



Louisiana Morbidity Report

Louisiana Office of Public Health - Infectious Disease Epidemiology Section
P.O. Box 60630, New Orleans, LA 70160 (504) 568-5005
www.oph.dhh.state.la.us/infectiousdisease/index.html



Frederick P. Cerise, M.D., M.P.H.
Secretary

Kathleen Babin eaux Blanco
GOVERNOR

March-April 2004

Volume 15 Number 2

Increasing Pneumococcal Polysaccharide Vaccine Rates in Hospitalized Patients

The LSU-New Orleans Internal Medicine House-staff Initiative for Performance Improvement (HIPI) Experience*

R. Kruspe; R. Lillis; D.W. Daberko II; C.M. Blais; W. Wilbright; S. Gupta; C.M. Gould; T. Sun; J.A. Martinez; B. deBoisblanc; U. Ladabaum; C.V. Sanders; F.A. Lopez

*(Adapted and reprinted with permission from the *The Journal of the Louisiana State Medical Society* 2003; 155:325-331)

The Institute of Medicine's report on errors in medicine has focused attention on the quality of medical care in the United States. A consistent feature of many studies that evaluate quality of health care is that a gap exists between accepted evidence-based practice guidelines and the actual care that is delivered. In 2000, Jencks et al. first reported upon the quality of health care received by Medicare beneficiaries across the U.S. by monitoring twenty-four clinical quality indicators that highlighted acute myocardial infarction, heart failure, stroke, pneumonia, breast cancer and diabetes mellitus. The overall rank of Louisiana in this profile of quality indicators was forty-nine. When these quality indicators were re-evaluated and reported upon in a publication in 2003, Louisiana had slipped further to fifty-one (including Puerto Rico and the District of Columbia).

Streptococcus pneumoniae is the most common cause of community-acquired pneumonia requiring hospitalization and is respon-

(Continued on page 2)

Misapplication of Organophosphate Insecticide to Public School Results in Health Effects – LA, 2002

Shannon Soileau, MS, Michelle Lackovic, MPH

The Louisiana Department of Health and Hospitals (LDHH) conducts surveillance of health-related pesticide exposures. The statewide surveillance program obtains acute pesticide exposure data from two sources: the Louisiana Department of Agriculture and Forestry (LDAF) and the Louisiana Poison Control Center (PCC). LDAF complaints date back to 1991 and referral of PCC cases began in 2002. All LDAF-referred complaints and some PCC complaints, depending on location of exposure and severity, are investigated by LDAF and LDHH. Joint investigation of these complaints involves complainant interviews and collection of environmental and health data.

In March 2002, LDHH received notification of a pesticide complaint at a public elementary school resulting in reported adverse health effects for twenty-one school employees. The incident involved an application of an organophosphate insecticide treating for swarming termites and ants. The investigation revealed that school employees' health effects were associated with insecticide exposure.

Undiluted Dichloron® 2000, an insecticide, was applied to the exterior of temporary buildings with a Lysol® kitchen cleaner spray bottle. Dichloron® 2000 contains 4.3% chlorpyrifos (0,0-diethyl 0-3,5,6-trichloro-2-pyridyl phosphorothioate), a cholinesterase inhibiting organophosphate insecticide. Dichloron® 2000 also contains the inert ingredients aromatic naptha, nonylphenol polyethylene glycol ether, 1, 2, 4-trimethylbenzene, naphthalene and aromatic petroleum distillate. According to the product label, dilution with water is required for each of its designated uses. Dichloron® 2000 is not labeled for termite control and has limited uses for ant control on lawns. The product was transferred from its original container to the spray bottle and then approximately three and one-half pints of undiluted product were applied around the foundation and doorways of the temporary buildings. Laboratory analysis of the spray bottle's contents indicated a 5% chlorpyrifos solution.

Immediately following the application, twenty-one people working in and around the temporary buildings noticed an odor and began to experience symptoms. All twenty-one individuals were

(Continued on page 3)

Content

<u>Increasing Pneumococcal Polysaccharide Vaccine Rates in Hospitalized Patients</u>	1
<u>Misapplication of Organophosphate Insecticide to Public School Results in Health Effects – LA, 2002</u>	1
<u>Shigella in Central Louisiana</u>	4
<u>Labrotory Announces RiboPrinter</u>	5
<u>Your Tax Dollars at Work</u>	5
<u>Natural Teeth Retention Among Older Adults in LA</u>	5
<u>To Close or Not To Close</u>	6
<u>OPH Training Offerings - Videoconference Courses</u>	6

Increasing Pneumococcal Polysaccharide... (Cont)

sible for approximately one-third of all such admissions. Pneumococcal-associated infections cause approximately 40,000 deaths annually in the U.S. and invasive pneumococcal disease (i.e., bacteremia and meningitis) has been reported to have case fatality rates that approach 40% in the elderly. Increasing rates of antibiotic resistance for *S. pneumoniae* have also created therapeutic challenges for health care providers.

