



MONTHLY MORBIDITY REPORT

Provisional Statistics

REPORTED MORBIDITY
JULY/AUGUST, 1977

from the
OFFICE OF PUBLIC HEALTH STATISTICS

HOSPITAL INFECTIONS CONTROL

REC'D
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In its recent requirement that every department in the hospital have a written policy regarding hospital acquired infections, the Joint Commission on Accreditation of Hospitals indicated the importance of hospital acquired or nosocomial infections.¹ Such infections represent a paradox of modern medicine—that the miraculous medical procedures which save and prolong life may also increase susceptibility to infections by allowing old and debilitated patients to survive and by breaking down natural barriers to infections. The hospital, which houses many patients made susceptible by such breaks in barriers to infection as surgery, intravenous fluids, urinary catheters, respirators, surgery, and immunosuppressive drugs, is an environment which favors spread of infections. Staff, who have contact with large numbers of debilitated patients, can unwittingly be mechanical vehicles for disease-causing microorganisms. It has been estimated that 5-7% of patients who enter a hospital will acquire an infection while in the hospital.² The average nosocomial infection extends the patient's stay in the hospital by 5-6 days,³ a considerable expense in this era of super high cost of hospitalization.

In response to this problem, a hospital infections control movement has developed. Actually, the concept of hospital infection control dates at least as far back as Ignaz Semmelweis, a Hungarian obstetrician who in 1847 observed that the incidence of puerperal fever, then the major cause of death after childbirth, was four times higher in the division where medical students were taught than in the area where mid-wives were trained.

He concluded that the students were transmitting some noxious substance from the autopsy room to the women in delivery, thus causing the increased number of infections. When he began to require medical students to wash their hands and rinse them in a chlorinated lime solution before each delivery, the incidence of puerperal fever dropped dramatically.⁴ The basic principle of good handwashing between patients was then and is now the single most important factor in the control of infections.

What is modern thinking about how hospitals can prevent the spread of infections by the gram negative rods, fungi, and penicillinase producing staphylococci that would rarely spread or find susceptible hosts out of the hospital environment?

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COMMUNICABLE DISEASE BULLETINS

ST. LOUIS ENCEPHALITIS

Three serologically confirmed and three presumptive cases of St. Louis encephalitis have occurred this year in Louisiana as of August 25, 1977. Two confirmed cases (fourfold rise in titer to SLE) and three presumptive cases were from Slidell. All were women between 17 and 52 years old. The other confirmed case was an 11 year old girl from Bogalusa. All cases had onset in mid-July.

ROCKY MOUNTAIN SPOTTED FEVER

Seven serologically confirmed cases of Rocky Mountain Spotted Fever have been reported in 1977 in Louisiana. All patients live in northern Louisiana except for one man from New Orleans who travels extensively and may have acquired his illness elsewhere. The patients were four men and three women. Four were under twenty-one. Five of the seven had a definite recent tick bite. The onset of all cases was in June or July. The previous yearly maximum RMSF cases for Louisiana was two. There were no fatalities.

DENGUE

A case of dengue type I has been confirmed in a Louisiana resident by isolation of the virus from serum. The patient had recently been in Jamaica where the first dengue type I epidemic in the western hemisphere is still in progress as of August, 1977. Imported cases from Jamaica have been diagnosed in several other states. Physicians are advised to consider the diagnosis in patients with fever, headache, myalgias, retro-orbital pain and rash who have recently been in the West Indies. The diagnosis is confirmed by submitting acute and convalescent serums to the Central Laboratory.

First, though some infections in immunocompromised hosts cannot be prevented, the rate can be minimized by proper techniques. Each hospital must decide on a set of standards and procedures to follow for each patient care area of the hospital designed to prevent the acquisition of infections by both patients and staff. Proper isolation procedures for a variety of illnesses must be agreed upon. These procedures are usually dictated by a hospital infections control committee. Delineating the precise procedures for various areas of the hospital is beyond the scope of this article, but relevant materials are available from many sources. The Epidemiology Unit of the Office of Health Services and Environmental Quality can assist in finding material on which to base procedures.

Once standards are set, the application of basic epidemiology is essential. Surveillance for infections either known or suspected to be hospital acquired is necessary, especially in high risk areas such as intensive care units, surgical recovery areas, burn units, hemodialysis units, and newborn nurseries. When unacceptable rates of nosocomial infections or unusual clusters are detected, the hospital must be ready and able to respond by investigating and correcting any breach of proper techniques which has occurred.

