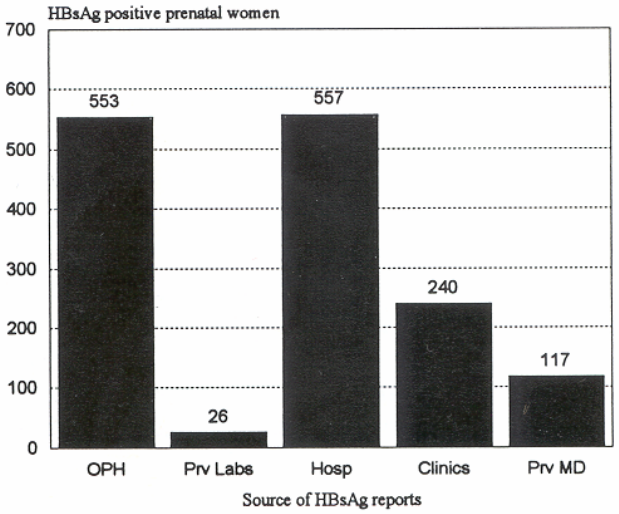
Since infants born to Hepatitis B positive mothers are at very high risk of becoming carriers if not adequately vaccinated, they must receive HBIG and complete the 3-dose *(Continued on next page)*

Figure 1: HBsAg positive mothers identified in LA 1991-1996



* Incomplete data

Figure 2: Reported HBsAg positive prenatal women in Louisiana by source, 1991-1996



Contents

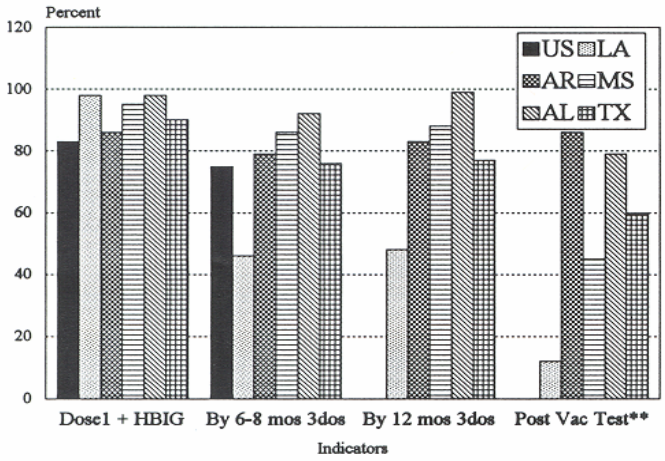
Prevention of Perinatal Hepatitis B Transmission (Cont.)

series by 6 months. Depending on the brand of vaccine used, the dose of vaccine may be higher for these infants. For infants of carrier mothers to be adequately vaccinated, the flow of information from the prenatal provider to the hospital to the infant provider is crucial.

Incomplete reporting probably accounts for much of the low rates for second and third dosages given in the series. Up-to-date reporting from physicians to OPH would increase the measurement of percentages of babies completing the series in time and better identify the smaller number of infants who need special outreach efforts to be vaccinated.

Having release of information forms signed by the carrier mothers while in the hospital and sent to OPH would be another way to enable the OPH Hepatitis Coordinator to obtain more easily the results of the second and third doses of Hepatitis B vaccine from physicians.

Figure 3: Hepatitis B perinatal prevention indicators by southcentral states*



* For infants born in 1995 to HBsAg positive mothers.
** Reported by health units and private providers.

Influenza Immunization Program, 1997-98

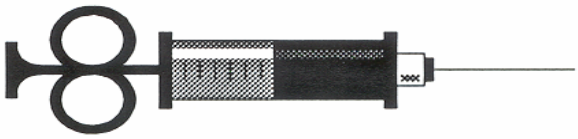
Parish health unit clinics throughout the state will begin to administer influenza immunizations the week of October 12 - 18, 1997 to individuals who are at high risk of serious illness or death from influenza infection. Those that are considered to be at high risk are the same as those identified in previous years (i.e., persons over 65 years of age and those of any age with chronic cardiac, respiratory, or kidney diseases, those with diabetes, those whose immune system has been compromised, and children/teenagers receiving long-term aspirin therapy).