The pneumococcal polysaccharide vaccine (PPV) contains twenty-three polysaccharide antigens that represent almost 90% of the serotypes that cause invasive pneumococcal disease, including the six most commonly associated with antibiotic resistance. This vaccine has been shown to be up to 70% effective in preventing invasive infections. In addition to its clinical effectiveness, (PPV) is cost-effective in indicated patient populations and also appears to be cost saving.

Although the pneumococcal vaccine is recommended by numerous U.S. specialty societies for patients who are older than 65 years or who are at increased risk for morbidity or mortality from pneumococcal infection, it has been underutilized. The Advisory Committee on Immunization Practices (ACIP) recommends that PPV be provided to:

- All individuals 65 years of age or older
- Individuals 2 to 64 years of age with chronic illnesses such as congestive heart failure, cardiomyopathies, chronic obstructive pulmonary disease, diabetes mellitus, alcoholism, chronic liver disease, or cerebrospinal fluid leaks
- Individuals 2 to 64 years of age with asplenia
- Individuals 2 to 64 years of age in special settings where risk for invasive disease or its morbid sequelae is increased (i.e., Alaskan Natives, certain Native American Indian groups, long-term care facility denizens)
- Individuals 2 years of age or older who are immunocompromised by virtue of HIV infection, lymphoproliferative malignancy, multiple myeloma, other generalized malignancies, chronic renal failure, nephrotic disease, post-transplantation, or immunosuppressive chemotherapies

The ACIP also recommends that the PPV be administered to eligible patients in the hospital in order to improve immunization rates. In one large survey study, almost two-thirds of patients admitted with pneumonia had been hospitalized within the previous four years, yet few were given the pneumococcal vaccine. Jencks et al. reported that the performance rate in the median state for inpatients with pneumonia who were screened or immunized for pneumococcal vaccination prior to discharge was only 11% from 1998-1999 and 24% from 2000-2001. In Louisiana, the rate was only 4% from 1998-1999 and 7% from 2000-2001, the lowest percentage in the U.S. including the District of Columbia and Puerto Rico.

Several studies have shown that pneumococcal vaccination of hospitalized patients is a safe and effective method for increasing vaccination rates among at-risk patients. In July, 2001, the inpatient Louisiana State University (LSU) Internal Medicine service at the Medical Center of Louisiana in New Orleans initiated a project to increase inpatient pneumococcal vaccination screening and administration rates by its providers. Initially, the LSU-New Orleans Inter-

nal Medicine Department and its house staff embarked upon a retrospective study to determine its baseline pneumococcal vaccination or screening rates for all patients with pneumonia on its inpatient services (at the The Medical Center of Louisiana in New Orleans) from July, 2000 through June, 2001.

From July, 2001 through June, 2002 an intensive educational intervention concentrating on the indications and benefits of pneumococcal vaccination was directed towards the LSU Internal Medicine house staff assigned to the inpatient service. Retrospective analysis for pneumococcal vaccine screening and administration of charts of all patients with pneumonia on the LSU Medicine inpatient service during this time period was performed in order to determine the effects of the intervention. Data from the pre-educational intervention period revealed a baseline pneumococcal vaccine screening or administration rate of 11% for all patients with pneumonia on the LSU Internal Medicine inpatient service. During the one-year intervention period, the pneumococcal vaccine screening or administration rate increased to 71%, a clinically and statistically significant increase (p -value < 0.0001). Data targeting patients sixty-five years of age and older revealed a baseline pneumococcal vaccine screening or administration rate of 10% for patients with pneumonia on the LSU Internal Medicine inpatient service which increased to 82% during the one year educational intervention (p -value < 0.0001). House officer scores (possible range 0-100) on a questionnaire assessing their understanding of the indications and benefits of pneumococcal vaccination were significantly higher after the educational intervention compared to before the intervention (means \pm standard deviations, 68 ± 9 vs. 59 ± 10 , $p < 0.0001$).

The findings from this study highlight the importance of education in increasing compliance with widely-accepted practice guidelines such as pneumococcal vaccine screening or administration in patients hospitalized with pneumonia. Consequently, other proven methods for increasing immunization rates including standing orders will also be assessed.

For more information or references, please contact Dr. Fred A. Lopez at the Department of Medicine and Section of Infectious Diseases, LSU Health Sciences Center by email, alopez1@lsuhsc.edu, telephone: 504-568-4676; 504-568-5031 or FAX#: 504-568-2127.

