Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 (504) 568-5005
www.dhh.state.la.us/OPH/infectepi/default.htm

M. J. "Mike" Foster, Jr.
GOVERNOR

David W. Hood
SECRETARY

March-April 2002 **Volume 13 Number 2**

Antibiotic Sensitivity in Louisiana

Highlights

- MRSA is now a community acquired infection.
- Community MRSA is often more sensitive to antibiotics than hospital acquired, so ask for antibiotic sensitivity tests

1. **Antibiotic Sensitivity Active Surveillance**

The Antibiotic Sensitivity Active Sentinel Surveillance system has been maintained in 30 hospitals that continue to voluntarily participate in reporting monthly lab aggregate data and individual case reports of Vancomycin Resistant Enterococci (VRE), Drug Resistant Streptococcus Pneumoniae (DRSP) and Methicillin Resistant Staphylococcus Aureus (MRSA). The collection rate was 100% of the expected hospitals for the 4th quarter of 2001. New hospital lab reporting sites are encouraged to participate in this surveillance activity.

The resistance rate for two of the three organisms is gradually increasing between 2000 and 2001 with MRSA from 38% to 45%, DRSP from 42% to 48% and VRE rates remain stable (around 5%).

2. Passive reporting of antibiotic resistant cases

There has been a 731% increase in the number of reports of antibiotic resistant organisms since 1997 (see Table). It is difficult to determine whether the increase is due to better reporting or actual increase in the true number of cases in the population.

Table: Case reports of antibiotic resistance by organism, 1997-2001

Event Name	1997	1998	1999	2000	2001
Enterococcus faecium	80	178	123	172	209
Enterococcus fecalis	10	23	24	35	37
Enterococcus spp	25	77	73	181	128
MRSA	490	936	1073	3783	4726
Drug Resistant S.pneumoniae	121	166	101	430	217

3. Outbreak investigations

There has been concerns about increasing numbers of sporadic cases or even small outbreaks of MRSA cutaneous infections.

In October, a parish prison facility reported an unusually large number of boils and cutaneous infections among prisoners. During a 30 day period in October/November 2001 cultures were performed on all the cutaneous infections that presented at the prison clinics. Forty-two cultures that grew an organism included 11 staphylococci methicillin sensitive, 28 methicillin resistant (a 71% proportion of MRSA) and 3 other non-staphylococci bacteria. For a population of 1,600 inmates this represented an incidence of 210 MRSA skin infections /1,000 /year, an incidence well above the norm.

Antibiotic sensitivity was reviewed for 26 MRSA specimens: 19 (73%) were sensitive to ciprofloxacine, 22 (84%) were sensitive to clindamycin, 16 (61%) sensitive to tetracycline and 19 (73%) sensitive to trimethoprim-sulfamethoxazole. This fits the pattern observed in community-acquired MRSA that are considered to be "multi-sensitive."

The outbreak lasted two months and subsided. Among 10 isolates tested by pulse field gel electrophoresis (PFGE) 5 belonged to type G61 and 4 to type G36. These two types were among the most prevalent in the city. Out of 59 MRSA isolates from several hospitals in the same city tested by PFGE, 19 (32%) belonged to type G36 and 32 (54%) to type G61. This high prevalence of a few PFGE types among community acquired MRSA has been observed before.

Contents

BRFSS: Arthritis Update 2000

Zehra Ali, MPH

Arthritis is a public health issue that affects one in three adults in Louisiana. Of the approximately 880,000 Louisianans affected by arthritis in 2000, nearly half are less than 55 years of age.

Arthritis disproportionately affects Louisianans. The rate of arthritis is highter for Whites than African Americans (31% vs 26%). Likewise gender disparities are present, with 34% of women report-

(Continue on next page)

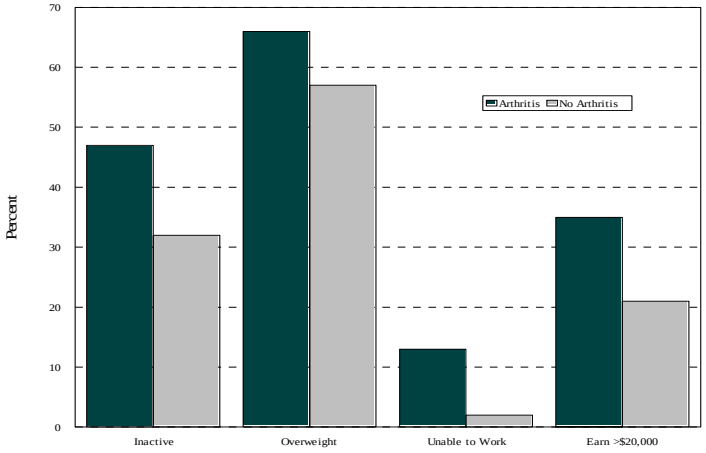
ing to have arthritis compared to men (23%). Level of education is directly correlated with the onset of arthritis: 46% of Louisianans who have not graduated from high school, reported to have arthritis compared to 26% of Louisianans with at least a high school diploma or GED.

