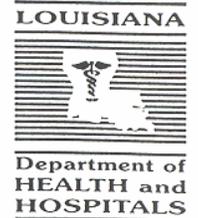




Edwin W. Edwards
GOVERNOR

Louisiana Morbidity Report

Louisiana Office of Public Health - Epidemiology Section
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Rose V. Forrest
SECRETARY

March-April 1995

Volume 6 Number 2

Smoking in Pregnancy

Smoking during pregnancy is a major cause of low birth weight. It is estimated that between 29 and 42 percent of low birth weight can be prevented if pregnant women did not smoke. Because of this, national and state public health officials are currently encouraging women to quit smoking during pregnancy. The Year 2000 Objective for the nation by the U.S. Public Health Service is that no more than 20% of women will smoke during pregnancy.

Since 1990, birth certificates have contained information about smoking during pregnancy provided by parents after delivery; this information probably understates true smoking rates but can still be useful in planning prevention efforts. In 1993, according to this data, 11.6% of pregnant women in Louisiana smoked during pregnancy, compared to 16.9% of women in the U.S. as a whole. Smoking rates in Louisiana were almost twice as high in white women as in black women (14.8% vs. 7.7%). Smoking rates during pregnancy declined fairly rapidly from 1991 to 1993 (Figure 1). This decline was greater among black women (from 10.6% to 7.7%) than among white women (from 15.4% to 14.8%).

There were also marked racial differences in smoking rates by age of the mother (Figure 2). Young black women had smoking rates during pregnancy that were very low (2.1% for women 15-19), whereas young white women had smoking rates that were high (19.5% for women 15-19).

These racial differences in smoking habits mirror those in national data on pregnant women and in non-pregnant females and males: for example, smoking rates in black females age 18-24 in the U.S. decreased by almost two-thirds from 1983 to 1991 (from 31.8% to 11.8%) while smoking rates for white females age 18-24 decreased by less than one-third (from 36.5% to 25.1%). Because smoking habits generally begin in teenage years and then continue through adult years, the low smoking rates for young black women and the high smoking rates for young white women can be expected to lead to much larger differences between race groups (and larger differences in low birth weight attributable to smoking) in the future.

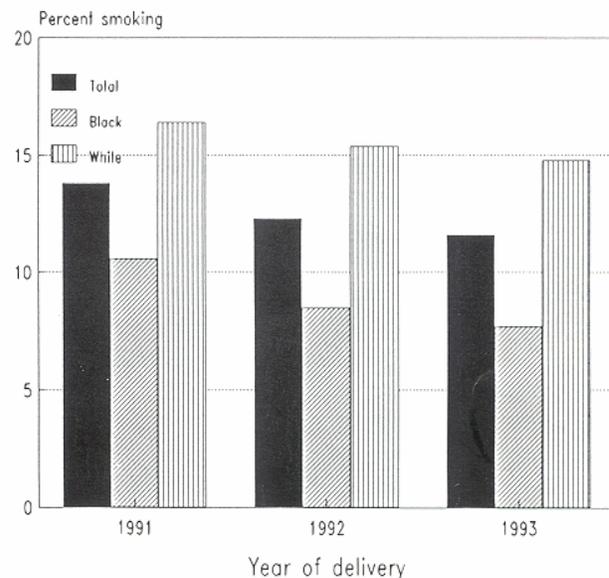
Smoking rates in pregnancy varied also by region of the state (Figure 3). The highest smoking rates were in the Acadiana region and in the northeastern parishes. Individually, the parishes with the highest rates were Caldwell (25.9%), Grant (22.9%) and Evangeline (21.0%) Parishes.

During 1995, the Office of Public Health's "Partners for Healthy Babies" campaign will focus on decreasing substance use during pregnancy. Billboards and public service announcements will carry this message by this summer. Health
(Continued on page two)

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Figure 1: Rates of smoking during pregnancy in Louisiana by race of mother and year of delivery



Smoking in Pregnancy (Cont.)

care providers have an important role in counseling their patients about the importance of avoiding tobacco and other substances during pregnancy.

