



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

# Louisiana Morbidity Report

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November-December 2003

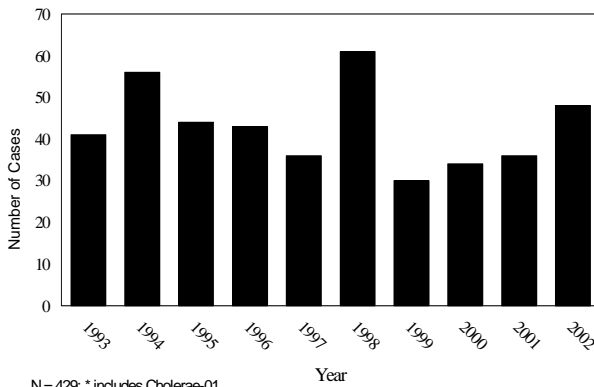
Volume 14 Number 6

## Vibrio In Louisiana, 1993-2002 Summary

Susan Wilson, RN MSN CIC

From 1993 to 2002, a total of 429 cases of vibrio illness were reported to the Office of Public Health, Infectious Disease Epidemiology Section. The number of cases per year ranged from 30 to 61 cases with an average incidence rate of 1.0 case per 100,000 (Figure 1).

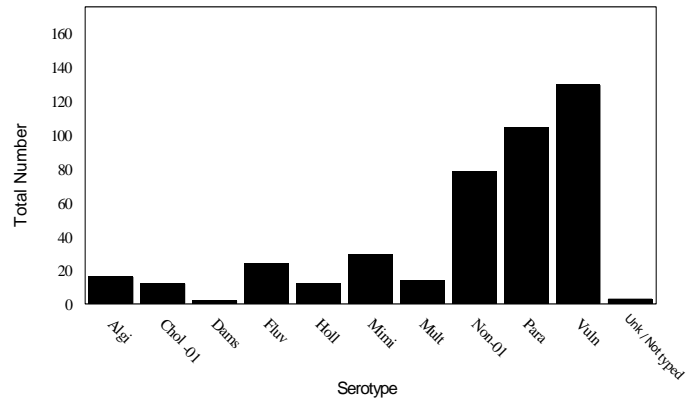
Figure 1: Vibrio cases\* by year, Louisiana 1993-2002



These infections were associated with nine different vibrio organisms (*V. alginolyticus*, *V. cholerae-01*, *V. cholerae non-01*, *V. damsela*, *V. fluvialis*, *V. hollisae*, *V. mimicus*, *V. parahaemolyticus* and *V. vulnificus*, as well as cases involving multiple vibrios). Three

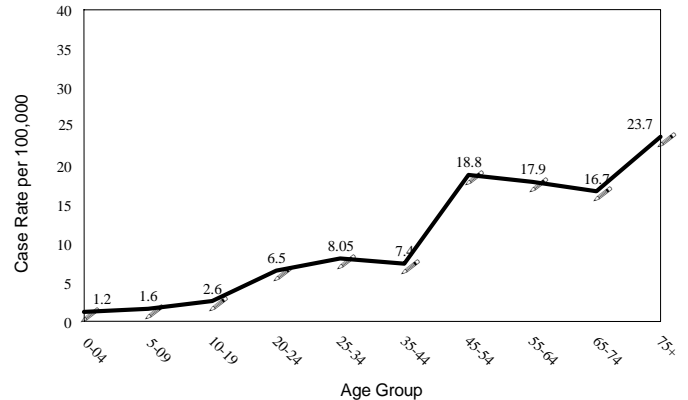
species, *V. vulnificus*, *V. parahaemolyticus* and *V. cholerae non-01* account for 73% of the cases (Figure 2).

Figure 2: Vibrio serotypes, Louisiana 1993-2002



Among patients for whom information was available, the median age of vibrio cases was 48 years (range 1 to 95 years). Age-specific case rates were higher in age groups 45 years and older than among all other age groups (Figure 3).

Figure 3: Vibrio Case Rate by Age Groups, Louisiana, 1993-2002



This age distribution shows an increase in vibrio cases among advancing age groups, an expectant finding for vibrio disease among older adults who may also comprise a high risk population group. Male cases outnumbered female cases by more than 2:1 (291 versus 135 cases). Race and ethnicity was known in 97% of the total cases; of these, a significantly higher proportion was reported among Whites (76%) versus African-Americans (18%).