Arthritis is the leading cause of disability. It limits everyday activities and alters quality of life among adult Louisianans. Adults with arthritis are three times more likely to report their health as fair or poor (32%) compared to those without arthritis (9%). Louisianans with arthritis are also more likely to report days of poor physical health (43%) than those without arthritis (22%) and are more likely to report days of poor mental health (32%) than those without arthritis (23%).

The disabling nature of arthritis alters a person's ability to be physically active, to work, and to earn an income. (Figure) Forty-seven percent of Louisianans with arthritis are inactive in comparison to 32% of Louisianans without arthritis. A higher percentage of people with arthritis are overweight (66%) compared to those without arthritis (57%). This may be directly related to the disproportionate inactivity rates. Statewide, Louisianans with arthritis are six times more likely to be unable to work (13%) than those without arthritis (2%). The inability to work may have a direct affect on their ability to earn a higher income: adults with arthritis reported a household income of $20,000 or less (35%) compared to those without arthritis (21%).

More than half (55%) of adult Louisianans with arthritis are unaware of the type of their condition and two-thirds (67%) of this group are not under a physician's care for arthritis. Early diagnosis and continuous arthritis management are known to not only reduce long-term discomfort but also to improve emotional health and quality of life. Hence it is imperative that the population be aware of their particular condition and become educated on additional studies that are currently in progress to understand the depth of the disease.

Figure: Quality of life indicators by arthritis status in Louisiana, 2000



The Chronic Disease Epidemiology Unit of the Louisiana Office of Public Health conducts surveillance on arthritis statewide through the Behavioral Risk Factor Surveillance System (a telephone survey that annually collects data from a representative sample of adults 18 or older). In 2000, a random sample of 1,601 adult Louisianans participated. The Office of Public Health works in partnership with the Louisiana Chapter of the Arthritis Foundation to address arthritis and its complications. The Arthritis Foundation can help you find resources for any of the more than 100 types of arthritis. To obtain information on these resources or for further information regarding arthritis, please call toll-free at 1-800-673-7508.

The Importance of a Repeat Newborn Screen

David Damsker, MD; Charles Myers, MSW;
Louis Trachtman, MD, MPH

A patient with a variant form of phenylketonuria (PKU) was recently identified based solely on the second screen. In accordance with Louisiana's Newborn Screening Rule (LAC 48: V, 6303 et. seq.), the aforementioned infant's primary care physician properly identified that the initial screen, despite having a completely normal value, had been done prior to the 48-hours after birth, and therefore, required a repeat screen. The physician ordered the patient re-screening at the first post-discharge visit. As the results of the second screen indicated that the phenylalanine value was elevated, the State Genetics Program staff immediately arranged for confirmatory testing and referral to a metabolic center.

As data from a number of states has shown, this could have been a case of "classical" PKU, and had the Newborn Screening Rule not been properly followed, the baby could have suffered the consequences of untreated PKU.

In the Washington State newborn screening program, 4% of all PKU patients diagnosed since 1978 had negative first screens and were only able to be identified on the second screen. They have also found 15% of all congenital hypothyroidism (CH) cases over the same time span, on the second screening. The Oregon program (which performs testing for five states), found five (5) PKU cases since 1991 and 12.4% of their total CH cases since 1975, all on the second screening.

Although for the last decade Louisiana's classical PKU patients have been detected from the initial screen, this infant with a PKU variant does highlight the importance of the repeat screen.

For questions or more information, please contact the Louisiana Genetic Diseases Program at 504-568-5070.

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Assistant Secretary, OPH	*Madeline McAndrew*
State Epidemiologist	*Raoult Ratard, MD MPH MS*
Editors	*Karen Kelso, RNC MS* *Susan Wilson, MSN*
Layout & Design	*Ethel Davis, CST*

Smoking Prevalence Among Public Middle School Students

Nancy Hancock, MPH candidate

Smoking prevalence

According to the recent Youth Tobacco Survey (YTS), one out of two (50.0%) Louisiana public middle school students has ever smoked a cigarette. By the eighth grade over 60% of Louisiana children have ever smoked. Nearly one out of five (17.1%) middle school students are current smokers. 4.8% of public middle school students reported being a frequent smoker.