Louisiana Morbidity Report

Volume 15 Number 2

March-April 2004

The Louisiana Morbidity Report is published bimonthly by the Infectious Disease 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, Infectious Disease Epidemiology Section, Louisiana Department of Health and Hospitals, P.O. Box 60630, New Orleans, LA 70160.

Assistant Secretary, OPH

Sharon Howard, MSW

State Epidemiologist

Raoult Ratard, MD MPH

Editors

Susanne Straif-Bourgeois, PhD MPH

Theresa Sokol, MPH

Rosemarie Robertson, BS MT(C) CNMT

Layout & Design

Ethel Davis, CST

Misapplication of Organophosphate Insecticide... (Cont)

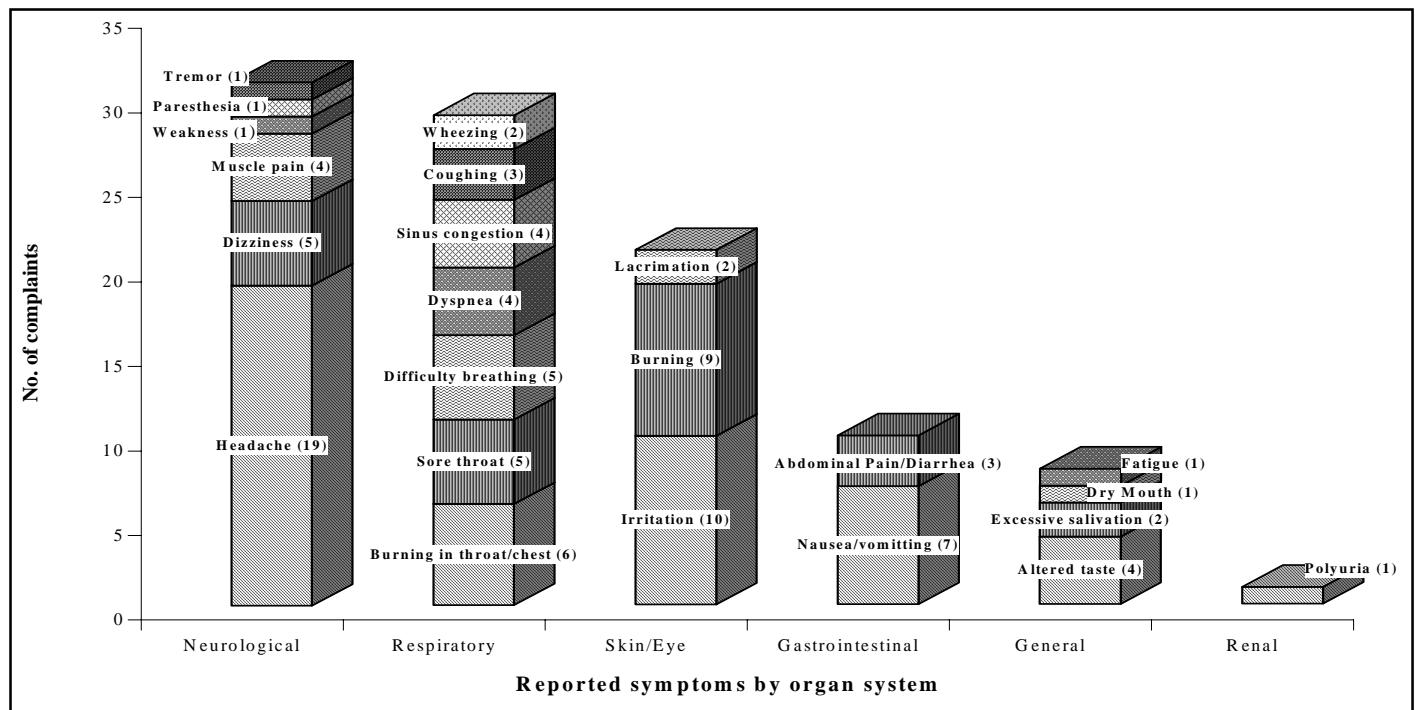
sent off site for the remainder of the day. At the time of the application, children were not present and student appointments were cancelled for the remainder of the week. Upon returning to school the following day, several persons complained that their symptoms had returned and they were again sent away from school for the remainder of the day.

Complainants included 19 (90%) females and 2 (10%) males; the median age was 43 years (range: 23-59 years). There was an average of 4.8 reported symptoms per complainant (range: 2-8 symptoms). Reported symptoms included neurological (31%), respiratory (29%), skin/eye (21%), gastrointestinal (10%), general (8%) and renal (1%) (Figure 1).

3) employ a certified commercial applicator for all pesticide applications, 4) submit annually an integrated pest management plan to the LDAF and 5) maintain a hypersensitive student registry. Schools are also encouraged to use the least toxic method of pest control.