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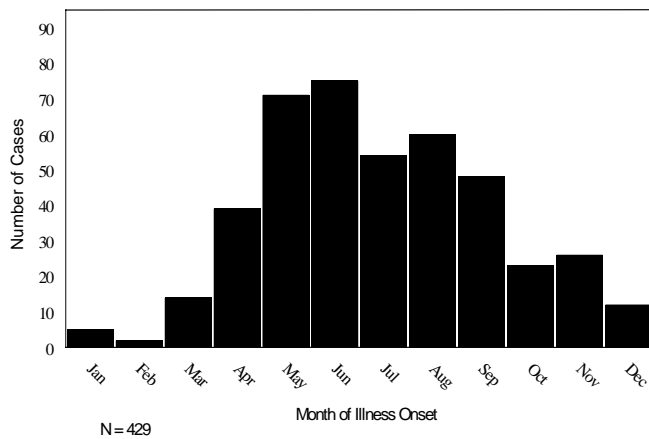
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Vibrios in Louisiana, Ten Year Summary (Cont.)

The month of onset for vibrio illnesses reportedly occurred from April through September with peaks observed in the summer months which correlate with the warm environmental conditions that foster vibrio growth (Figure 4).

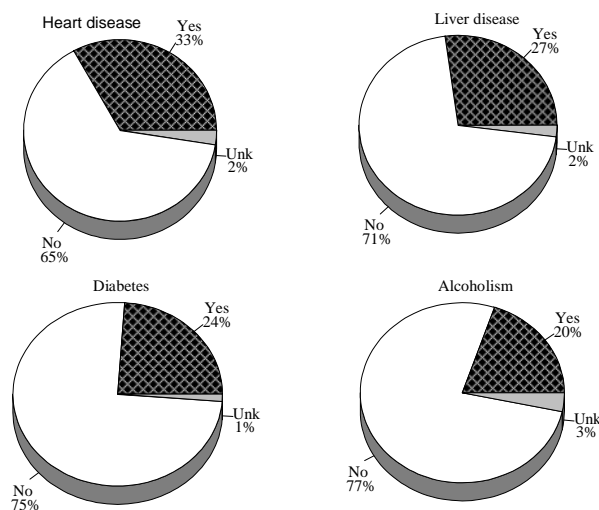
Figure 4: Vibrio cases by month of onset, Louisiana, 1993-2002



Contact with Gulf waters with high salinities and temperatures as well as the sustenance of vibrio pathogens for long periods, have the potential to cause infections for at-risk individuals either from shellfish harvested for consumption or by contact exposure to water during occupational and/or recreational activities. No large outbreaks of vibrio infections were identified in Louisiana during this ten-year surveillance period. Vibrio infections had generally occurred as sporadic cases which have been consistent with prior experience in the United States.

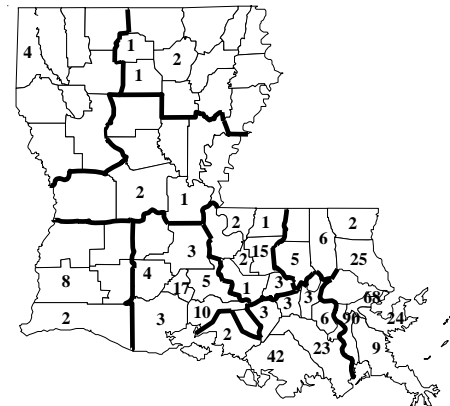
Of the case-patients who reported any underlying illnesses, the most frequently reported conditions are represented, (Figure 5).

Figure 5: Vibrio cases with underlying conditions, Louisiana, 1993-2002



The geographic distribution of case-patients by parish of residence was known in 98% of the reported cases. At least 64% of the cases were reported from the six southeastern parishes of the state: Jefferson, Terrebonne, Orleans, St. Tammany, St. Bernard and Lafourche (Figure 6).

Figure 6: Reported Vibrio Cases by Parish Louisiana, 1993-2002



The role of vibrio species as causative agents of gastroenteritis, wound infection and primary septicemia has been well-established and known to cause diverse clinical presentations. Of the three major categorical syndromes reported, the largest proportion of case-patients presented with gastroenteritis (48%) followed by wound infections (34%) and primary septicemia (13%).