Figure 2: Rates of smoking during pregnancy in Louisiana by age and race

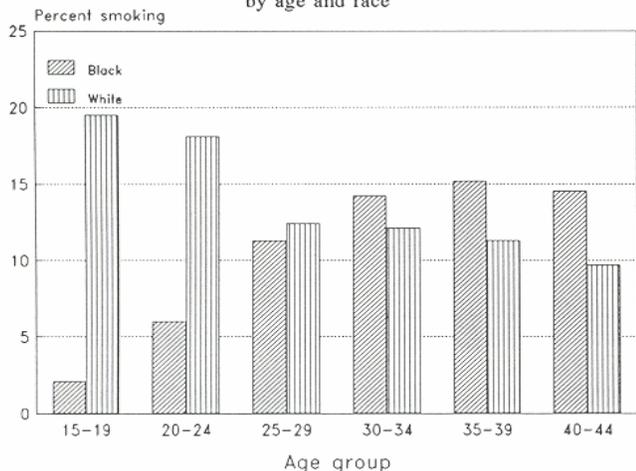
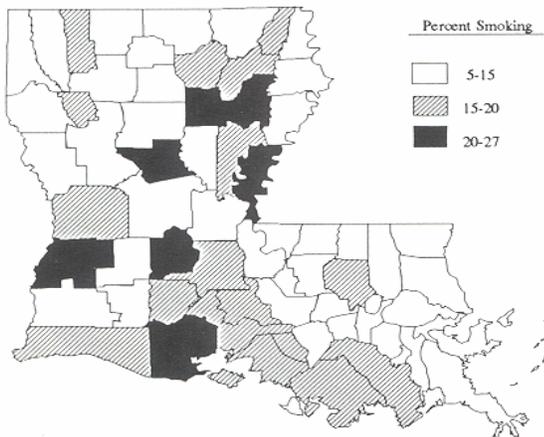


Figure 3: Smoking rates in pregnancy by parish, 1993



New EIS Officer Named

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 1995-1997, our new EIS officer will be Debra Berg, M.D. Dr. Berg is an infectious disease specialist who trained at Michael Reese Hospital in Chicago and is currently on staff there. In addition to her specialty in infectious diseases, she has had experience in developing countries in Latin America. We eagerly look forward to her arrival in July.

Newly Licensed Hepatitis A Vaccine

An inactivated hepatitis A virus vaccine (Havrix) was recently licensed by the Food and Drug Administration. The vaccine is recommended for individuals at high risk of infection including:

- travelers to regions of the world where hepatitis A is common
- military personnel
- persons living in communities with high levels of hepatitis A virus infections and periodic community-wide epidemics
- homosexuals
- users of illicit injectable drugs
- persons with chronic liver disease
- individuals exposed to hepatitis A, such as certain institutional workers (e.g., caretakers for the developmentally challenged), employees of child day-care centers, laboratory workers who handle live hepatitis A virus and handlers of primate animals that may be harboring HAV.

The recommended dosage for children 2-18 years of age consists of 3 doses and for adults, two doses are recommended. There is not a routine immunization strategy planned at this time. For more information, contact the Epidemiology Section.

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Simplifying the Reportable Disease List

Over the past few years, as new diseases of public health importance have been recognized, the list of reportable diseases and conditions on the back page of this newsletter has grown. The Epidemiology Section is now trying to simplify this list, so that medical providers can focus on diseases that are actively tracked epidemiologically and diseases for which we have active prevention programs. We are considering removing from the list diseases for which diagnostic criteria are not well defined (such as "foodborne illness"), diseases which may represent chronic or recurrent conditions with uncertain onset dates (such as herpes genitalis), and extremely rare communicable diseases in Louisiana (such as plague). This last group of diseases should still be reported under the requirement in the Sanitary Code for reporting "all cases of rare or exotic communicable diseases and all outbreaks". Below are those diseases being considered for removal from the list:

- Anthrax
- Aseptic meningitis
- Brucellosis
- Diphtheria
- Foodborne illness
- Genital warts
- Granuloma inguinale
- Herpes genitalis
- Leprosy
- Leptospirosis
- Malaria
- Ophthalmia neonatorum
- Plague
- Poliomyelitis
- Psittacosis
- Trichinosis
- Tularemia
- Typhus
- Yellow fever

In addition, we are recommending deleting "encephalitis" from the list and replacing it with "Arthropod-borne encephalitis (specify type)."

We invite any comment or suggestions from readers about this change before placing a notice about it in the Louisiana Register. Please contact the Epidemiology Section at (504) 568-5005 or 1-800-256-2748.