Since 1991, the LDHH has documented nine pesticide exposure incidents occurring on school property. These incidents have resulted in pesticide exposure and subsequent health effects for approximately 185 children or school employees. Two incidents involved misapplications on school grounds necessitating closure and remediation of affected buildings. In one of these incidents, classrooms were treated with lindane causing adverse health ef-

Figure 1: Symptoms reported by 21 public school employees, Louisiana, March 2002



Two days after the incident, eleven of the twenty-one complainants (52%) sought medical care at a local hospital's occupational medicine clinic. Most patients complained of headache (36%), sore throat (36%) and allergy-like symptoms (45%). Physical examinations did not detect any abnormal findings related to chlorpyrifos exposure. Laboratory work included a complete blood count and metabolic panel for each patient. Blood cholinesterase tests were not performed. There were no documented signs of pesticide exposure. Five days after the incident, symptoms had resolved and everyone returned to work.

The Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), the principal federal statute regulating the sale and distribution of pesticides in the United States, is often supplemented by more stringent state or local pesticide laws. In order to protect children from pesticides during school hours, thirty-one states, including Louisiana, have adopted rules or regulations that specifically speak to the application of pesticides on or near school property. The law stipulates that schools must 1) maintain a record of pesticide use, 2) apply pesticides at least eight hours preceding presence of stu-

fects for more than ninety people. The school was closed for one year. Aerial drift of three herbicides onto a school affected the health of sixty-one individuals. Three incidents involved a pesticide misapplication during school hours resulting in limited exposure. Lastly, two incidents involved student exposure to pesticides due to inappropriate storage and accessibility of pesticides on school grounds.

To file a pesticide exposure complaint, contact the LDAF's Pesticide Hotline at (225) 925-3763. For more information about the LDHH's pesticide surveillance program or references for this article, contact the Section of Environmental Epidemiology and Toxicology at (504) 568-8027, or toll-free at 1-888-293-7020.

Resources are also available from the Environmental Protection Agency (EPA) Website at www.epa.gov. Through the program Tools for Schools, the EPA assists schools with efforts to improve indoor air quality, including providing guidance on pesticide safety. Information is also available on how to author and implement an integrated pest management plan.

Shigella in Central Louisiana

Theresa Sokol, MPH; Ronald Goudeau, BS;
Susanne Straif-Bourgeois, PhD MPH; Kerri Gerage, BS

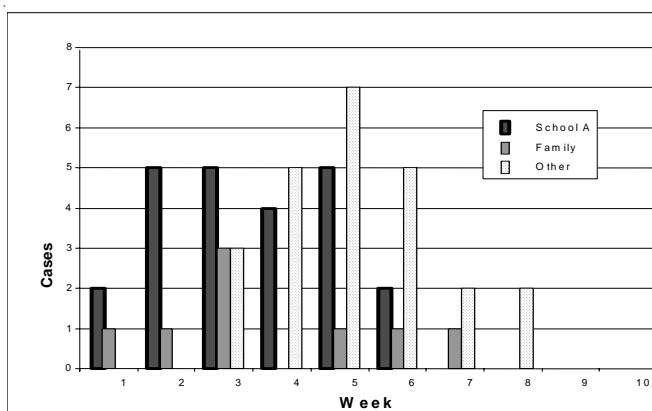
There are between 200 to 400 cases of Shigella reported every year in Louisiana. The highest incidence occurs among infants (49/100,000 in infants) followed by young children less than four (15/100,000).

On August 21, 2003 a case of Shigella was reported in a four year old elementary school girl, which was not unusual. However, this initial report was followed by a report of another four year old girl from the same school the next day. Between August 27 and 28 there were an additional five cases among school children aged four to eight, all attending the same primary school. A full scale investigation was started. The Regional Disease Surveillance Specialist, Ronald B. Goudeau, Regional Epidemiologist, Shirley Burton, Regional Infectious Disease Rapid Response Team (Pam Hoover, Cindy Griffin, Randall Ducote, Melissa Bordelon, Jeremy Dugas, Dani Marsh, Allan Thompson, Rachael Bruce, Gary Laborde) and the Regional Medical Director, Dr. John Naponick in collaboration with central office Infectious Disease Epidemiology staff were involved.

Cases

The outbreak lasted a total of ten weeks from August 28, 2003 to October 18, 2003. There were fifty-seven cases, comprised of twenty-two in school A, twelve among family members and twenty-three in other schools. During the first six weeks, the majority of cases occurred among children attending school A and a few family members. Starting at week three, cases began occurring in other schools which peaked at week five and then slowly declined (Figure 1).