Gastroenteritis

Along with other Gulf Coastal states, vibrio surveillance conducted in Louisiana over this ten-year period showed that gastroenteritis was the most commonly reported syndrome of vibrio infections. Among 202 case-patients diagnosed as gastroenteritis, the most frequently reported symptoms were diarrhea (82%), nausea (68%), vomiting (54%) and fever (51%). Overall, 151 (77%) cases reported eating seafood within seven days before illness. The mean time between seafood consumption and onset of illness was 2.2 days. The median duration of illness was 6.5 days. Forty-three percent of the reported cases required hospitalization with a median hospital stay of three days. The vibrio species most frequently identified among gastroenteritis case-patients were *V. cholera non-O1*, *V. mimicus*, *V. fluvialis* and *V. parahaemolyticus*.

Wound Infections

Wound and soft tissue infections are the second most serious extra-intestinal infections caused by exposure to seawater or raw

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seafood drippings with vibrio organisms. Clinical presentations range from mild erythema to severe cellulitis with fasciitis and myositis. A total of 144 case-patients developed wound infections associated with vibrio pathogens. Of these, 128 case-patients were exposed as a result of various activities such as accidents incurred while boating, handling raw seafood and seafood drippings as well as lacerations sustained during a fishing/shrimping event. The age range of wound associated case patients was from 11 to 83 years of age with a mean of 51 years. Cellulitis (77%) was the most frequently reported symptom followed by fever (67%), muscle aches (35%) and bullae (28%). One hundred eighteen (83%) case-patients required hospitalization with a mean duration of illness of thirteen days. Ten (8%) deaths were reported among wound patients. Eighty-seven of the 144 cases had a history of underlying conditions at the time of vibrio exposure. These included heart disease (41%), diabetes (30%), alcoholism (28%) and liver disease (27%). *V. vulnificus* and *V. parahaemolyticus* accounted for 83% of the vibrio species identified among wound patients with the majority attributed to *V. vulnificus*.

### Primary Septicemia

Primary septicemia is the most serious presentation of vibrio infections. There were fifty-three cases reported to have developed primary septicemia associated with vibrio pathogens. The cases ranged in age from 19 to 95 years of age with a mean age of 59 years (which is higher than for those who develop gastroenteritis or wound infections). Symptoms most commonly reported among case-patients were fever (79%), nausea (46%), muscle aches (42%), vomiting and cramps (40% each) and shock (30%). Fifty-one (96%) case-patients had underlying conditions at the time of diagnosis including liver disease (80%), alcoholism (38%) heart disease (25%) and diabetes (23%). Of the total primary septicemia cases, *V. vulnificus* was most frequently identified. Seventy-four percent of the cases (n=39) consumed shellfish within the seven days before illness onset. As for the type of shellfish consumed, oysters (80%) were more likely eaten than shrimp (44%), crabs (18%), fish (15%) and crawfish (3%). Among those who ate oysters, twenty-six (67%) had eaten raw oysters. All fifty-three case-patients (100%) required hospitalization. Sixteen deaths (30%) were reported among primary septicemia patients.

Vibrios are free living marine organisms that grow best in relatively warm coastal waters of moderate salinity. Humans become incidentally infected through consumption of seafood or by percutaneous exposures via occupational or recreational contact with brackish water. Person-to-person contact is not the usual method of transmission.

Reporting of vibrio infections was mandated in Louisiana in 1988 in response to the increase in numbers of reported cases involving infections caused by shellfish along the Gulf Coast. All vibrio infections became reportable as part of an effort to improve surveillance and to provide the community with appropriate recommendations for prevention and control. This initiative was the result of a multi-agency collaborative effort among representatives from State health departments, U.S. Food and Drug Administration and Centers for Disease Control and Prevention.

Currently in the U.S., educational efforts emphasize the risk of

death from *V. vulnificus* infection for patients with liver disease who eat raw oysters. *V. vulnificus* naturally occurs in the marine environment and is considered to be an opportunistic pathogen in individuals having compromised immune systems or medical disorders. Physicians should recognize the importance of obtaining a thorough patient history in relation to the endemicity of vibrio infections in Louisiana. There is an emphasis for clinicians to provide the community with health risk information to those identified as most likely to develop infections and severe complications. Patients with liver or immune dysfunctions should be warned to avoid raw molluscan seafoods, such as oysters. Early detection and initiation of antimicrobial therapy for invasive *V. vulnificus* infections remain as an aggressive approach due to the rapid progression from clinical illness to death.