Groups potentially capable of nosocomial transmission of influenza to high risk persons (e.g., physicians, nurses, and others with extensive contact with high risk patients) are encouraged to see their own physicians and/or organize their own immunization programs.

The 1997-98 trivalent influenza vaccine for use in the United States contains A/Wuhan/359/95-like (H3N2), A/Bayern/07/95-like (H1N1), and B/Beijing/184/93-like viruses. The Food and Drug Administration's Vaccines and Related Biological Products Advisory Committee (VRBPAC) recommended this inactivated formulation based on antigenic analyses of recently isolated viruses and the antibody responses of persons vaccinated with the 1996-97 vaccines. Annual vaccination using the currently recommended vaccine is necessary for immunity to the likely infective strains of influenza virus and any remaining supplies from 1996-97 should be discarded.

Children 6 months to 8 years of age who have not received influenza vaccine previously should receive two doses of split virus vaccine at least a month apart. If vaccine has been administered previously, one dose is sufficient. The dosage of split virus vaccine for children is 0.25 ml for those 6 to 35 months of age, and 0.5 ml for those children 3 years and older. Only one 0.5 ml dose of whole or split virus vaccine is required for persons 12 years of age and older.

For information on time and days of the clinics, please contact your local parish health unit.



Louisiana Morbidity Report
Volume 8 Number 4 **July-August 1997**

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.

Assistant Secretary, OPH	*Jimmy Guidry, MD*
State Epidemiologist	*Louise McFarland, DrPH*
Editors	*Thomas Farley, MD MPH* *Karen Kelso, RNC MS*
Associate Editor	*Barbara Trahan, MPH*
Production Manager	*Ethel Davis, CST*
Contributors	*Susan Wilson, BSN* *Cathy Scott, MPH* *Ruben Tapia, MPH* *Patricia Andrews, MPH* *Maureen Daly, MD* *Jim Sutherland, DDS MPH* *Stephanie Posner, MPH*

Cancer Incidence in Louisiana

Cancer incidence in Louisiana, as well as in the U.S. as a whole, has been rising steadily. Nonetheless, for each race/sex group in Louisiana the incidence rate remained lower than for its counterpart in the national rates. The Louisiana Tumor Registry reports that the age-adjusted rates per 100,000 population are as shown in Table.

For both Louisiana and the U.S. sample, the most frequent cancer diagnoses for men were prostate, lung, and colon/rectum, in that order. Women in both geographic areas were diagnosed most often with cancer of the breast, followed by those of the lung and the colon/rectum.

For a few diagnoses, Louisiana incidence rates exceed national averages. For example, the state ranks among the top three for lung cancer among males, and white males' incidence rate is 33% higher than the national average (three times higher than Utah).

Louisiana also has had high mortality rates from cancer. For 1989-1993, only Kentucky experienced a higher death rate from cancer than Louisiana for white males, and mortality among blacks in Louisiana was also above average for the nation. The combination of relatively low incidence and high mortality argues for more aggressive cancer prevention and early detection programs in the state.

Cancer is a reportable disease in Louisiana. All licensed facilities and practitioners are required to report new cancer diagnoses classified as in situ or malignant except (1) carcinoma in situ of the cervix and (2) basal cell and squamous cell carcinomas of the skin unless located on the genital organs or the vermilion border of the lips. All data that would potentially identify a cancer patient, physician, or medical facility are strictly confidential, and studies using tumor registry data publish only aggregate statistics.

Most cases are identified through hospitals or pathology labs. If a patient is diagnosed and treated solely in a physician's office or a freestanding facility and if biopsies are not read by a pathology laboratory, the health care provider is asked to report the case as follows:

- If the physician is on the staff of a hospital with an ACoS-approved cancer program, data on these cases must be submitted to the hospital cancer registry.
- Otherwise, the physician is to submit a green Confidential Disease Case Report card to the State Epidemiology Section or to notify the regional tumor registry.