Variable definitions

- Ever smoked: tried or experimented with cigarette smoking, even one or two puffs
- Current smoker: smoked cigarettes on 1 or more days in the past 30 days
- Frequent smoker: smoked cigarettes on 20 or more days in the past 30 days

Smoking prevalence varies by grade and race. YTS data indicate that 17,000 sixth (38.8%), 25,000 seventh (49.1%) and 30,000 eighth (62.6%) grade adolescents have ever smoked cigarettes. 11.9% of sixth graders, 16.3% of seventh graders and 22.9% of eighth graders reported smoking cigarettes on 1 or more days during the past 30 days. Sixth graders are less likely to be frequent smokers (2.7%) compared to seventh (4.4%) and eighth (7.2%) grade students.

Smoking prevalence of ever tried or experimented with cigarette smoking is similar for African-American and white public middle school students (47.5%, 51.5%). However, the rates of current and frequent smoking are different. White boys have the highest prevalence of current smoking (23.5%) followed by white girls (19.2%), African-American boys (11.7%) and African-American girls (9.3%). The same pattern holds for frequent cigarette smoking (9.1%, 5.1%, 2.3% and 0.8% respectively).

Intentions to smoke

Most adolescents who have never smoked do not plan to smoke during the next year. Only 4.0% of those who have never smoked think they will try a cigarette soon and 3.1% think they will smoke cigarettes during the next year. As children mature, their intentions differ; 3.8% of sixth graders who have never smoked think they will smoke cigarettes during the next year compared with 1.8% of seventh graders and 2.3% of eighth graders. However, when all children are included, almost one out of four (23.4%) Louisiana public middle school students intend to smoke during the next year (Figure).

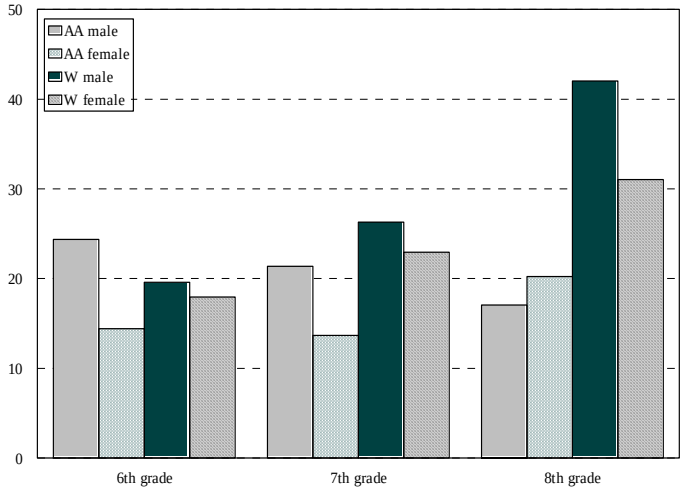
African-American and white students have different intentions to smoke. White boys (29.2%) are more likely to think they will smoke cigarettes during the next year than white girls (23.9%), African-American boys (20.9%) or African-American girls (16.0%). However, 20.0% of African-American boys think they will be smoking cigarettes five years from now which is similar to the number who said they will smoke cigarettes during the next year. The percent who answered yes to smoking cigarettes 5 years from now is reduced in the other groups (21.3% of white boys, 17.4% of white girls and 10.7% of African-American girls) compared to those who think they will smoke cigarettes during the next year. African-American boys intend to continue smoking cigarettes while the other groups think they will quit in the next five years. Because African-American adult males are almost twice as likely to be diagnosed with a smoking related illness, programs need to be targeted to reduce African-American adolescent boys' intentions to smoke.

The Louisiana Tobacco Control Program in partnership with the Chronic Disease Epidemiology Unit of the Louisiana Office of Public Health recently conducted the first Youth Tobacco Survey (YTS) in Spring 2001; 2,328 public middle school students completed the self-administered survey. 82.5% of schools (35 of the 48 sampled schools) and 72.9% of students within the schools (n=2,328) participated to yield a 60.2% response rate.

Cigarette smoking is a leading cause of death in the U. S., and most adult smokers began as adolescents. To prevent smoking among Louisiana's youth, it is essential to understand when this population starts smoking cigarettes and how they transition from non-smokers to frequent smokers. Documenting smoking prevalence and intentions to smoke serves as the beginning of this process, and these data function as an assessment of the cigarette smoking problem among Louisiana's students.

Smoking prevention campaigns need to begin early in middle school to help avert experimentation with cigarette smoking, and these efforts need to continue in the seventh and eighth grades to decrease the number of adolescent cigarette smokers in Louisiana. The Tobacco Control Program uses information from YTS as a rationale for their youth-oriented activities. The Tobacco Control Program funds a number of community-based organizations around the state. The organizations include: Boys and Girls Clubs, school-based health centers, youth ministry groups, and community centers. Youth within these organizations conduct rallies and meetings to educate their peers and community about the importance of making healthy lifestyle choices. Also, they advocate for clean indoor air, tobacco free communities, and using sports and physical activity as an alternative to tobacco usage.