The apparatus for maintaining hospital infection control consists of an infection control committee and infection control officers. The committee needs representation from medical and surgical departments, nursing, housekeeping, and the laboratory, and the support of the hospital Board of Directors and administration. It is responsible for basic policy setting. Necessary decisions ordinarily are made by the chairman of the committee, usually a physician with an interest in infectious diseases and epidemiology, along with one or more infection control officers who might be nurses, medical technologists, or epidemiologists involved in carrying out day to day surveillance, visiting high risk areas frequently to detect nosocomial infections. It has been found that one such person is necessary for 250-300 beds.⁵

The work of a hospital infections control group may be difficult in that considerable day to day routine is involved in surveillance, and long established patterns of behavior by health workers may sometimes need to be altered. However, the necessity for hospital infection control activity in every hospital is undeniable. The Epidemiology Unit of the Office of Health Services and Environmental Quality is happy to assist in technical matters upon request.

¹ Joint Commission on Accreditation of Hospitals, Program on Hospital Accreditation Standards, 1976.

² Hewitt, W. and Sanford, J.P.: Workshop on Hospital-Associated Infections, *Journal of Infectious Diseases*, 130:680, 1974.

³ Center for Disease Control, Study on the Effectiveness of Nosocomial Infection Control, *Hospital Infection Control*,

April, 1976, p. 55.

⁴ Infection Control in the Hospital, *Ortho Diagnostic Reporter*, 9, December, 1974.

⁵ Mallison, G.: A Hospital Program for Control of Nosocomial Infection, *APIC Newsletter*, 2:4, February, 1974.

DRUG INFORMATION CENTER TO SERVE LOUISIANA HEALTH PROFESSIONALS

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Assistant Professor of Pharmacy
Xavier University
Director of the Drug Information Center

The Xavier University of Louisiana College of Pharmacy in New Orleans now maintains a drug information center to serve Louisiana health professionals. The primary function of the Drug Information Center (D.I.C.) is to act as a consultative service providing documented information about all aspects of drugs and drug therapy that will be clinically useful to physicians, pharmacists, dentists, nurses and other health care professionals. A secondary function is to serve as a teaching tool for pharmacy students.

The center is staffed by clinical faculty and by pharmacy students. When a physician or other health professional poses a question regarding drugs or drug therapy, the full time faculty drug information specialist or a student working under his direct supervision quickly researches and reports on the question. Available resources include the Iowa Drug Information Service, which indexes about 140 journals, all on microfiche, and the de Haen Drug Information System, which indexes and abstracts about 450 journals. The Tulane and LSU medical libraries can also be used.

The Drug Information Center is presently located in the College of Pharmacy Library and is open from 9:00 a.m. until 5:00 p.m., Monday through Friday. Questions can be submitted in writing or by telephone during those hours by any health care professional. Written reports and reprints of articles and literature searches are available on request. There is no charge for the service, which is funded as a service and educational project by the Department of Health, Education, and Welfare.

The address and phone number are:

Xavier University of Louisiana
College of Pharmacy Drug Information Center
Pine and Palmetto Streets
New Orleans, Louisiana 70125
Phone: 504-488-7668

SELECTED REPORTABLE DISEASES

(By Place of Residence)

STATE AND PARISH TOTALS Reported Morbidity July, 1977	ASEPTIC MENINGITIS	DIPHTHERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTION	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	TUBERCULOSIS, PULMONARY	Meningococcal INFECTIONS	PERTUSSIS	RABIES IN ANIMALS	RUBELLA*	SEVERE UNDERNUTRITION	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	MEASLES	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY
TOTAL TO DATE 1976	39	0	8	4	281	83	319	30	3	3	85	7	33	2	50	2	182	11285	368
TOTAL TO DATE 1977	12	0	4	0	366	92	338	79	5	10	27	4	45	0	61	1	74	10724	384
TOTAL THIS MONTH	7	0	0	0	72	28	50	12	1	4	1	0	7	0	17	0	0	1981	63
ACADIA																			17
ALLEN																			2
ASCENSION																			3
ASSUMPTION																			2
AVOUELLES					1														4
BEAUREGARD																			4
BIENVILLE							1												3
BOSSIER							3												15
CADDO	1				4	7	5	1		3					5			162	4
CALCASIEU					1		2												111
CALDWELL																			
CAMERON																			1
CATAHOULA							1												
CLAIBORNE					1														3
CONCORDIA																			1
DESOTO							1												8
EAST BATON ROUGE	1				4	1		1							1			183	9
EAST CARROLL																			1
EAST FELICIANA																			1
EVANGELINE							3												2
FRANKLIN																			13
GRANT																			2
IBERIA							2								1				7
IBERVILLE															1				17
JACKSON																			
JEFFERSON	1				13	6	5	3		1	1							93	5
JEFFERSON DAVIS							1												5
LAFAYETTE					2	5	3											40	3
LAFOURCHE					3	1												20	
LASALLE																			
LINCOLN																			22
LIVINGSTON																			1
MADISON	2				17										1			5	
MOREHOUSE							1												12
NATCHITOCHES																			6
ORLEANS	1				13	5	8	4	1				5		4			787	26
OUACHITA					2		1											80	1
PLAQUEMINES						1												3	3
POINTE COUPEE																			
RAPIDES					1		4						1					70	3
RED RIVER							1												
RICHLAND																			5
SABINE							1												3
ST. BERNARD					3														6
ST. CHARLES					2								1					14	2
ST. HELENA																			
ST. JAMES																			11
ST. JOHN					2		1											9	1
ST. LANDRY					1	2	1											3	
ST. MARTIN	1							1											1
ST. MARY																			7
ST. TAMMANY																			
TANGIPAOHA								1							1			43	
TENSAS																		28	3
TERREBONNE							1											9	
UNION					2													5	
VERMILION							1												
VERNON																			59
WASHINGTON							2	1										23	2
WEBSTER															1				8
WEST BATON ROUGE																			7
WEST CARROLL																			
WEST FELICIANA																			25
WINN							1												1
OUT OF STATE																			8