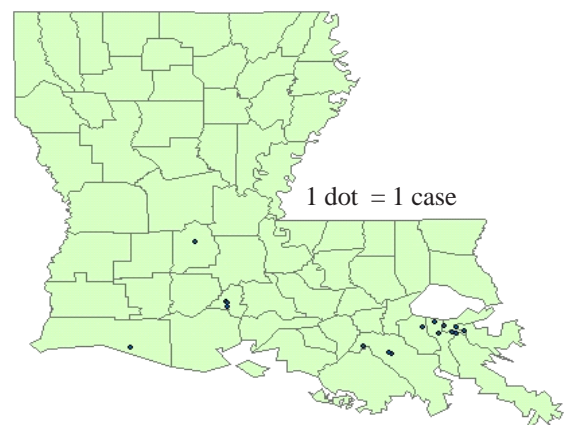
The seawater exposure data in this report associated with vibrio wound infections suggests that it is also necessary to inform such high risk patients to avoid seawater or brackish water exposure and discourage such contact for "therapeutic" purposes. Persons-at-risk of acquiring vibrio wound infections through percutaneous exposures via occupational or recreational contact should be advised of wearing protective gear (gloves, goggles, hip boots, etc.) during the handling of seafood or during seawater contact and should seek immediate medical attention in the event of infected wounds as a result of punctures or lacerations that may occur after contact with seawater. Prevention of vibrio infections requires a heightened awareness of these infections by clinicians, health care providers and laboratories. An educated public is the best line of defense against this disease.

## Vibrio In Louisiana January-October 2003

Annu Thomas, MPH

As of October 31, 2003, eighteen cases of vibrio illness had been reported to the Infectious Disease Epidemiology section through the Reportable Disease Database (RDD). Cases were distributed mainly in southeastern Louisiana. (Figure 1)

Figure 1: Vibrio case numbers in Louisiana January-October



Note: Two cases were not included due to lack of information.  
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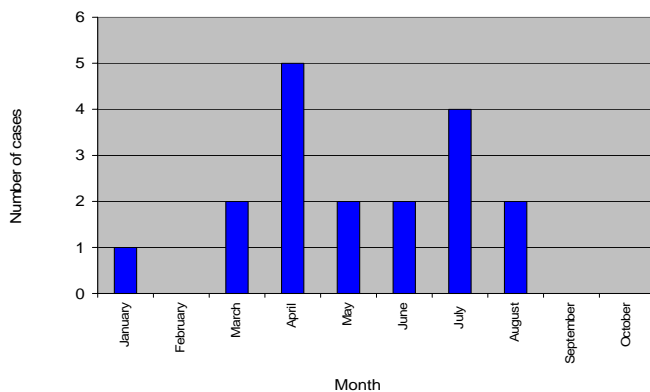


(*Vibrio* in Louisiana January-October 2003 continued)

Of the eighteen cases reported, forty-four percent (eight cases) were from Orleans parish followed by Lafayette with twenty-two percent (four cases) and Lafourche with seventeen percent (three cases). Grant, Cameron and St. Tammany parishes have one case each. All but one isolate were confirmed by the Central State Laboratory in New Orleans. Of the isolates submitted for serotyping, *Vibrio parahaemolyticus* was isolated from seven samples (39%); three samples (17%) obtained had *Vibrio vulnificus*; eight samples (44%) contained other vibrio species.

Four of the eighteen cases (22%) have been associated with the consumption of raw oysters, while the remaining cases have been associated with either the consumption of cooked seafood or wound exposure to a body of water. Fifty-six percent of the total cases occurred in adults over 61 years of age. Cases by month of illness onset were reported as early as spring of 2003. (Figure 2)

**Figure 2:** *Vibrio* case numbers in Louisiana, January-October, 2003



The case definition of a vibrio infection is an illness characterized by the manifestation of symptoms such as diarrheal illness, vomiting, septicemia and/or localized wound infections and is laboratory confirmed. Laboratory test involves the isolation of the vibrio organism from blood, stool, or wound.