Figure: Percent who think they will smoke cigarettes during the next year by grade, race and sex



Louisiana Office of Public Health
Infectious Disease Epidemiology Section
Phone: 1-800-256-2748
Fax: (504)568-5006

Information on Methicilin Resistant Staphylococcus aureus (MRSA)

A brief history of the origins of MRSA?
Staphylococcus aureus was sensitive to penicillin when it was introduced in the late 1940s but resistance developed almost immediately. S.aureus acquired a β lactamase capable of inactivating the β lactam ring which is at the core of the penicillin molecule. Lactamase resistant antibiotics (methicillin, nafcillin, oxacillin) remained effective until the early 1960s when S.aureus acquired a new gene that modified its penicillin binding protein. These strains were name methicillin resistant Staphylococcus aureus or MRSA.

MRSA started in hospitals and other medical care institutions
MRSA quickly became known for its ability to cause large hospital outbreaks and become endemic. Most strains of MRSA are sporadic but a few strains has the ability to spread very rapidly throughout an institution and reach epidemic levels. MRSA became progressively more common. In 1999 the proportion of MRSA among S.aureus hospital acquired infections in the USA was estimated at 50% with large local variations.

MRSA has spread in the community and now is considered to be also a community acquired organism
The actual prevalence of community acquired MRSA cannot be accurately determined BUT it is estimated that 40% of adult cases may be acquired outside the hospital (Chambers HF, Emerg Inf Dis 2001, 7:178-182).

Community acquired MRSA infections are commonly reported in miscellaneous groups: patients with cystic fibrosis, day-care centers, wrestling teams, prisons.

The prevalence of CA-MRSA infection was estimated at 208/100,000 in Chicago (Hussain FM, Pediatr Inf Dis J 2000, 19:1163-1166). The prevalence seems to have increased from 10/100,000 in 1988/90 to 259/100,000 in 1993/95.

Hospital acquired MRSA (HA-MRSA) show multi-resistance to other antibiotics while community acquired MRSA (CA_MRSA) remains multi-sensitive.

Resistant to	CA-MRSA	HA-MRSA
Erythromycin	2-8 %	50-60%
Clindamycin	2-5 %	30-40 %
Tetracycline	10-20 %	70-80 %
Tmp-sxt	2-10 %	20-40 %
Ciprofloxacin	1-5 %	27.4 %
Vancomycin	0 %	0 %

HA-MRSA strains show much more resistance to all other antibiotics

Tmp-sxt = Trimethoprim-sulfamethoxazole

MRSA are usually NOT more virulent than other S.aureus.
Many strains tend to be simple colonizers, they are present on the skin or mucosa and cause no infection, no disease. Others have the same pathogenic potential than regular S.aureus. No difference were found in animal lethality, in production of extracellular enzymes or toxins, in intraleukocyte survival.

However **CA-MRSA strains may be more virulent**: In 1999 CDC reported 4 cases of lethal MRSA infections among children (12months to 13 years from Minnesota and N.Dakota) who clearly had community acquired infections (hepatic abscess, brain abscess and necrotizing pneumonia). Unlike HA-MRSA strains, CA-MRSA stains produce superantigens (SEB and SEC, but not TSST-1). Superantigen production is a recently described virulence factor of both staphylococci and streptococci and is important because superantigen production by these microbes in immunologically naïve persons can cause toxic shock syndrome.

Colonized individuals are the main reservoir of MRSA
People are normally colonized by S.aureus. Some patients are more often colonized than others: newborns, diabetics, patients with skin diseases (eczema), hemodialysis patients. A small fraction of these S.aureus are MRSA. The proportion of MRSA depends on the locale.

The **sites of colonization** are:
•**NASAL area**
•perineum, anal area
•axillary areas, finger tips
•tracheostomy sites, wounds, sputum from intubated patient

Detection of carriers (in outbreaks or endemic situations)
•Rotate unmoistened nylon swabs 5 times around anterior portion of nares with gentle pressure on nares
•Roll swab onto plates of selective media (Mannitol salt agar) with fixed concentration of antibiotics
•Incubate at 30-35 °C for ≥48 hours
•MRSA carriers: 30,000 CFU per swab

MRSA main mode of transmission is by contact
Staphylococci are transmitted by direct skin-to-skin contact. The source of infection may be a person with infection or a person that is colonized. Usually the organism spreads from hands of the infected/colonized person to the skin of another person. In general, transmission of staphylococci does not occur by the airborne route or through contaminated objects (fomites). **Therefore the single best way to prevent transmission of staphylococci is routine handwashing**.