* Includes Rubella, Congenital Syndrome

From January 1 through July 31, 1977, the following cases were also reported: 1- Brucellosis; 4- Leptospirosis; 1- Malaria (Contracted outside the U.S.A.); 1- Rocky Mountain Spotted Fever.

SELECTED REPORTABLE DISEASES

(By Place of Residence)

STATE AND PARISH TOTALS Reported Morbidity August, 1977	ASEPTIC MENINGITIS	DIPHTHERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIOUS	HEPATITIS A AND UNSPECIFIED	HEPATITIS B	TUBERCULOSIS, PULMONARY	MENINGOCOCCAL INFECTIONS	PERTUSSIS	RABIES IN ANIMALS	RUBELLA*	SEVERE UNDERNUTRITION	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	MEASLES	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY
TOTAL TO DATE 1976	42	0	13	4	327	107	356	35	3	5	86	7	35	2	60	2	191	12642	390
TOTAL TO DATE 1977	13	0	8	0	409	101	390	83	5	18	27	4	69	0	82	1	74	12004	470
TOTAL THIS MONTH	1	0	4	0	46	12	51	4	0	8	0	0	24	0	21	0	0	1280	88
ACADIA	1				1		1											2	1
ALLEN																			
ASCENSION					2		1											3	
ASSUMPTION																		1	
AVOYELLES																		3	
BEAUREGARD																		3	
BIENVILLE																		1	
BOSSIER							1						5					11	
CADDO					3	2	2	3		6			1		4			86	4
CALCASIEU								1										16	2
CALDWELL																			
CAMERON																			
CATAHOULA																		1	
CLAIBORNE																		2	
CONCORDIA							1											3	
DESOTO																		5	
EAST BATON ROUGE					3	1	3								1			109	8
EAST CARROLL																		2	
EAST FELICIANA																		1	
EVANGELINE							1											1	
FRANKLIN							2											2	
GRANT																			1
IBERIA					1														
IBERVILLE					1													3	1
JACKSON																			
JEFFERSON					8	2	6			1			1		1			68	4
JEFFERSON DAVIS							1												
LAFAYETTE					1													10	5
LAFOURCHE						1												8	1
LASALLE																			
LINCOLN																		26	
LIVINGSTON																		3	1
MADISON					4								3					3	
MOREHOUSE																		8	
NATCHITOCHE							1											17	
ORLEANS			1		11	3	18						13		9			595	43
OUACHITA			1		1		1											15	
PLAQUEMINES					2		1											6	2
POINTE COUPEE																		2	
RAPIDES										1					2			73	4
RED RIVER						1	1												
RICHLAND																			
SABINE							1											4	
ST. BERNARD					1										1			4	1
ST. CHARLES							1											6	1
ST. HELENA																		1	
ST. JAMES							2											4	
ST. JOHN						1												3	3
ST. LANDRY					2													2	
ST. MARTIN															1			7	
ST. MARY							1											3	
ST. TAMMANY			1										1		2			33	1
TANGIPAHOA					1		2											33	4
TENSAS																			
TERREBONNE					3													7	
UNION																		5	
VERMILION																		4	
VERNON						1												3	
WASHINGTON			1		1		1											24	
WEBSTER																		8	
WEST BATON ROUGE							1											16	1
WEST CARROLL																			
WEST FELICIANA																		20	
WINN							1											3	
OUT OF STATE																		1	

* Includes Rubella, Congenital Syndrome

From January 1 Through August 31, 1977, the following cases were also reported: 1-Brucellosis; 4- Leptospirosis; 2-Malaria (Contracted outside the U.S.A.); 5-Rocky Mountain Spotted Fever.