Prevention of Group B Streptococcal Infection

During the last two decades, *group B streptococcus* (GBS) has emerged as a major infectious cause of neonatal morbidity and mortality. Studies have shown that much early-onset neonatal disease can be prevented by prophylactic antimicrobials given during labor and that prenatal screening using selective broth media can detect the majority of women who will be colonized with GBS at delivery. The Centers for Disease Control has proposed a prevention strategy for early-onset group GBS that includes guidelines for screening pregnant women and the administration of intrapartum chemoprophylaxis.

The following summarizes the recommendations:

- Women who have previously delivered an infant with GBS disease should receive intrapartum antibiotic chemoprophylaxis
- All other pregnant women should be screened by vaginal and rectal culture at 26 to 28 weeks gestation
- For culture negative pregnant women, no intrapartum prophylaxis is needed
- Intrapartum prophylaxis is recommended for culture positive pregnant women who develop ONE or MORE of the following risk factors:
 - Intrapartum fever (≥ 37.5 C)
 - Prolonged membrane rupture (> 12 hours)
 - Estimated gestational age < 37 weeks
- Women who do not receive prenatal care or whose GBS culture status is unknown should receive intrapartum chemoprophylaxis IF one of the stated risk factors is present

Intrapartum antimicrobial prophylaxis consists of IV penicillin G (5 million units q 6 hrs) or ampicillin (2 grams initially followed by 1 gram q 4-6 hrs) until delivery. Clindamycin or erythromycin may be used for women allergic to penicillin (efficacy for GBS disease prevention has not been measured).

The above strategy relies on currently available technology, minimizes potential adverse effects associated with antimicrobials, has been validated through a randomized controlled trial, and is least likely to contribute to selection of antimicrobial-resistant microorganisms.

For more information contact the Epidemiology Section at 504-568-5005 or CDC, NCID, Childhood and Respiratory Diseases Branch.

An Outbreak of Pneumococcal Pneumonia in a Workplace

In early February OPH was notified about five cases of pneumococcal pneumonia in a single crew of electricians working on the construction of a large boat. Although pneumococcus is the most common cause of community-acquired pneumonia, the unusual clustering of such illness prompted OPH to investigate.

Between January 1 and January 17 these men developed a prodrome of "cold symptoms" lasting one to three weeks. The symptoms worsened, and between January 7 and January 19 all five developed fever and cough; three (60%) noted shortness of breath. Three (60%) of these five workers had culture confirmed pneumococcal disease, and the remaining two had clinical illness consistent with pneumococcal disease. All five of these men were hospitalized; three required intensive care unit care, and one died.

These five men worked together in a confined area of the boat; 100% of the electricians on this crew became ill. The men did not all room together and no other shared activities outside of work were identified for all of the men. Exposure to dusts produced during the construction of the boat and to irritating fumes were reported by some of the men, although the dates of these reported exposures conflicted, and they could not be confirmed with company records. The work performed by these men required close contact, and the men reported frequently coughing on each other. All five men were smokers, but none reported any underlying medical conditions which could predispose them to pneumococcal infection. Six workers from other areas of the boat reported a respiratory illness during this time, although none required hospitalization and none were culture proven to be due to pneumococcus.

The isolates from the three culture-confirmed cases were serotyped. Two of the isolates were serotype 14 and one was serotype 4. To confirm this finding, tests for serotype-specific antibodies in serum are underway. Serum samples from four of the men were also tested for antibodies to a standard battery of respiratory viruses. Among other results, all four men had mildly elevated titers to adenovirus (32 or less), two of the four had mildly elevated (32 or less) titers to influenza type A, and none had elevated titers to influenza type B.

Although outbreaks of pneumococcal disease have been reported before, they are rare. The results of our investigation strongly suggest that pneumococcal disease was associated with this workplace. The finding of two different serotypes of pneumococcus, if real, however, suggests that something in the workplace predisposed these men to pneumococcal infection, rather than that a single strain was transmitted at the workplace. Although several possible pulmonary irritants may have been present in this work

environment, including silica dust and organic solvent fumes, it was not possible for us to quantitate these exposures due to rapidly changing work and ventilatory conditions on the boat. It is also possible that a viral exposure may have predisposed these men to infection. The results of our limited testing for antibodies to respiratory viruses, however, did not strongly implicate a particular viral pathogen. Thus what pre-disposed these men to infection will probably not be known with certainty.