Droplet transmission occur only in very special circumstances such as from patients with tracheostomies.

MRSA is rarely transmitted by the environment, BUT in some institutionalized populations it is of major concern: burns units, hydrotherapy.

Colonization is not a sufficient reason to treat
MRSA colonization does not warrant treatment or hospital admission. The decision to treat a MRSA infection should be made based on the clinical judgment of the attending physician.

Hospital, nursing home, extended-care facility admission of a colonized or infected MRSA patient is acceptable medical practice.

There are very few indications for treatment of colonized patients or carriers
Elimination of **MRSA carriage** is NOT systematically recommended for the following reasons:
1-Difficulty in obtaining and in confirming elimination of colonization
2-Promotion of resistance to other antibiotics,
3-Complications due to side effects,
4-Relapses are frequent and multiple treatments would be necessary
5-High cost of monitoring results

How to attempt eradication of carriage ?
In some cases, physicians decide to treat carriers. The following regimen have been used for eradication of nasal carriage:

•Most antibiotics do not reach sufficient concentrations in nasal secretions
•Susceptibility testing necessary prior to eradication

Topical		
Mupirocin 2% ointment	tid	3 days
Vancomycin 5%	tid	14-28 days
Bacitracin (with syst)	tid	5 days
Fusidic acid 4%	tid	14 days
Oral		
Rifampin	600 mg qd	5 days
Trimethoprim Sulfa	160/800 mg bid	5 days
Minocycline	100mg bid	14 days
Ciprofloxacin	750mg bid	14 days

The main problems are the emergence of resistance (particularly with quinolones and rifampin) and relapse and recolonization.

What prevention measures to take when a MRSA patient is diagnosed in an institution?

Place the patient in **contact isolation**:
•Strict handwashing; Use of antimicrobial soap for personnel and patient bathing when MRSA contact is involved
•Gloves for direct contact with infected tissues
•Aprons or gowns for patient care
•Mask if coming within 6 feet of patients sputum +
•Patient placement in private rooms whenever possible. No placement of MRSA patients with other high risk patient in same room

There is NO need to:
- Systematically screen all patients
- Systematically screen medical personnel
- Treat colonized patient or medical care provider

MRSA patients can be transferred or discharged
Hospitals can transfer patients with active infection to nursing homes/extended-care facilities if the clinical manifestations of infection show signs of improvement and if the nursing home/extended-care facility is equipped to manage the wound and necessary antibiotic therapy. Denial of admission to a nursing home/extended-care facility should be based on medical eligibility, not on culture results.

A patient colonized by MRSA while hospitalized should be discharged once that accompanying medical condition is under control.

What to do in an outbreak situation in a hospital or long term care facility?
Call the Infectious Disease Epidemiology Section for advice at
1-800-256-2748
•Carry out epidemiologic investigation:
•Identify extent of patient colonization
•Identify staff colonized
•Establish links between patients /patient-staff.
•Evaluate relative importance of modes of transmission
– transient hand contamination
– common source carriers
– common source vehicle
•Select appropriate interventions to address epidemiologic situation
•Isolation and cohorting
•Eradication of colonization among patients and staff

What to do if one suspects a community acquired MRSA outbreak (particularly in an institution) ?
(MMWR October 26, 2001 / 50;42: 919-922)
1-Severe skin disease or treatment failures of presumed *S. aureus* skin infection **should be evaluated with appropriate cultures** or other diagnostic tests. Efforts to monitor the etiology of skin disease should be linked to these data to determine whether MRSA is a problem in the facility.

2-Optimal **treatment of MRSA disease** should be based on the infecting organism's **antimicrobial susceptibility** result and, when available, input by infectious disease expertise.

3-Recommend that all inmates/patients **practice good personal hygiene:** Close contact among institutionalized individuals may place them at increased risk for transmission of skin-colonizing or skin-infecting organisms.

Recommendations include:
- frequent handwashing, daily showers, easy access to sinks and plain soap (in this setting, the usefulness of antibacterial soap is unknown).
- daily showers
- avoid touching wounds or drainage of others and should have Hands should be washed with soap as soon as possible after touching wounds or dressings.
- Personnel that provide wound care should follow Standard Precautions

Common disinfectants are effective against MRSA

MRSA sensitivity to antibacterial disinfectants is no different from that of other bacteria. Most commonly used disinfectants are effective.