Physicians should encourage high-risk patients to eat well-cooked oysters and clams. Free copies of the brochure "The Risk of Eating Raw Mollusks or Shellfish: Advice for Persons with Liver Disease, Diabetes and Weakened Immune Systems" are available at the Office of Public Health, Infectious Disease Section by calling 1-800-256-2748.

## Alligators and West Nile Virus

Sarah Michaels, MPH

Large-scale die-offs of alligator hatchlings on farms prompted an investigation by the Department of Wildlife and Fisheries and the LSU School of Veterinary Medicine. In early October, 2003 LSU confirmed West Nile virus infections in four farm-raised alligators. This was the first documented WNV activity in a Louisiana alligator. West Nile Virus activity has also been confirmed at three other farms in Louisiana. Florida and Georgia documented WNV activity at alligator farms in 2001 and 2002. No cases have been documented in wild alligator populations. (<http://www.cdc.gov/ncidod/EID/vol9no7/03-0085.htm>).

Some alligators at these farms were probably infected by mosquito bites around their eyes and mouth. Since the die-offs were isolated to one building on the farm, it's likely that the virus was then spread through feces to other animals. Alligators often display neurological signs like head tilting, swimming in circles, muscle tremors and not feeding. Mortality rates are very high. As alligators produce elevated viremias, there is the potential that a viremic animal may be able to infect a mosquito with the virus. Alligator meat and blood could contain West Nile virus. While these viruses are not expected to go through normal intact skin, they may go through damaged skin (cuts, eczema, any skin disease) and through mucosal membranes (for example, the lining of the eye and mouth). Therefore those who skin and cut through alligator meat need to wear gloves and wash their hands before and after work. Workers should wear goggles if there is a risk of blood splatter in their eyes or face. However, alligator farms should not be considered a public health threat. No farmers or workers are reported to have been infected with the virus. Alligator meat is also safe when cooked thoroughly; the virus is heat-labile and thorough cooking should inactivate it.

The virus is extremely abundant in some birds commonly affected by West Nile and here is a great deal of evidence that the vast majority of West Nile transmission is due to the bird-mosquito transmission cycle. The pool of virus in alligator is estimated to be very small in comparison with the huge pool of virus present in the birds.

(Continued on next page)

## Scene from the Alexandria Antibiotic Resistance Kickoff

Public Forum Oct 1, 2003. Panel Left to Right... Dr. Raoult Ratard - State Epidemiologist, Dr. John Naponick - Regional VI Medical Director, Dr. Catrin Jones-Nazar - Program Coordinator for the Louisiana Antibiotic Resistance campaign, Pat Cook - CDC National Director for the 'Get Smart-Know When Antibiotics Work' campaign, Kenneth Boudreaux, RPH - Pharmacy Clinical Manager, Rapides Regional Medical Center, Dr. Francis Brian - Sr. Vice President of Medical Affairs, Rapides Regional Medical Center, Cindy Griffin, BSN, Rapides Parish Health Unit Nurse and the moderator, Linda Hickman - Director, Community Services, CHRISTUS St. Francis Cabrini Hospital.



## Conjunctivitis Outbreak

Donald T. Michael III, MPH

In August, 2003, six adult staff members from a children's educational program presented at a hospital emergency room and to private physicians complaining of having red, itchy, watery eyes and facial swelling. Physician examination of patients revealed conjunctivitis possibly caused by a chemical irritant. Affected people described first experiencing symptoms while attending a day-long staff orientation meeting in a church gymnasium. Approximately eighty individuals attended this meeting.

A case-control study (including six cases and thirteen controls) was performed via telephone interview using a questionnaire that addressed risk factors for suspected etiologies. Cases were defined as those individuals who had complained of red, itchy eyes during the suspected time period for exposure and sought medical care. Cases also reported the following symptoms: 83.3% had swollen faces (n=5), 66.7% had respiratory problems (n=4), and 83.3% had light rash or burn (n=5). Several others who attended the orientation also complained of similar symptoms but did not seek medical attention.