BULLETIN

Shortage of Immune Globulin Supplies

A nationwide shortage of Immune Globulin for intramuscular injection has occurred and is expected to continue through 1995. The projected monthly production of IG should be sufficient to meet regular, "steady state" needs. To ensure efficient and equitable distribution of supplies, new orders must be placed directly with one of the two IG manufacturers (Armour Pharmaceutical Company and Michigan Department of Public Health, Division of Biologic Products). Both manufacturers will routinely fill orders that do not exceed 100 doses per week or a total of 500 doses per month. A purchaser who requires more than 500 doses of IG per month will be referred to an epidemiologist at the Hepatitis Branch of CDC, who will decide if the additional doses should be released.

HAPPY
EASTER

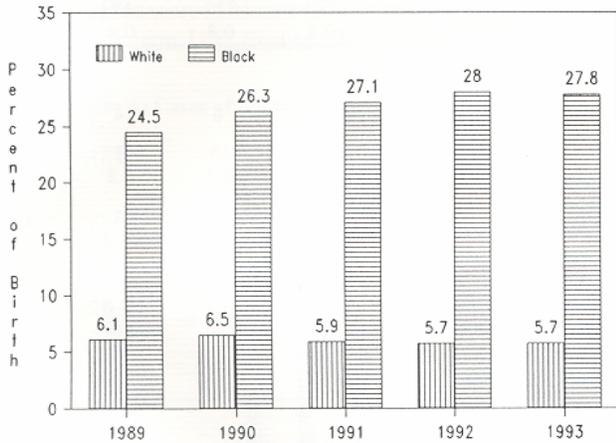


AIDS UPDATE

HIV Infection Among Teenage Mothers, Orleans Parish, 1990-1993

From 1990 through 1993, each year on average, approximately 2,068 teenage mothers gave birth in the Orleans parish (8.7% of the total female teenage population age 14 to 19 years). They constituted 23.3% of childbearing women of all ages who delivered babies during the same period. The percent of all births that occurred in teenage mothers increased slightly from 26.3% in 1990 to 27.8% in 1993 for blacks and decreased from 6.5% to 5.7% for whites (Figure 1).

Figure 1: Percent of births attributed to teenage mothers in Orleans Parish by race, 1989-1993



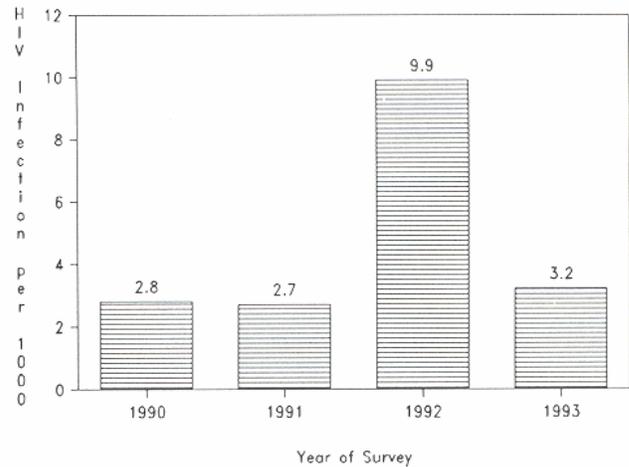
In the Survey of Childbearing Women in Orleans Parish (1990 to 1993) 6,703 teenage mothers (6396 blacks, 307 whites) were tested for HIV antibodies, and 31 (0.46%) were positive. The number tested accounted for 81% of the total teenage mothers residing in the parish. The trend for HIV positivity is shown in Figure 2. An estimated 38 teenage mothers were infected from 1990 to 1993 and comprised 21.5% of all infected women who delivered babies during the same period in the parish. Also an estimated 5 to 11 HIV infected babies were born to these mothers (based on a mother-to-child transmission rate of 12% to 30%). There was no statistically significant difference in seropositivity rate between teenage mothers and older childbearing women ($P > 0.1$).

Results of the survey in the Sexually Transmitted Disease Clinic (North Rampart Clinic in New Orleans) indicated, each year, from 1990 through 1993, approximately 9 per 1000 female teenagers visiting the clinic were HIV infected. Those attending the clinic are presumed to be at high risk for HIV.