Figure 1: Shigella in Central Louisiana, August 28-October 18, 2003



The majority of cases were children (Table 1). All adult cases occurred among family members. There were twenty-seven females and thirty males.

Table 1: Age group distribution of cases, Central Louisiana August 28-October 18, 2003

Age Groups Years	School A	Other School	Home	Total
0-3	0	8	3	11
4	7	7	1	15
5-8	11	7	0	18
10-14	4	1	0	5
14+	0	0	8	8
Total	22	23	12	57

All Shigella isolates from cases tested by pulse field gel electrophoresis (PFGE), had the exact same pattern.

Etiologic Investigation

The etiologic investigation did not reveal a single source for this outbreak. The outbreak started in school A among girls in pre-Kindergarten and First to Third grades then spreading to both genders in other classes. The slow build up and spread of cases pointed toward a person to person spread by direct contact. Some transmission through contaminated environment may have happened but there were no common links established between cases. Cases later appeared among adult family members and siblings. Another eleven schools were affected, six of which had more than one case demonstrating some transmission in these schools.

Preventive Measures

As soon as it appeared that this was not a sporadic event, the following preventive measures were instituted:

1. The Infectious Disease Rapid Response Team was activated to provide sufficient resources for the investigation.
2. Case finding: Infection control practitioners, pediatricians' offices, day care centers and schools were informed and asked to report cases of diarrhea. Medical providers were encouraged to obtain stool samples for bacteriologic confirmation.
3. Case investigation: Each case was investigated collecting basic demographic information, date of onset, signs and symptoms, stool culture results, school or day care attendance and other risk factors.
4. Exclusion: Cases of diarrhea were excluded while symptomatic. In schools with at least one confirmed case of shigella infection, cases were excluded and the children allowed readmittance after a negative culture was received.
5. Treatment: Antibiotic sensitivity data was obtained for Louisiana from these cases. Contrary to the national data, Shigella from Louisiana are usually sensitive to trimethoprim-sulfamethoxazole.
6. Environment: Environmental inspections were carried out in the affected schools. Food service, restrooms, school buses, gymnasiums and other areas where the environment may have a role, were inspected and advice provided on the disinfection of environmental surfaces.
7. Public Information: Information was distributed to interested groups on the outbreak and preventive measures to be taken.

Laboratory Announces RiboPrinter

Sanhita Gupta, PhD

The State of Louisiana's Central Lab recently validated Ribotyping using the "RiboPrinter™ Microbial Characterization System." The Dupont Qualicon RiboPrinter™ System will be used for molecular subtyping of bacterial isolates and may also be utilized for identification of bacterial isolates.

Ribotyping generates a highly reproducible and precise fingerprint that can be used to identify and classify bacteria at the genus, species and sub-species levels. It is a method that can differentiate bacteria based upon their rRNA genotype and can provide an additional method of identifying bacterial pathogens, both for routine laboratory surveillance and for use in outbreak investigations.

The Ribotyping system is almost completely automated. One set of samples requires approximately eight hours to run and can hold eight specimens. For each strain analyzed, a fresh colony from pure culture is resuspended in sample buffer, added to the sample carrier and heat treated in a separate module provided. This step involves heating the culture to a temperature of 80° C to denature any endogenous DNase. The temperature is then reduced and two lytic enzymes are added (lysozyme and N-acetyl muramidase). The sample carrier is then placed in the riboprinter with the subsequent completely automated steps: lysis, restriction digestion of the genomic DNA, gel electrophoresis, denaturation and transfer of the nucleic acid from the gel to nylon membrane and Southern hybridization * with sulfonated DNA probe harboring the genes for small and large rRNA subunits of E.coli. The hybridized probe is detected with alkaline phosphatase labeled antibody to sulfonated DNA. Bound antibodies are detected by capturing light emission from a chemiluminescent substrate with a charge-coupled device camera. The output is a densitometric scan of the restriction fragments and their molecular weights which is saved in the riboprinter database. This restriction pattern is compared to the patterns in the existing database automatically and a report containing the riboprint pattern and an assigned ID is printed at the end of the analysis. In addition, a library of the patterns generated from the samples run is stored as a separate database for future use.

Please contact Wayne Dupree at 504-568-3453 or Sanhita Gupta at 504-568-2480 for more information.

* A technique used for searching for a specific DNA fragment. Synonyms: Southern blot, Southern blotting

Your Tax Dollars At Work...

In 2003, members of the Department of Infectious Disease Epidemiology in New Orleans delivered an average of one presentation every other working day.