Persons with questions about reporting procedures or about cancer incidence in Louisiana should contact the regional Louisiana Tumor Registry office or Patty Andrews, MPH, Registry Liaison, at 504/568-4795.

Table: Average annual cancer incidence, 1989-1993, all sites combined

	U.S.	Louisiana
White males	494.1	478.4
White females	351.6	312.1
Black males	608.4	525.3
Black females	337.4	305.3
Males, all races	497.7	492.0
Females, all races	345.6	311.5

Algae Toxin in Lake Pontchartrain

A public health advisory was issued on June 23, 1997 to discourage people from the recreational use of areas of Lake Pontchartrain that are currently affected by a "blue-green algae" bloom because toxins produced by the algae could make people and their pets sick. These lake areas are not fixed, since the algae float and move with the wind, water currents and weather conditions. This bloom could last until the Fall, or be blown away by a hurricane.

The algae in Lake Pontchartrain have been found to be producing at least one toxin, a hepatotoxin. This toxin is sensitive to heat. Cooking fish, crabs, or shrimp caught in the Lake will destroy the toxin and make the meat of the seafood suitable for consumption. The fat and internal organs should be avoided.

Studies suggest, however, that recreational exposure through swimming, water skiing, or jet skiing will expose people unnecessarily to the toxin, which is capable of causing severe gastrointestinal symptoms, such as vomiting and diarrhea, and liver damage, if ingested or inhaled in fairly large amounts. Also, persons who are allergic to the toxin could suffer respiratory problems and rashes if they touch or inhale even small amounts of the algae. Persons who may have had contact with the algae and who have symptoms are advised to contact their physicians for evaluation and treatment.

The algae have been analyzed through the Louisiana Universities Marine Consortium's Center at Chauvin and by Wright State Unviersity in Ohio. The species identified were *Anabena* and *Microcystis*. Both types occur naturally, mainly in fresh water, and are commonly known as blue-green algae or cyanobacteria. The algae bloom probably began with influx of fresh Mississippi River water into Lake Pontchartrain. It has also been spotted in Lake Maurepas and in the Rigolets.

Further testing of the algae is being done to determine if other toxins, such as neurotoxins, are present. None have been found so far.

If further information is needed, contact Dr. Louise McFarland at 504-568-5005 or Dr. Louis Trachtman at 504-568-5048.

Community Water Fluoridation in Louisiana

Despite proven efficacy, safety, and cost-effectiveness in preventing dental decay, only slightly more than half of Louisiana residents currently benefit from community water fluoridation (Figure 1). However, with recently passed legislation and with the assistance and support of health professionals, more Louisiana residents should be able to benefit in the future from community water fluoridation.

Fluoride acts immediately on the tooth's surface by increasing the resistance to bacteria and reversing the process of early tooth decay before an open cavity forms. It also works systemically as it is incorporated into the enamel of developing teeth. It is estimated that water fluoridation can reduce dental caries by 60% in baby teeth and 35% in adult teeth.

Figure 1: Water systems adjusted to optimal flouride levels

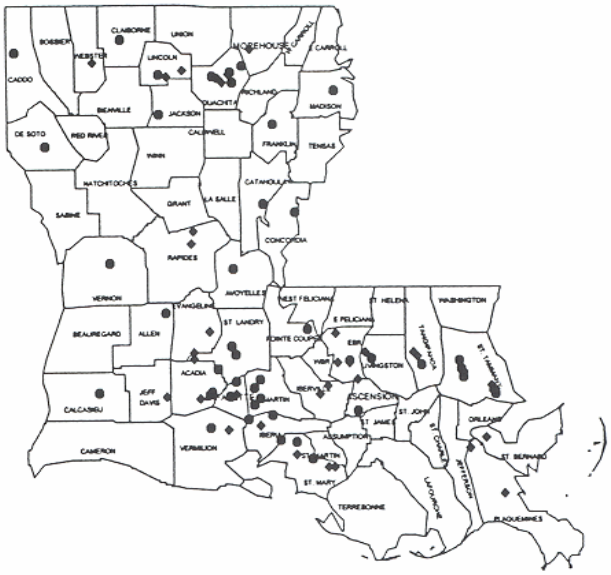
Optimally fluoridated water poses no detectable risk of cancer, birth defects, nor gastrointestinal, genitourinary, or respiratory problems. Fluoride consumption is associated with a benign condition of tooth discoloration called dental fluorosis. At optimal levels of fluoridation, however, fluorosis is minimal if detectable at all.