Illness among meeting attendees was strongly associated with



location while at the meeting, particularly seating at the second table from the front of the room on the right side of the gym (Odds Ratio = 24.0,  $p = 0.0173$ ). Representatives from the Louisiana Department of Environmental Quality tested air quality while air conditioners were running and did not detect any presence of suspected chemical agents. While the investigation did not implicate a particular chemical agent, the location in the gym strongly associated with illness was directly under an uncovered, high wattage halogen bulb.

Overexposure to ultraviolet radiation can result in a feeling that something is in the eyes (a common complaint by cases that led to the red, itchy eyes), sensitivity to light and tearing (also a complaint by cases.) The potential for this type of exposure can be prevented through the use of a glass or plastic dispersion cover fitted over the bulb to spread the ultraviolet radiation out over a wider area. Most bulbs in the gymnasium had been previously equipped with a cover.

Church and educational program staff were advised to: (1) Cover the suspect halogen light with a diffuser and (2) avoid prolonged periods of time in the gymnasium until renovations (including new air conditioners and overhead lights) were completed.

*(Alligators and West Nile Virus continued)*

Therefore, living or working close to infected alligators would not pose any special risk. The best way to reduce your chances of contracting WNV is to prevent mosquito bites.

The alligator farming industry in Louisiana is quite large and most farms are located in the Southern portion of the state. Dr. Javier Nevarez DVM (LSU/ LA Dept of Wildlife and Fisheries) is working with the alligator industry to identify more cases of WNV in alligators and to prevent further transmission by isolating sick animals and instructing workers on the proper use of personal protective equipment. Please contact Noel Kinler at the Department of Wildlife and Fisheries (337)373-0032 for more information.

## OPH Training Offering

The Infectious Disease Epidemiology Section will repeat the Field Epidemiological Techniques I and II classes, (previously held on December 3-4, 2003), on March 9-10, 2004. This training will be targeted towards sanitarians, public health nurses, infection control professionals, disease surveillance specialists, epidemiologists, health care providers and other public health care professionals interested in epidemiological principles and outbreak investigations. This workshop will take place at the State Office Building in New Orleans. *Registration Deadline is February 2nd!* This course offering is free of charge but requires registration as seating is limited. For a registration form and agenda please email Louise Bellazer at [lbellaz@dhh.state.la.us](mailto:lbellaz@dhh.state.la.us) or call (504) 568-5005 x102.

### Louisiana Fact

*In the 1840s, deaths in Louisiana from tuberculosis (also known as consumption) began to rise due to increasing urbanization. In 1910, under pressure from the Louisiana Anti-Tuberculosis League (established in 1906) New Orleans health officials reinstated a city ordinance that banned spitting on sidewalks, and streets, in railroad cars and other public places in an attempt to stop the spread of the disease. This was not useful. Dust particles containing TB bacilli may become airborne again but the size is usually too large (greater than 5 microns). Since the bacilli cannot reach the alveoli of the lung, they cannot cause infection.*

# Region 1 Norovirus Outbreak

Mona Mehta, MPH

## Background

Early October 2003, an occupational health nurse at a local refinery called the Infectious Disease Epidemiology Section (IDES) to report that five employees with symptoms of gastrointestinal illness had been seen in the employee health office. The employees had attended a work luncheon a few days prior to the illness.

Upon receipt of the phone call, IDES initiated an investigation. An employee list was prepared of those who attended the luncheon, along with a list of menu items and names of the places where the food was purchased for the event. The purchasing locations were both supermarkets as well as restaurants. Some of the items were prepared on-site by refinery workers. With the aid of the menu that was faxed in, IDES began to prepare a questionnaire that was administered to the employees. At the same time, New Orleans Sanitarian Services began their investigation of food source locations. No violations were found at the supermarkets or restaurants involved.

## Epidemiological Investigation

IDES administered the questionnaire to the employees who attended the luncheon. Samples of leftover food items from the meal and stool samples from ill persons were also obtained. Several employees who attended the luncheon also prepared the meat products at the event and were administered foodhandler questionnaires in addition to the luncheon attendee questionnaire. The employees were told the purpose of this investigation and were provided with fact sheets on food borne illnesses and food preparation.

## Laboratory Investigation

Three stool specimens were collected from employees (one of whom was a foodhandler) at the refinery for testing by the Louisiana Office of Public Health Bacteriology and Virology Section. The stool was tested for the following bacteria: Salmonella, Shigella, E.coli O157, Vibrio, Clostridium, Campylobacter, Staphylococcus and Yersinia. The Virology Section also tested the stool samples for norovirus.