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE
Jan-Feb 2002
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 Jan-Feb 2002	Jan-Feb 2001	Jan-Dec Cum 2002	Jan-Dec Cum 2001	% Chg
Vaccine-preventable														
H. influenzae (type B)	0	0	0	0	0	0	0	0	0	0	0	0	1	-
Hepatitis B Cases	6	4	1	0	0	0	1	2	1	15	13	15	115	-87
Rate[1]	0.6	0.7	.3	0	0	0	.2	0.6	0.3	0.3	0.3	0.3	2.7	-
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Mumps	0	0	0	1	0	0	0	0	0	1	0	1	2	-
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	0	0	11	-
Sexually-transmitted														
HIV/AIDS Cases[2]	54	47	2	18	6	5	6	8	4	150	101	150	946	-84
Rate[1]	5.4	8.1	0.5	3.4	2.2	1.7	1.2	2.3	0.9	3.4	2.3	3.4	21.6	-
Gonorrhea Cases	551	163	85	159	69	93	433	166	107	1826	1892	1826	12288	-85
Rate[1]	53.0	28.7	22.5	30.8	25.7	30.5	85.6	47.3	27.8	42.3	44.8	42.3	291	-
Syphilis (P&S) Cases	3	7	1	5	0	1	0	0	4	21	17	21	173	-88
Rate[1]	0.3	1.2	0.3	1.0	0.0	0.3	0.0	0.0	1.0	0.48	0.4	0.48	4	
Enteric														
Campylobacter	1	0	1	3	0	2	0	0	0	7	15	7	129	-95
Hepatitis A Cases	8	1	0	0	0	0	2	0	0	11	15	11	85	-87
Rate[1]	0.8	0.2	0	0	0	0	0.4	0	0	0.3	0.6	0.3	2.7	-
Salmonella Cases	4	5	11	4	0	2	0	2	4	32.0	67	32	868	-96
Rate[1]	0.4	0.9	2.9	0.8	0	0.7	0	0.6	1.0	0.7	1.6	0.7	20.1	-
Shigella Cases	9	2	3	2	0	0	1	0	2	19	33	19	250	-92
Rate[1]	0.9	0.4	0.8	0.4	0	0	0.2	0	0.5	0.4	0.7	0.4	5.8	-
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	-
Vibrio, other	1	0	0	0	0	0	0	0	0	1	0	1	27	-96
Other														
H. influenzae (other)	0	0	0	0	0	1	0	0	0	1	1	1	11	-91
N. Meningitidis	2	1	1	1	3	1	0	0	0	9	22	9	79	-89
Tuberculosis	0	1	1	0	0	0	0	0	0	2	2	2	281	-99

1 = Cases Per 100,000

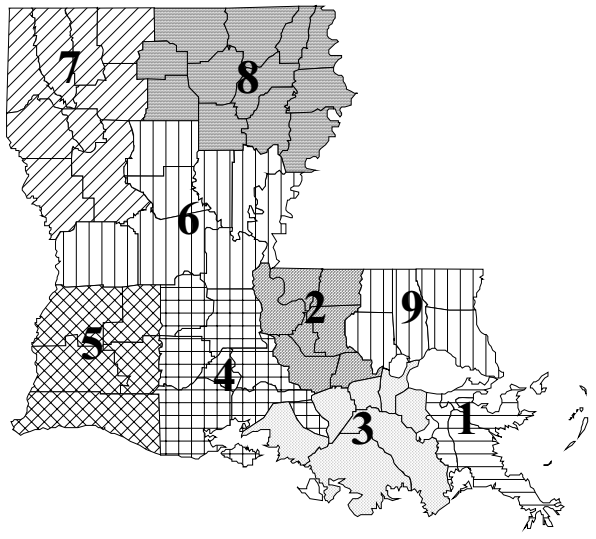
2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected.

Table 2. Diseases of Low Frequency

Disease	Total to Date
Legionellosis	0
Lyme Disease	1
Malaria	2
Rabies, animal	1
Varicella	5

Table 3. Animal Rabies (Jan-Feb 2002)

Parish	No. Cases	Species
Acadia	1	Skunk



Annual Summary Salmonellosis - 2001

In 2001, 838 cases of salmonellosis were reported, a 5% decrease from 2000 (Figure 1). The overall state case rate for year 2001 was 19.4 per 100,000. Sex-specific rates were higher for males than females (17.9 vs 16.8 per 100,000, respectively). The 0-4 years age group represented 49% of the cases (Figure 2) and has been a consistent pattern over the past years. The majority of case onsets were reported between July and October for which this seasonal trend is consistent for Salmonellosis infections when compared to previous years. In March, a *Salmonella Heidelberg* outbreak associated with stuffed bell peppers served at a local restaurant was identified and investigated (refer to *Louisiana Morbidity Report, March-April 2001, Vol. 12 No. 2*). Parishes reporting the highest case rates per 100,000 were St. Bernard (5.0), Morehouse (4.7), Terrebonne (4.3) and St. Tammany (3.8); [Figure 3]. Of the 26 (60%) identified serotypes for Salmonella, the three most frequently identified serotypes were *S. newport* (24%), *S. javiana* (14%) and *S. typhimurium* (12%) (Table).