For every $1 spent on water fluoridation, approximately $50 to $80 is saved in dental care costs. It costs about $0.51 a year per person to fluoridate water systems.

In 1990, 195 water systems serving 55.4% of the state's population had fluoridation; 111 of these systems serving 8.4% of the population were naturally fluoridated and the other 84 systems serving 47% of the population were adjusted for optimal fluoride levels. Some of the systems have discontinued fluoridation since that time. Therefore, the percentage of residents in the state who benefit from community water fluoridation has declined slightly to 53.6% in the last seven years. The goal of the Oral Health Program is to target large systems for fluoride initiation. There are 34 such systems that serve 10,000 or more people that currently do not adjust water fluoride levels (Figure 2). This represents 27% of the population.

In 1997, the legislature passed a law encouraging communities to fluoridate and creating a Fluoridation Advisory Board to assist public water systems in obtaining funding. Individuals interested in helping with efforts to fluoridate the drinking water in their community may do so by contacting Jim Sutherland, D.D.S., M.P.H., Director of the Oral Health Program at OPH through his e-mail address, (jsutherl@dhhmail.dhh.state.la.us).

Figure 2: Water systems with less than optimal flouride levels. Circles indicate water systems serving 10,000 or more persons. Diamonds indicate water systems serving 5,000-10,000 persons.



New EIS Officer Named

As has been occurring for many years, the Epidemiology Section has had the pleasure of the assistance of an Epidemic Intelligence Service (EIS) officer, assigned to us from the Centers for Disease Control and Prevention. These officers are physicians who are undergoing a fellowship training in epidemiology and who conduct many of our epidemic investigations. For 1997-1999, our new EIS officer will be Katrin Kohl, M.D., M.P.H. Dr. Kohl trained in immunology at the University of Munich. She has an M.P.H. degree as well as a diploma in Tropical Medicine from the Tulane University School of Public Health and Tropical Medicine. She has working experience in other countries such as Costa Rica and Singapore. Dr. Kohl can be reached at 504-568-5005.

AIDS UPDATE
HIV Prevalence Estimates

In planning responses to the AIDS epidemic, it is helpful to know the prevalence and incidence of HIV infection. Because it is very difficult to directly measure HIV incidence and prevalence within various populations, it is necessary to estimate these measures. The HIV/AIDS section made such approximations using several sources of information. Adjusted AIDS surveillance data were applied to backcalculation and projection models to estimate the total number of infected persons. Data were modeled separately for the different exposure groups for 1995 and apportioned according to the distribution of demographics within each exposure group.

Assumptions of the estimation technique are as follows: 1) 50% of HIV-infected persons develop AIDS in 10 years, 70% in 15 years, and 90% in 20 years; 2) this progression does not vary across demographic and exposure subgroups; 3) 100% of persons with AIDS die within two years and this rate does not vary across subgroups; 4) the HIV incidence curve follows a "gamma" curve, typical of epidemics; 5) for apportioning, HIV incidence and the distribution of demographic subpopulations are stable over time within exposure groups.

Although modeled estimates often lack statistical precision and some assumptions may be violated, the resulting estimates are consistent with multiple sources of information, including Louisiana HIV incidence and prevalence surveys, behavior surveys, and other estimation techniques. Together, these estimates are useful for guiding the planning and assessment of prevention activities and service needs.