Year	2000	2001	2002	2003
Number of Presentations	31	71	155	139
Number of Attendees	902	3867	6245	6271
Antibiotic Resistance	0	90	130	458
Bioterrorism	20	2391	3255	1907
Encephalitis-related (WNV)	0	340	1977	1352
SARS	0	0	0	290

The numbers of attendees per topic shows the change of information delivered. In 2000, both Bioterrorism (BT) and Encephalitis-related presentations were less demanded than more general topics such as Epidemiology methods. However in 2001, increased funding permitted the filling of requests for BT and West Nile Virus (WNV) trainings. In 2003, requests for both Antibiotic Resistance and SARS lectures increased.

Attendees are comprised of physicians, nurses, coroners, veterinarians, law enforcement, state government, laboratory technicians, hospital workers, teachers, the public and members of the Office of Public Health such as sanitarians and social workers. Louisiana had approximately 76,000 Louisiana-employed registered doctors and nurses in 2003 (11,000 physicians, 45,000 registered nurses and 20,000 LPN's).

Natural Teeth Retention Among Older Adults in Louisiana

The Centers of Disease Control and Prevention (CDC) analyzed data for 2002 from the Behavioral Risk Factor Surveillance System (BRFSS) concerning prevalence of tooth retention and loss.

A summary has twenty-six states with greater than 50% of adults ≥ sixty-five years of age reporting having most of their teeth (with a loss of five teeth or fewer.) Louisiana at 46.3% (± 3.5, 95% C.I.), was in the lower third of the states and territories (Guam, Puerto Rico, U.S. Virgin Islands) surveyed with thirty-six states/territories above and seventeen states/territories below that value. The highest rates of retention were in California and Colorado, each with 60.5 % and the lowest, in West Virginia at 26.6%.

For states/territories surveyed on loss of all natural teeth, Louisiana was near the top of the scale with 33.8% (± 3.5, 95% C.I.) with only four states higher. The highest rated state for loss was Kentucky at 41.9 % and the lowest rated state was Hawaii at 13.1%.

Many older adults in Louisiana may not benefit fully from improvements in the prevention and control of oral diseases possibly due to difference in health literacy and behaviors, attitudes toward oral health and dental care and access to and the use of dental services and types of treatment received.

To Close or Not to Close?

Rosemarie Robertson, BS

There are many economic implications for Louisiana with the closing of an oyster bed. It is estimated that the dockside oyster production industry generates thirty million dollars in this state. Approximately sixty percent of Louisiana's oysters find their way to out-of-state and worldwide markets.

Since 2002, there have been only four closures of Louisiana's oyster beds, three in 2002 and one in 2003. Three of these were precautionary closures due to hurricane/tropical storm induced flooding conditions. Hurricanes can cause natural contaminants to be washed into rivers, bayous and streams where they can then flow into the oyster (*Crassostrea virginica*) growing areas.

Although *Vibrio vulnificus* and *Vibrio parahaemolyticus* are the two main organisms that are tested for in the case of gastrointestinal complaints, viral gastroenteritis outbreaks caused by caliciviruses (for example, Noroviruses) have also been associated with eating contaminated shellfish, particularly oysters.

Symptoms typically associated with Norovirus or *Vibrio* infection include vomiting, diarrhea and stomach cramps lasting for more than a 24-hour period. If there are two human cases of sickness that can be traced back to the same oyster bed, the bed can be closed to harvest. The closure of oyster beds is a precautionary measure to prevent further illness.

The Louisiana Department of Health and Hospitals (LDHH), Office of Public Health (OPH) traces oysters eaten by ill persons to retailers, wholesalers and harvesters. Stool samples are collected from the ill by epidemiologists from OPH who also conduct interviews and administer questionnaires sometimes with the assistance of other agencies. (Trace-back investigations of oysters in outbreaks may be difficult because of the inability to collect stool samples from sick individuals.) Stool samples are lab-tested for organisms. Sequence analysis of nucleic acid from stool specimens may also be used to demonstrate that a problem organism does correspond with oysters harvested from the same harvest site. Restaurants and seafood markets associated with the outbreak are inspected by sanitarians to observe handling and storage of shellfish. Tags that identify the date and site of harvesting and the harvester's identification number are obtained from purchasers and retailers of sacks that were definitely or possibly implicated. Retailer records are cross-referenced with records from wholesalers and harvesters to establish the accuracy of information about harvester and site of harvest.

If oyster beds were closed, LDHH would increase environmental monitoring of the closed oyster waters and re-open them as soon as they meet the National Shellfish Sanitation Program (NSSP) standards. The LDHH Molluscan Shellfish Program staff makes this determination. (LDHH has the authority to close oyster waters under LSA-R.S. 40:5,3.) Oyster waters are cleansed by the natural cycle of tides. It could take anywhere from several days to several weeks for the harvesting areas to be considered safe.

The seafood industry and regulators have made great strides in improving and regulating the disposal of human sewerage from shellfish harvest vessels. Water standards for oyster harvesting are set by the NSSP and can be found at www.issc.org.