Any food specimens submitted for testing are only tested pending the results of a Bacteriology panel. Food is not tested for norovirus due to the oils in the food destroying the PCR enzyme.

## Epidemiological Investigation Results

A total of 22 out of 29 (75%) questionnaires were completed and returned to IDES. Fifteen (68%) of the refinery workers met the case definition. (A case was defined as anyone who experienced diarrhea or abdominal cramps.) Of those who became ill, thirteen cases (87%) experienced diarrhea, twelve cases (80%) experienced cramps, nine (60%) had nausea, six (40%) had a headache and four (27%) had a fever. No one experienced bloody diarrhea. The average incubation period of the illness was 37 hours with a range of 7 to 48 hours. The average duration of illness was 44 hours with a range of 24 to 72 hours.

All foodhandlers emphasized that they washed their hands before preparing the food. They used tongs to cook and handle the meat products. Meat products were considered cooked when they

were not pink on the inside. Once the meat was prepared, it was placed in a cardboard box lined with aluminum foil and served using tongs. Only one of the foodhandlers became ill and submitted stool for norovirus testing - which came back positive for norovirus. However, since this foodhandler became ill after the event, there was no indication that he was the source of the outbreak.

There were no associations found between consumption of menu items and illness. This is due to the fact that almost everyone ate most of the menu items; therefore, no exposure variable was available to distinguish an association.

## Laboratory Results

Since the stool specimens tested negative for bacteriological agents, the food was not tested. All of the stool specimens tested positive for norovirus. The state is awaiting confirmation of the results by the CDC.

## Conclusion

An outbreak of gastrointestinal illness occurred in late September 2003 at a refinery in region 1. The illness affected those workers who attended the luncheon held at the refinery. Laboratory analysis of the stool specimen identified norovirus as the causative agent for the illness. Norovirus is self-limiting with clinical symptoms of diarrhea and/or vomiting commonly accompanied by abdominal pains, myalgia and/or headache. The incubation period for norovirus is between 24 and 48 hours. Among the cases in the outbreak, almost all experienced diarrhea and abdominal cramps. The average incubation period was 37 hours and the average duration was 44 hours. The illness could not be associated with any particular food item served at the luncheon since most of the workers ate the same menu items. Therefore, no association could be determined.

In general, noroviruses are transmitted through the fecal-oral route, either by consumption of fecally contaminated food or water or by direct person-to-person spread. Norovirus outbreaks have been commonly associated with community foodborne, waterborne and shellfish transmission, with secondary transmission to family members. In a suspected outbreak, collected stool specimens of 10-50 ml in volume should be placed in tightly capped stool or urine sample cups and be collected within 48-72 hours after onset of illness while the stools are still liquid or semi-solid. Stool specimens should be refrigerated at 4 °C if shipping is to be delayed. Freezing can destroy virus particles, so it is not recommended.

To prevent a similar outbreak from occurring again, the recommendations provided to the employees can be found on the CDC website. In general, the importance of hand washing was emphasized, especially after using the bathroom, changing diapers, and before eating or preparing food. Foodhandlers are asked not to prepare any food while they are symptomatic and for three days after recovering from illness.

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## Announcement of Publication

The State of Louisiana Management Guidelines for Methicillin-Resistant (MRSA) and Vancomycin-Resistant (VRSA) Staphylococcus Aureus will be available by late December 2003 and may be downloaded at <http://oph.dhh.state.la.us/infectiousdisease/index.html>.



LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE  
 Sep-Oct 2003  
**PROVISIONAL DATA**