AIDS CASE TRENDS

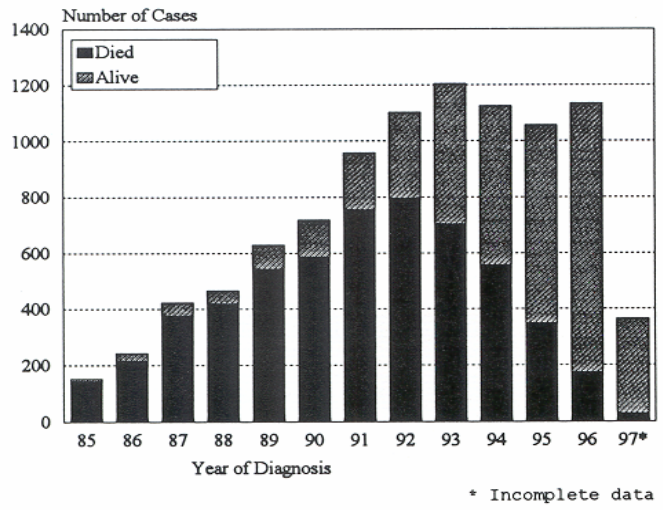


Table: HIV Prevalence Estimates for Louisiana, Estimated for 1995

	Estimate of Persons Living with HIV	Percent HIV Positive in Population	Approximate Ratio of Prevalence*
Total	14,100	0.32%	1 in 300
Tot 15-44	12,000	0.61%	1 in 165
EXPOSURE CATEGORY (ASSUMES HIGH RISK BEHAVIOR)**			
MSM[1]	6,600	19.4%	1 in 5
IDU[2]	3,800	8.2%	1 in 12
HRH[3]	3,500	2.9%	1 in 35
Other	200	<.001%	1 in 24,000
GENDER (AGES 15-44 ONLY)			
Men	9,400	0.97%	1 in 100
Women	2,800	0.28%	1 in 350
ETHNICITY (AGES 15-44 ONLY)			
Afr-Am	7,000	1.09%	1 in 90
White	4,900	0.39%	1 in 250
Other	300	0.34%	1 in 300
AFRICAN-AMERICAN MEN			
15 - 24	600	0.50%	1 in 200
25 - 34	2,500	2.69%	1 in 40
35 - 44	1,800	1.93%	1 in 50
45 +	650	0.43%	1 in 225
15-44	4,800	1.61%	1 in 60
Total	5,600	0.87%	1 in 100
WHITE MEN			
15 - 24	400	0.19%	1 in 500
25 - 34	2,300	1.15%	1 in 90
35 - 44	1,700	0.77%	1 in 125
45 +	700	0.15%	1 in 700
15-44	4,300	0.71%	1 in 150
Total	5,100	0.37%	1 in 250
AFRICAN-AMERICAN WOMEN			
15 - 24	550	0.43%	1 in 225
25 - 34	1,000	0.94%	1 in 100
35 - 44	600	0.59%	1 in 175
45 +	200	0.10%	1 in 1,000
15-44	2,200	0.64%	1 in 150
Total	2,500	0.33%	1 in 300
WHITE WOMEN			
15 - 24	150	0.07%	1 in 1,400
25 - 34	300	0.14%	1 in 700
35 - 44	150	0.07%	1 in 1,400
45 +	50	0.01%	1 in 10,000
15-44	600	0.09%	1 in 1,000
Total	650	0.05%	1 in 2,000

* Example: In 1995, 1 in 60 African-American men ages 15-44 were infected with HIV.

** Estimates assumed overall high risk behavior within exposure sub populations.

[1] MSM = Men who have sex with men

[2] IDU = Injection Drug Users

[3] HRH = High-risk Heterosexual Exposure

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE
May - June , 1997
PROVISIONAL DATA