OPH Training Offerings

Videoconference Courses

These course offerings listed are free of charge but attendees must be registered as seating is limited. For site information, a registration form and agenda please email Louise Bellazer at lbellaz@dhh.la.gov or call (504) 568-5005 x102.

Foodborne Disease Epidemiology – Change of Date

The OPH Infectious Disease Epidemiology Section is offering a videoconference focusing on Foodborne Diseases. Topics include *Campylobacter*, the Milk and Dairy Program, NARMS, Norovirus, *Salmonella/Shigella*, and *Vibrio*. This videoconference is targeted towards public health nurses, infection control professionals, disease surveillance specialists, epidemiologists, sanitarians, health care providers and other public health staff. It will be accessible at nine sites throughout Louisiana on May 19, 2004 from 9:00 AM – Noon. *Registration Deadline is May 3rd!*

Vectorborne Disease Epidemiology

The OPH Infectious Disease Epidemiology Section is offering a videoconference focusing on Vectorborne Diseases. This videoconference is targeted towards public health nurses, infection control professionals, disease surveillance specialists, epidemiologists, sanitarians, health care providers and other public health staff. It will be accessible at nine sites throughout Louisiana on June 24, 2004 from 9:00 AM – Noon. *Registration Deadline is June 8th!*

ARE WE MAKING A DIFFERENCE? An Epidemiological Approach to Program Evaluation - Susan Hassig, PhD

The OPH Infectious Disease Epidemiology Section is offering a series of videoconferences focusing on program evaluation principles. Dr. Hassig, Clinical Associate Professor of Epidemiology at Tulane School of Public Health and Tropical Medicine, will be the main presenter. Four units will be offered: April 14, 21 and May 5, 11, 2004 from 9:00 AM – Noon. The videoconferences are targeted to OPH nurses and other public health nurses, infection control personnel, epidemiologists, health care professionals and administrators. The videoconferences are offered free of charge with Nursing and Medical Continuing Education Units applied for. The videoconferences will be accessible at nine sites throughout Louisiana.

In-House Training - Lake Charles Region

Antibiotic Resistance for Pharmacists

A presentation has been planned for April 13, 2004 from 6:30 P.M.-8:00 P.M. Speakers include Ken Boudreaux, RpH, Dr. BJ Foch and Dr. Catrin Jones-Nazar. An application has been submitted for Pharmacy Continuing Education Units. For more information on location and to reserve a place, please contact Stephani A. Adams email, ssadams@dhh.la.gov, phone (337) 475-3236.

LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE
Jan-Feb 2004
PROVISIONAL DATA

Table 1. Disease Incidence by Region and Time Period
HEALTH REGION

DISEASE	HEALTH REGION									TIME PERIOD				
	1	2	3	4	5	6	7	8	9	Jan-Feb 2003	Jan-Feb 2002	Jan-Feb Cum 2003	Jan-Feb Cum 2002	% Chg
Vaccine-preventable														
<i>H. influenzae (type B)</i>	0	0	0	0	0	0	0	0	0	0	1	0	1	-100.0
Hepatitis B Cases	1	1	3	0	0	0	2	0	0	7	24	7	24	-70.8
Rate ¹	0.1	0.2	0.8	0.0	0.0	0.0	0.4	0.0	0.0	0.2	0.5	0.2	0.5	na
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Mumps	0	0	0	0	0	0	0	1	0	1	0	1	0	0.0
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	0	+100.0
Pertussis	0	1	0	0	0	0	0	1	0	2	1	2	1	+100.1
Sexually-transmitted														
HIV/AIDS Cases ²	23	18	2	11	0	7	9	4	3	77	177	77	177	-55.0
Rate ¹	2.3	3.1	0.5	2.0	0.0	2.3	1.8	1.1	0.7	1.8	4.0	1.8	4.0	na
Gonorrhea Cases	21	299	97	197	49	86	414	136	86	1394	1563	1385	1563	-11.4
Rate ¹	2.0	49.5	25.3	35.9	17.3	28.6	79.2	38.4	19.6	31.2	35.0	31.2	35.0	na
Syphilis (P&S) Cases	5	9	0	8	0	1	1	1	4	29	20	29	20	+45.0
Rate ¹	0.5	1.5	0.0	1.5	0.0	0.3	0.2	0.3	0.9	0.6	0.4	0.6	0.4	na
Enteric														
Campylobacter	1	0	0	1	1	0	0	0	4	7	14	7	14	-50.0
Hepatitis A Cases	0	0	0	0	0	0	0	0	0	0	12	0	12	-100.0
Rate ¹	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.3	na
Salmonella Cases	1	6	0	6	2	1	3	4	0	23	46	23	46	-50.0
Rate ¹	0.1	1.0	0.0	1.1	0.7	0.3	0.6	1.1	0.0	0.5	1.0	0.5	1.0	na
Shigella Cases	3	1	1	5	1	3	2	1	1	18	62	18	62	-71.0
Rate ¹	0.3	0.2	0.3	0.9	0.4	1.0	0.4	0.3	0.2	0.4	1.4	0.4	1.4	na
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0
Vibrio, other	0	0	0	0	0	0	0	0	0	0	1	0	1	-100.0
Other														
<i>H. influenzae (other)</i>	0	0	0	0	1	0	0	0	0	1	3	1	3	-66.7
<i>N. Meningitidis</i>	6	2	0	0	0	0	0	1	0	9	14	9	14	-35.7