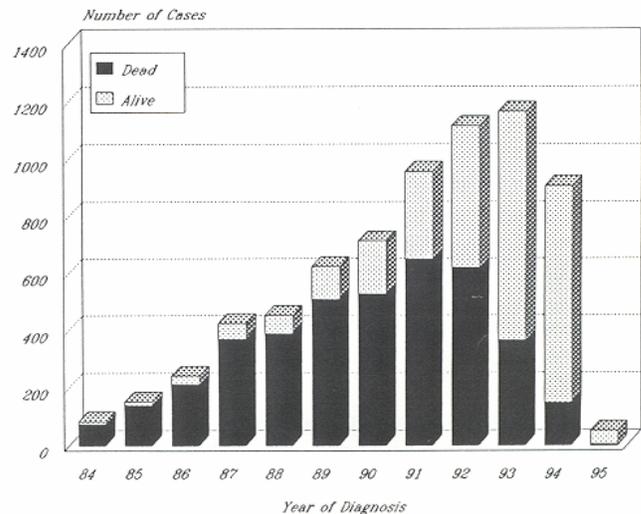
In the AIDS Surveillance data, between 1990 to 1992 there were 79 (5.1% white and 91.1% black) female AIDS cases age 20-29 years in Orleans parish. Because of the length of incubation period for HIV it is possible that many of these women were infected as teenagers. The major risk behaviors for this group (in retrospect) were IDU (24.4%), high risk heterosexual contact (51.1%), and 20% were in non-identified risk behavior group.

Children of HIV-infected teenage mothers are born with very severe problems. Even if children of HIV positive teenage mothers are not exposed to the biological effects of the virus, the majority are exposed to the environmental effect such as less caregiving for the child, stigmatization, social isolation, as well as HIV disease in the family, and the anticipation of maternal death. Results of the surveys support the need for a continued effort of early behavioral and educational interventions in treatment, testing, counseling and monitoring the HIV trend in Orleans parish.

Figure 2: HIV infection in teenage mothers in Orleans Parish by year of survey, 1990-1993



AIDS Case Trends



LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE,
JAN - FEB, 1995
PROVISIONAL DATA

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD				% Chg	
	1	2	3	4	5	6	7	8	9	Jan-Feb 1995	Jan-Feb 1994	Cum 1995	Cum 1994		
<u>Vaccine-preventable</u>															
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Mumps	0	0	0	0	0	1	0	0	0	1	2	1	2	-50	
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Pertussis	0	0	0	0	0	0	0	0	0	0	1	0	1	0	
<u>Sexually-transmitted</u>															
AIDS	Cases	20	9	4	4	3	2	2	5	3	52	178	52	178	-71
	Rate ¹	1.8	1.6	1.1	0.8	1.1	0.6	0.4	1.4	0.8	1.2	4.1	1.2	4.1	
Gonorrhea	Cases	709	168	160	147	84	85	354	121	125	1953	1825	1953	1825	+7
	Rate ²	6.8	3.1	4.5	3.0	3.2	2.7	7.0	3.5	3.6	4.6	4.3	4.6	4.3	
Syphilis(P&S)	Cases	39	31	9	29	4	6	19	19	18	174	319	174	319	-50
	Rate ²	0.4	0.6	0.3	0.6	0.2	0.2	0.4	0.5	0.5	0.4	0.8	0.4	0.8	
<u>Enteric</u>															
Campylobacter		3	2	4	1	1	0	0	1	2	14	6	14	6	+133
Hepatitis A	Cases	6	1	1	0	0	0	0	0	1	9	13	11	13	-15
	Rate ¹	0.6	0.2	0.3	-	-	-	-	-	0.3	0.2	0.3	0.3	0.3	
Salmonella	Cases	7	4	1	1	1	2	0	1	1	18	12	18	12	+50
	Rate ¹	0.7	0.7	0.3	0.2	0.4	0.6	-	0.3	0.3	0.4	0.3	0.4	0.3	
Shigella	Cases	9	1	2	2	1	0	0	9	0	24	12	24	12	
	Rate ¹	0.9	0.2	0.6	0.4	0.4	-	-	2.6	-	0.6	0.3	0.6	0.3	
Vibrio cholera		0	0	0	0	0	0	0	0	0	0	0	0	0	-
Vibrio, other		0	0	1	0	0	0	0	0	0	0	1	1	1	0
<u>Other</u>															
Hepatitis B	Cases	5	6	0	2	0	0	5	0	0	18	20	18	20	-10
	Rate ¹	0.5	1.1	-	0.4	-	-	1.0	-	-	0.4	0.5	0.4	0.5	
<u>Meningitis/Bacteremia</u>															
H. influenzae		0	0	0	0	0	0	0	0	0	0	2	0	2	-
N. meningitidis		3	2	0	0	3	0	2	0	1	11	7	11	7	+57
Tuberculosis	Cases	-	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A
	Rate ¹	-	-	-	-	-	-	-	-	-	N/A	N/A	N/A	N/A	N/A