Table 1. *Disease Incidence by Region and Time Period*

DISEASE		HEALTH REGION 1	2	3	4	5	6	7	8	9	TIME PERIOD May-June 1997	May-June 1996	Cum 1997	Cum 1996	% Chg
Vaccine-preventable															
Measles		0	0	0	0	0	0	0	0	0	0	0	0	0	-
Mumps		0	0	0	0	1	0	0	0	0	1	1	11	11	0
Rubella		0	0	0	0	0	0	0	0	0	0	0	0	1	-
Pertussis		2	0	0	0	1	1	0	0	0	4	2	12	5	+140
Sexually-transmitted															
AIDS	Cases	23	11	2	2	3	1	6	3	4	55	190	347	636	-45
	Rate[1]	2.1	2.0	0.5	0.4	1.1	0.3	1.2	0.9	1.1	1.3	4.4	8.1	14.8	
Gonorrhea	Cases	631	184	157	176	61	103	291	117	73	1793	1464	4372	4713	-7
	Rate[1]	60.7	32.4	41.6	34.1	22.8	33.8	57.5	33.3	19.0	42.5	34.7	103.6	111.7	
Syphilis(P&S)	Cases	23	9	9	5	1	1	4	3	7	62	102	197	331	-40
	Rate[1]	2.2	1.6	2.4	1.0	0.4	0.3	0.8	0.9	1.8	1.5	2.4	4.7	7.8	
Enteric															
Campylobacter		6	13	4	3	1	1	3	5	2	38	28	71	63	+13
Hepatitis A	Cases	10	2	0	0	0	0	5	13	1	31	35	117	86	+36
	Rate[1]	1.0	0.4	-	-	-	-	1.0	3.7	0.3	0.7	0.8	2.7	2.0	
Salmonella	Cases	21	12	3	9	4	3	3	4	11	70	116	146	172	-15
	Rate[1]	2.0	2.1	0.8	1.7	1.5	1.0	0.6	1.1	2.9	1.6	2.8	3.4	4.1	
Shigella	Cases	6	5	0	1	0	0	2	1	1	16	208	61	361	-83
	Rate[1]	0.6	0.9	-	0.2	-	-	0.4	0.3	0.3	0.4	4.9	1.4	8.6	
Vibrio cholera		0	0	0	0	0	0	0	0	0	0	0	0	0	-
Vibrio,other		1	1	0	1	0	0	0	0	0	3	12	3	14	-79
Other															
Hepatitis B	Cases	3	1	1	3	2	2	4	4	5	25	20	79	63	+25
	Rate[1]	0.3	0.2	0.3	0.6	0.7	0.7	0.8	1.1	1.3	0.6	0.5	1.8	1.5	
Meningitis/Bacteremia															
H. influenzae		0	0	0	1	0	0	0	0	1	2	1	7	2	+250
N. meningitidis		3	1	2	2	0	0	0	0	2	10	6	40	39	+3
Tuberculosis	Cases	N/A	0	8	0	6	5	0	4	4	27	75	97	197	-51
	Rate[1]		-	2.1	-	2.2	2.0	-	1.1	0.9	0.6	1.7	2.2	4.5	

1 = Cases per 100,000

Table 2. *Diseases of Low Frequency*

Disease	Total to Date
Blastomycosis	1
Brucellosis	0
Histoplasmosis	1
Lead Toxicity	19
Typhoid	0
Rocky Mountain Spotted Fever	0
Legionellosis	2
Lyme Disease	1
Malaria	5
Tetanus	0