1 = Cases Per 100,000

2= Totals reflect persons with HIV infection whose status was first detected during the specified time period, including persons diagnosed with AIDS when HIV was first detected. Due to delays in reporting of HIV/AIDS cases, the number of persons reported is a minimal estimate. Data should be considered provisional.

Table 2. Diseases of Low Frequency

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

Table 3. Animal rabies (Jan-Feb)

Parish	No. Cases	Species
	na	na



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

2:003 The following diseases/conditions 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	Neisseria meningitidis (invasive disease)	Smallpox
Botulism	Plague	Staphylococcus Aureus,
Brucellosis	Poliomyelitis, paralytic	Vancomycin Resistant
Cholera	Q Fever	Tularemia
Diphtheria	Rabies (animal & man)	Viral Hemorrhagic Fever
Haemophilus influenzae (invasive disease)	Rubella (German measles)	Yellow 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.

Aseptic meningitis	Hepatitis B (carriage)	Salmonellosis
Chancroid ¹	Hepatitis B (perinatal infection)	Shigellosis
E. Coli 0157:H7	Hepatitis E	Syphilis ¹
E. Coli Enterohemorrhagic (other)	Herpes (neonatal)	Tetanus
Encephalitis, Arthropod borne	Legionellosis (acute disease)	Tuberculosis ²
Hantavirus Pulmonary Syndrome	Malaria	Typhoid Fever
Hemolytic-Uremic Syndrome	Mumps	
Hepatitis A (acute disease)	Pertussis	

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

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

Acquired Immune Deficiency Syndrome (AIDS)	Hepatitis C (acute and infection)	Streptococcal Toxic Shock Syndrome
Blastomycosis	Human Immunodeficiency Virus (HIV infection)	Streptococcus Pneumoniae (invasive infection, penicillin resistant (DRSP))
Campylobacteriosis	Listeria	Streptococcus Pneumoniae (invasive infection in children < 5 years of age)
Chlamydial infection ¹	Lyme Disease	Trichinosis
Coccidioidomycosis	Lymphogranuloma Venereum ¹	Varicella (chickenpox)
Cryptosporidiosis	Psittacosis	Vibrio Infections (other than cholera)
Cyclosporiasis	Rocky Mountain Spotted Fever (RMSF)	West Nile Fever
Dengue	Staphylococcus Aureus, Methicillin/Oxacillin Resistant (MRSA) (invasive disease)	West Nile Infection (past or present)
Ehrlichiosis Hansen's Disease (leprosy)	Staphylococcal Toxic Shock Syndrome	
Enterococcus, Vancomycin Resistant (VRE) (invasive disease)	Streptococcal disease, Group A disease)	
Giardia	Streptococcal disease, Group B (invasive disease)	
Gonorrhea ¹		
Hansen's Disease (leprosy)		
Hepatitis B (acute)		

Other Reportable Conditions

Cancer	Phenylketonuria*	Spinal Cord Injury**
Complications of Abortion	Reye's Syndrome	Sudden Infant Death Syndrome (SIDS)
Congenital Hypothyroidism*	Severe Traumatic Head Injury**	
Galactosemia*	Severe Undernutrition (severe anemia, failure to thrive)	
Hemophilia*	Sickle Cell Disease (newborns)*	
Lead Poisoning		

Case reports not requiring special reporting instructions (see below) can be reported by Confidential Disease Case Report forms (2430), facsimile, phone reports, or web base at <https://ophrdd.dhh.state.la.us>.

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

²Report on CDC72.5 (f.5.2431) card.

*Report to the Louisiana Genetic Diseases Program Office by telephone (504) 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.

This public health document was published at a total cost of . Seven thousand copies of this public document were published in this first printing at a cost of . The total cost of all printings of this document, including reprints is . This document was published by 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**

**PRSRSTD
U.S. POSTAGE
PAID
Baton Rouge, LA
Permit No. 1032**