1 = Cases per 100,000

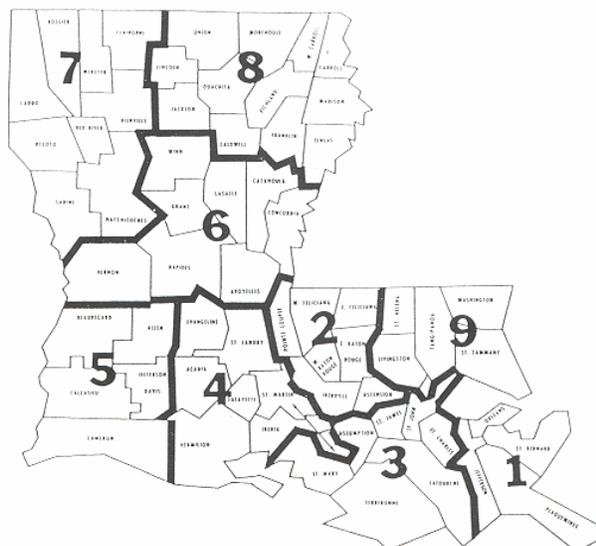
2 = Cases per 10,000

Table 2. Diseases of Low Frequency

Disease	Total to Date
Blastomycosis	3
Brucellosis	0
Histoplasmosis	0
Lead Toxicity	0
Legionellosis	1
Lyme Disease	0
Malaria	0
Tetanus	0

Table 3. Animal Rabies (Jan-Feb 1995)

Parish	No. Cases	Species
St. Landry	4	Skunks
Lafayette	1	Skunk
Allen	1	Skunk
Acadia	2	Skunk



Annual Summary Hepatitis A, 1994

In 1994, a total of 170 hepatitis A cases were reported to the Epidemiology Section, an increase of 62% from 1993. The overall state case rate is 4.0 per 100,000. Sex-specific rates were higher in males than females (4.6 vs 3.4 per 100,000), while race-specific rates were over two times higher in whites than blacks (3.5 vs 1.5 per 100,000). The age groups in which the largest number of cases were reported occurred in the 5 - 9 years and 20 - 44 years of age groups, demonstrating the typical bimodal peak of hepatitis A infection (Figure 1). The increase in cases within the 5 - 9 year age group is reflected by a school outbreak which occurred during spring 1994 (See LA Morbidity Report, Vol. 5, No. 3). However, a significant change is noted in the 20 - 44 years age groups, most notably that cases were predominantly males. The four parishes with the largest number of cases were: Orleans (39), Jefferson (26), Calcasieu (28) and Cameron [11, Figure 2].

Figure 2: Cases of hepatitis A by parish, 1993

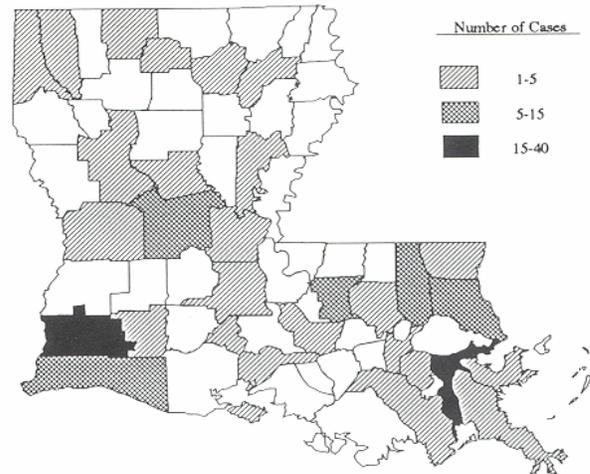
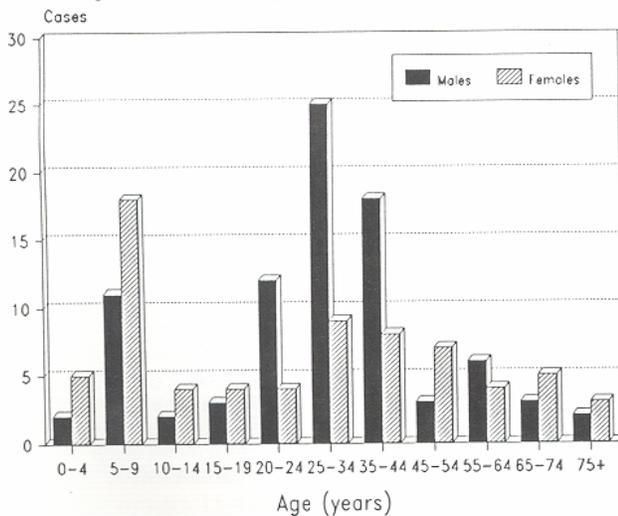