Figure 1: Cases of salmonellosis in Louisiana, 1992-2001

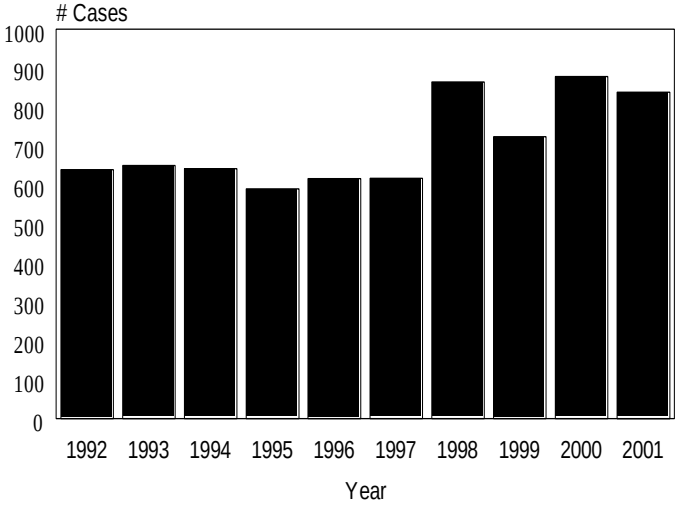


Figure 2: Cases of salmonellosis by age group, 2001

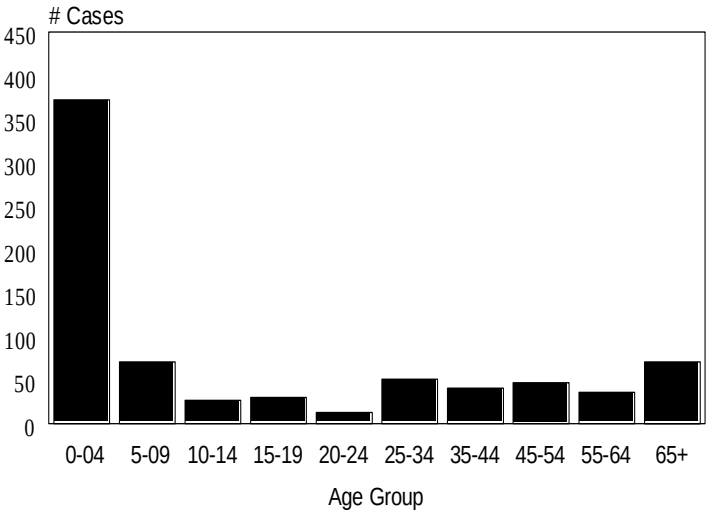
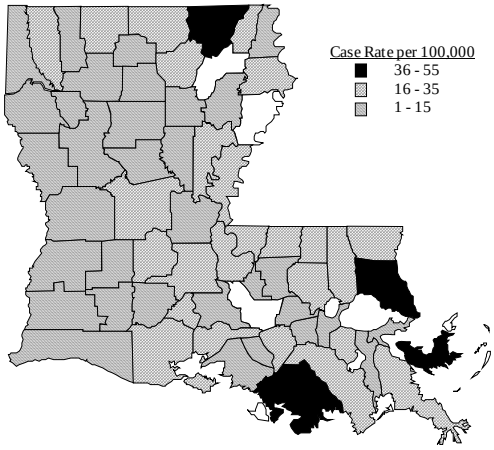


Figure 3: Cases of salmonellosis by parish, 2001



Serotype	1999 cases	1999 rank	2000 cases	2000 rank	2001 cases	2001 rank
newport	42	1	108	1	119	1
typhimurium	27	2	65	3	60	3
javiana	14	3	84	2	69	2
montevideo	14	4	23	6	19	6
mississippi	12	5	45	4	45	4
adelaide	NA	NA	36	5	37	5

Louisiana Fact

The press is often accused of highlighting stories and blowing things out of proportion. It was not always that way. In 1853 New Orleans suffered the worst outbreak of yellow fever with more than 8,000 yellow fever deaths. The New Orleans newspapers, believing that nothing should be printed which might injure the city's prosperity, refused for many weeks to countenance anything as totally undesirable as another epidemic. On June 22 the editor of the Crescent stated, apparently without flinching, that yellow fever had become an "obselete [sic] idea" in New Orleans.

The increasing gravity of the situation produced among the newspapers a gradual and reluctant surrender to the facts during the ensuing weeks. The Daily Delta apprised the public of the presence of yellow fever July 20, but made itself appear ludicrous by stating that it was the "least serious of several descriptions of fever," and that if victims would avoid excesses, discard their fears, and use simple remedies, mortality would be "very insignificant."