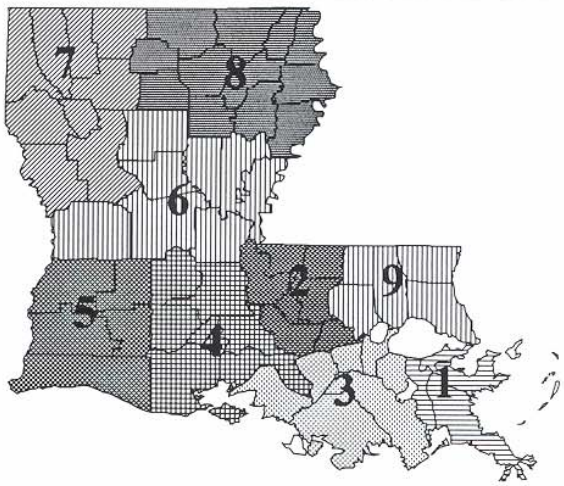


Table 3. *Animal Rabies (May- June ,1997)*

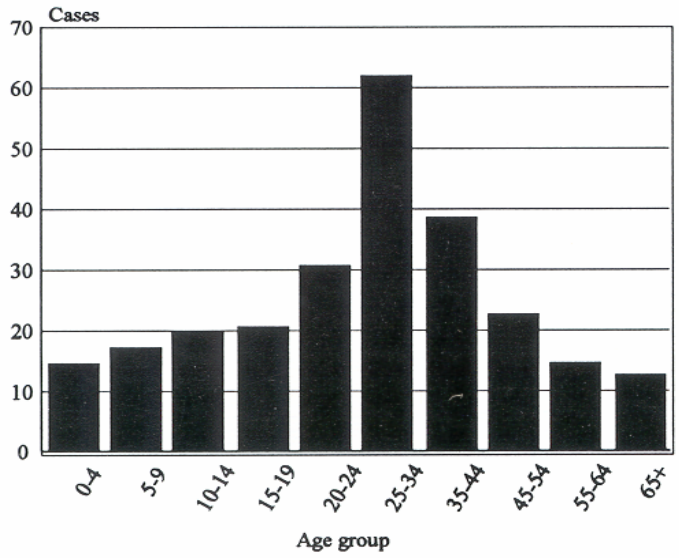
Parish	No. Cases	Species

No Report for May-June, 1997

Annual Summary Hepatitis A - 1996

In 1996, the number of hepatitis A cases reported to the Epidemiology Section was 261, an increase of 33% from 1995 and 53% from 1994. The overall state case rate for 1996 is 6.0 per 100,000. Sex-race specific rates per 100,000 were highest among African-American males (8.5) followed by white males (5.0), African-American females (4.9) and white females (3.8). Rates by age groups were highest among the 20 - 44 years age groups which accounted for over 50% of the cases reported. This trend differs from previous years in which cases were bimodally distributed in age groups less than 10 years of age and the adult age group. Region 8 (Monroe area) continues to be an endemic area for hepatitis A cases with the largest number of cases reported. An outbreak occurred this year in Region 8 in which cases were associated with hepatitis A infected foodhandlers. Because of this foodborne outbreak, the majority of the cases identified were of adult age which may contribute to the peak trend in the adult age groups. Seven parishes reported case rates exceeding the state case rate per 100,000 which include: Red River (136), Ouachita (61), Sabine (47), W. Baton Rouge (35), DeSoto (24), Pt. Coupee (17) and Tangipahoa (10).

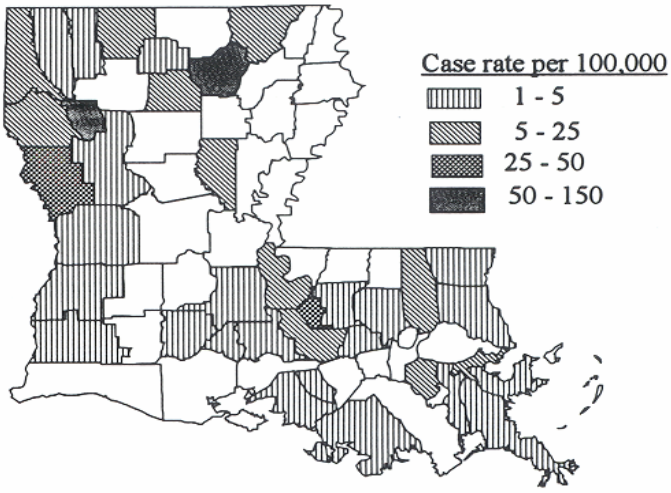
Figure 1: Cases of hepatits A by age group, 1996



Comment:

Recently, Hepatitis A vaccine has been released and is available to anyone who wishes to minimize his or her risk of acquiring Hepatitis A infection such as international travelers or day care attendees and workers. However, because utilization of vaccine is probably considerably low, Hepatitis A cases and foodborne outbreaks will continue to occur. In areas such as Region 8 where Hepatitis A foodborne outbreaks can potentially re-occur, it would be strongly recommended that the food service industry take advantage of the availability of Hepatitis A vaccine.