Table 1. Disease Incidence by Region and Time Period

DISEASE	HEALTH REGION									TIME PERIOD				
	1	2	3	4	5	6	7	8	9	Sep-Oct 2003	Sep-Oct 2002	Jan-Oct Cum 2003	Jan-Oct Cum 2002	% Chg
<b>Vaccine-preventable</b>														
<i>H. influenzae (type B)</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis B Cases	1	0	0	0	0	0	2	0	1	4	13	115	110	4.5
Rate <sup>1</sup>	0.1	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.3	0.1	0.3	2.7	2.5	na
Measles	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mumps	0	0	0	0	0	0	0	0	0	0	0	1	1	0.0
Rubella	0	0	0	0	0	0	0	0	0	0	0	0	1	-100
Pertussis	1	0	0	0	1	0	0	0	0	2	0	8	8	0
<b>Sexually-transmitted</b>														
HIV/AIDS Cases <sup>2</sup>	24	17	3	2	2	0	2	1	1	52	230	477	843	-44.0
Rate <sup>1</sup>	2.4	2.9	0.8	0.4	0.7	0.0	0.4	0.3	0.2	1.2	5.3	10.9	19.3	na
Gonorrhea Cases	501	122	69	113	48	49	282	115	46	1345	1793	9462	9897	-4.4
Rate <sup>1</sup>	48.5	20.2	18	20.6	17	16.3	53.9	32.5	10.5	129	171.9	907.2	948.8	na
Syphilis (P&S) Cases	5	11	0	9	0	2	3	0	20	50	31	136	129	5.4
Rate <sup>1</sup>	0.5	1.8	0.0	1.6	0	0.7	0.6	0.0	4.6	4.8	3	13.0	12.4	na
<b>Enteric</b>														
Campylobacter	1	2	4	1	0	2	1	0	2	13	11	88	103	-14.6
Hepatitis A Cases	5	0	1	0	0	0	1	0	0	7	17	65	78	-16.7
Rate <sup>1</sup>	0.5	0.0	0.3	0.0	0.0	0.0	0.2	0.0	0.0	0.2	0.4	1.5	1.8	na
Salmonella Cases	17	19	10	10	1	9	7	17	18	108	191	537	770	-30.3
Rate <sup>1</sup>	1.6	3.3	2.7	2.0	0.4	3.0	1.4	4.8	4.7	2.5	4.4		17.8	na
Shigella Cases	5	4	1	4	0	2	4	0	2	22	88	247	458	-46.1
Rate <sup>1</sup>	0.5	0.7	0.3	0.8	0.0	0.7	0.8	0.0	0.5	0.5	2.0		10.6	na
Vibrio cholera	0	0	0	0	0	0	0	0	0	0	0	0	1	-100
Vibrio, other	1	0	0	0	0	0	0	0	0	1	6	17	35	-51.1
<b>Other</b>														
<i>H. influenzae (other)</i>	0	0	0	0	0	0	0	0	0	0	1	12	9	-33.4
<i>N. Meningitidis</i>	2	0	0	0	0	0	1	0	0	3	5	36	39	7.7
Tuberculosis	na	na	na	na	na	na	na	na	na	na	na	na	na	na

1 = Cases Per 100,000

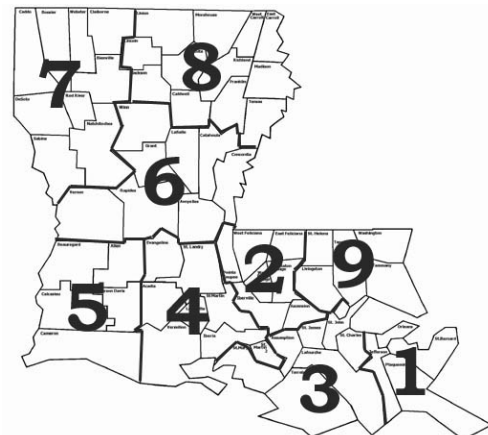
2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected. Due to reporting delays in HIV/AIDS cases, the number of persons reported is a minimal estimate.

Table 2. Diseases of Low Frequency

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

Table 3. Animal rabies (Jan-Oct)

Parish	No. Cases	Species
	0	



**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 <sup>1</sup>	Hepatitis B (perinatal infection)	Shigellosis
E. Coli 0157:H7	Hepatitis E	Syphilis <sup>1</sup>
E. Coli Enterohemorrhagic (other)	Herpes (neonatal)	Tetanus
Encephalitis, Arthropod borne	Legionellosis (acute disease)	Tuberculosis <sup>2</sup>
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 <sup>1</sup>	Lyme Disease	Trichinosis
Coccidioidomycosis	Lymphogranuloma Venereum <sup>1</sup>	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 <sup>1</sup>		
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>.

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

<sup>2</sup>Report 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.

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