Figure 1: Cases of hepatitis A by age and sex, 1993



Comment:

Over the past several years, the age trend of hepatitis A has remained consistent. However, the change of male predominance in the adult age groups is unusual in such that females were more likely to become cases as a result of frequent exposure to children as being the primary child caretaker. Unless the pattern of child care has not substantially changed, other behavioral risk factors may need to be considered. Hepatitis A transmission has been associated with drug use and homosexual activity in other areas, and this may be involved here now. With the development and release of the new hepatitis A vaccine (see article, pg 4), it is possible there will be a significant decrease in hepatitis A rates in high risk groups in the future.

LOUISIANA FACTS

The current requirement for the reporting of selected communicable diseases dates back to an Ordinance passed by the Board of Health on May 18, 1870 which stated All practitioners of medicine, masters of any water craft, boarding or lodging house keepers, principals or masters of any boarding school or seminary, the chief officers or persons in charge of any public institution of charity or asylum, or otherwise, are hereby required to report, within twenty-four hours, to the office of the Board of Health, all cases within their cognizance of Asiatic cholera, yellow fever, typhus or ship fever, malignant scarlet fever, small-pox, varioloid, trichiniasis, or any other case that may at any time be specified by the Board of Health, and in default or failure to so report such cases, such person so failing or in default shall be liable to a fine not to exceed fifty dollars; provided, however, that said Board may declare it unnecessary to report further cases when any disease shall have been pronounced epidemic.

BULK RATE
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 Permit No. 101

LIST OF REPORTABLE DISEASES/CONDITIONS

	REPORTABLE DISEASES		OTHER REPORTABLE CONDITIONS
Acquired Immune Deficiency Syndrome (AIDS)	Hemolytic-Uremic Syndrome	Poliomyelitis	Cancer
Amebiasis	Hepatitis, Acute (A, B, C, Other)	Psittacosis	Complications of abortion
Anthrax	Hepatitis B in pregnancy	Rabies (animal & man)	Congenital hypothyroidism
Aseptic meningitis	Herpes (genitalis/neonatal)**	Rocky Mountain Spotted Fever (RMSF)	Galactosemia
Blastomycosis	Human Immunodeficiency Virus (HIV) infection****	Rubella (German measles)	Hemophilia
Botulism*	Legionellosis	Rubella (congenital syndrome)	Lead poisoning
Brucellosis	Leprosy	Salmonellosis	Phenylketonuria
Campylobacteriosis	Leptospirosis	Shigellosis	Reye Syndrome
Chancroid**	Lyme disease	Syphilis**	Severe Traumatic Head Injuries+
Cholera*	Lymphogranuloma venereum**	Tetanus	Severe undernutrition
Chlamydial infection**	Malaria	Trichinosis	severe anemia, failure to thrive
Diphtheria*	Measles (rubeola)*	Tuberculosis***	Sickle cell disease (newborns)
Encephalitis (specify primary or post-infectious)	Meningitis, (Haemophilus)*	Tularemia	Spinal cord injury+
Erythema infectiosum (Fifth Disease)	Meningococcal infection (including meningitis)*	Typhoid fever	Sudden infant death syndrome (SIDS)
Escherichia coli 0157:H7	Mumps	Typhus fever, murine (fleaborne, endemic)	
Foodborne illness*	Mycobacteriosis, atypical***	Vibrio infections (excluding cholera)	
Genital warts**	Ophthalmia neonatorum**	Yellow fever*	
Gonorrhea**	Pertussis		
Granuloma Inguinale**	Plague*		

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