Figure 2: Hepatitis A case rates, 1996



Louisiana Fact

Efforts at establishing a uniform system of infection control in Louisiana can be traced back to 1884 when the Board of Health "produced a circular primarily on disinfection which was sent to physicians throughout the state of Louisiana. The circular declared that diseases communicable "of their own infection or contagion are to be regarded and treated as enemies to be resisted and stamped out." Isolation, cleanliness, and the use of disinfectants were evidently envisioned as the means whereby this goal might be attained. A special kind of disinfecting procedure was prescribed for infected clothing; another for patients' discharges; another for patients' bodies; another for houses and apartments; another for yards, stables, gutters, privies, and so forth; and another for corpses."

LIST OF REPORTABLE DISEASES/CONDITIONS

REPORTABLE DISEASES

Acquired Immune Deficiency Syndrome (AIDS)
Amebiasis
Arthropod-borne encephalitis (Specify type)
Blastomycosis
Botulism[1]
Campylobacteriosis
Chancroid[2]
Chlamydial infection[2]
Cholera[1]
Cryptosporidiosis
Diphtheria
Enterococcus (infection; resistant to vancomycin)
Escherichia coli 0157:H7 infection
Gonorrhea[2]
Haemophilus influenzae infection[1]
Hemolytic-Uremic Syndrome
Hepatitis, Acute (A, B, C, Other)
Hepatitis B carriage in pregnancy
Herpes (neonatal)
Human Immunodeficiency Virus (HIV) infection[3]
Legionellosis
Lyme Disease
Lymphogranuloma venereum[2]
Malaria
Measles (rubeola)[1]
Meningitis, other bacterial or fungal
Mumps
Mycobacteriosis, atypical[4]
Neisseria meningitidis infection[1]
Pertussis
Rabies (animal & man)
Rocky Mountain Spotted Fever (RMSF)
Rubella (German measles)
Rubella (congenital syndrome)
Salmonellosis
Shigellosis
Staphylococcus aureus (infection; resistant to methicillin/ oxacillin or vancomycin)
Streptococcus pneumoniae (infection; resistant to penicillin)
Syphilis[2]
Tetanus
Tuberculosis[4]
Typhoid fever
Varicella (chickenpox)
Vibrio infections (excluding cholera)[1]

OTHER REPORTABLE CONDITIONS

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

[1] Report suspected cases immediately by telephone. In addition, all cases of rare or exotic communicable diseases and all outbreaks shall be reported.
[2] Report on STD-43 form. Report cases of syphilis with active lesions by telephone.
[3] Report on EPI-2430 card. Name and street address are optional but city and ZIP code must be recorded.
[4] Report on CDC 72.5 (f. 5.2431) card.

*Report to the Louisiana Genetic Diseases Program Office by telephone (504) 568-5070 or FAX (504) 568-7722.
** Report to Injury Research & Prevention Section (504-568-2509).

Numbers for reporting communicable diseases

1-800-256-2748 Local # 568-5005 FAX # 504-568-5006

This public health document was published at a total cost of $1,045.00. Seven thousand copies of this public document were published in this first printing at a cost of $1,045.00. The total cost of all printings of this document, including reprints is $1,045.00. This document was published by Bourque Printing, Inc., Baton Rouge, LA 70815, to inform physicians, hospitals, and the public of current Louisiana morbidity status under authority of R.S. 40:36. This material was printed in accordance with the standards for printing for state agencies established pursuant to R.S. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of Louisiana Revised Statutes.

**DEPARTMENT OF HEALTH AND HOSPITALS
OFFICE OF PUBLIC HEALTH
P.O. BOX 60630 NEW ORLEANS LA 70160**

BULK RATE
U.S. POSTAGE
P A I D
Baton Rouge,LA
Permit No. 1032

RAOULT C RATARD MD
4109 CLEVELAND PL
METAIRIE LA 70003-1343