Reference: Louisiana State Board of Health: The Formative Years pp. 37,38

Sanitary Code - State of Louisiana
Chapter II - The Control of Disease

"It is hereby made the duty of every physician practicing medicine in the State of Louisiana to report to the State Health Officer, through the Health Unit of the parish or municipality wherein such physician practices, any case of suspected case of reportable disease which he is attending, or has examined, or for which such physician as prescribed. The report shall be made promptly at the time the physician first visits, examines or prescribes for the patient, and such report shall state the name, age, sex, race, usual residence, place where the patient is to be found, the nature of the disease and the date of onset." In addition to physician reporting, laboratories are required to report the results of tests which either confirm or suggest the occurrence of reportable diseases as specified by law. Additionally, Section 2:006 states "It shall be the duty of every osteopath, coroner, medical examiner, dentist, homeopath, infection control practitioner, medical records director, nurse, nurse midwife, nurse practitioner, pharmacist, physician assistant, podiatrist, social worker, veterinarian, and any other health care professional to report a confirmed case of reportable disease as specified in Section 2:003 in which he or she has examined or evaulated, or for which he or she is attending or has knowledge."

2:003 The following diseases are hereby declared reportable with reporting requirements by Class:

Class A Diseases/Conditions - Reporting Required Within 24 Hours:

Diseases of major public health concern because of the severity of disease and potential for epidemic spread—report by telephone immediately upon recognition that a case, a suspected case, or a positive laboratory result is known; [in addition, all cases of rare or exotic communicable diseases, unexplained death, unusual cluster of disease and all outbreaks shall be reported.]

- Anthrax
- Botulism
- Brucellosis
- Cholera
- Diphtheria
- Haemophilus influenzae (invasive infection)
- Measles (rubeola)
- Neisseria meningitidis (invasive infection)
- Plague
- Rabies (animal & man)
- Rubella (German measles)
- Rubella (congenital syndrome)
- Smallpox
- Tularemia
- Viral Hemorrhagic Fever

Class B Diseases/Conditions - Reporting Required Within 1 Business Day:

Diseases of public health concern needing timely response because of potential of epidemic spread—report by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known.

- Arthropod-borne encephalitis
- Aseptic meningitis
- Chancroid[1]
- E. Coli 0157:H7
- Hantavirus Pulmonary Syndrome
- Hemolytic-Uremic Syndrome
- Hepatitis A (acute illness)
- Hepatitis B (carriage in pregnancy)
- Herpes (neonatal)
- Legionellosis
- Malaria
- Mumps
- Pertussis
- Salmonellosis
- Shigellosis
- Syphilis[1]
- Tetanus
- Tuberculosis[2]
- Typhoid Fever

Class C Diseases/Conditions - Reporting Required Within 5 Business Days:

Diseases of significant public health concern—report by the end of the work week after the existence of a case, suspected case, or a positive laboratory result is known.

- Acquired Immune Deficiency Syndrome (AIDS)
- Blastomycosis
- Campylobacteriosis
- Chlamydial infection[1]
- Cryptococcosis
- Cryptosporidiosis
- Cyclosporiasis
- Dengue
- EHEC serogroup non 0157
- EHEC + shiga toxin not serogrouped
- Enterococcus, Vancomycin Resistant; (VRE)
- Giardia
- Gonorrhea[1]
- Hansen Disease (leprosy)
- Hepatitis B (acute)
- Hepatitis C (acute)
- Human Immunodeficiency Virus (HIV)
- Listeria
- Lyme Disease
- Lymphogranuloma venereum[1]
- Psittacosis
- Rocky Mountain Spotted Fever (RMSF)
- Staphylococcus aureus, Methicillin/ oxacillin or vancomycin resistant (MRSA)
- Streptococcus pneumoniae (invasive infection; penicillin resistant (DRSP)
- Streptococcus pneumoniae (invasive infection in children < 5 years of age)
- Varicella (chickenpox)
- Vibrio infections (except cholera)

Other Reportable Conditions:

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

Case reports not requiring special reporting instructrions can be reported by Confidential Disease Case Report forms EPI-2430, facsimile (504-568-5006), phone reports (504-568-5005 or 1-800-256-2748), or electronic transmission.

[1]Report on STD-43 form. Report cases of syphilis with active lesions by telephone.

[2]Report on CDC72.5 (f.5.2431) card.

*Report to the Louisiana Genetic Diseases Program Office by telephone (505) 568-5070 or FAX (504) 568-7722.

**Report on DDP-3 form; preliminary phone report from ER encouraged (504) 568-2509. Information contained in reports required under this section shall remain confidential in accordance with the law.

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