

# LOUISIANA MONTHLY MORBIDITY

DISEASES REPORTED DURING MONTH OF **MAY, 1969**

BY PARISH OF RESIDENCE

## RUBELLA IMMUNIZATION PROGRAM PLANNED

The federal Vaccination Assistance Act was passed in 1962 and initially funded in May 1963. The purpose of the Act was to catch up on the backlog of susceptible children and to improve on-going immunization programs to prevent any further build-up of susceptibles. It provided for vaccines for pre-schoolers and funds which could be used to obtain better utilization of existing resources and more comprehensive and effective delivery of immunization services.

The funding period provided for by the Act expires on June 30, 1969; however, it is anticipated that forthcoming federal appropriations will extend the program for another five years. With the extension of the program, emphasis will be directed principally toward the control of German Measles for which a vaccine is expected to be licensed within the next several weeks. When this vaccine becomes available, it will be placed in all health units throughout the state and will be administered on a routine basis to children between the ages of one and twelve. It is also anticipated that mass immunization programs will be conducted throughout the state as soon as adequate funds and vaccine become available.

DIVISION OF PUBLIC HEALTH STATISTICS -

- LOUISIANA STATE DEPARTMENT OF HEALTH

RELEASED JUNE 4, 1969	ASEPTIC MENINGITIS	DIPHThERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTION	INFECTIOUS AND SERUM HEPATITIS	MEASLES	MENINGOCOCCAL INFECTIONS	PERTUSSIS	POLIOMYELITIS, PARALYTIC	RABIES IN ANIMALS	RHEUMATIC FEVER	STREPTOCOCCAL INFECTIONS	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	TUBERCULOSIS, PULMONARY	GONORRHEA	SYPHILIS
TOTAL TO DATE 1968	17	7	12	6	287	2	67	3	0	24	9	138	26	1	49	4	440	3271	1029
TOTAL TO DATE 1969	10	4	18	1	369	103	69	1	0	13	8	170	23	0	30	5	322	3664	966
TOTAL THIS MONTH	4	1	4	0	76	30	6	0	0	0	3	23	6	0	10	0	53	842	186
ACADIA					4	1							1				1	2	
ALLEN					2														
ASCENSION												1						4	3
ASSUMPTION																		2	1
AVOYELLES																		1	
BEAUREGARD																			
BIENVILLE					1		1												
BOSSIER																		4	2
CADDO					2												8	69	10
CALCASIEU					2										2			30	
CALDWELL																			
CAMERON																			
CATAHOULA																			
CLAIBORNE																			1
CONCORDIA																			
DESOTO																			
EAST BATON ROUGE					1	26											3	55	17
EAST CARROLL																		2	
EAST FELICIANA																		1	3
EVANGELINE					1												4	3	1
FRANKLIN					3														
GRANT																			1
IBERIA																		7	
IBERVILLE					1													3	2

Louisiana Department

DIVISION OF PUBLIC HEALTH STATISTICS -

- LOUISIANA STATE DEPARTMENT OF HEALTH

RELEASED JUNE 4, 1969	ASEPTIC MENINGITIS	DIPHThERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIONOUS	INFECTIONOUS AND SERUM HEPATITIS	MEASLES	MENINGOCOCCAL INFECTIONS	PERTUSSIS	POLIOMYELITIS, PARALYTIC	RABIES IN ANIMALS	RHEUMATIC FEVER	STREPTOCOCCAL INFECTIONS	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	TUBERCULOSIS, PULMONARY	GONORRHEA	SYPHILIS
JACKSON																	1	1	
JEFFERSON	1		1		7							4						78	16
JEFFERSON DAVIS																		1	
LAFAYETTE			1		5							1					1	15	1
LAFOURCHE	1											1					2		
LASALLE					3														
LINCOLN					1													6	
LIVINGSTON					2	2											1	1	1
MADISON																		2	4
MOREHOUSE																		4	1
NATCHITOCHE					2													7	3
ORLEANS			3		14		3				2	14	5		6		20	347	57
OUACHITA					1												1	41	9
PLAQUEMINES					4							1							
POINTE COUPEE																	1		1
RAPIDES					1		1								1			2	3
RED RIVER																			2
RICHLAND																			
SABINE																	1		1
ST. BERNARD					1													3	
ST. CHARLES												1							1
ST. HELENA																			
ST. JAMES															1				
ST. JOHN					1						1								1
ST. LANDRY					4												2	7	4
ST. MARTIN																		3	
ST. MARY					1		1										1	3	3
ST. TAMMANY					1		1										1	17	1
TANGIPAHOA					2												1	10	8
TENSAS					1														
TERREBONNE																		1	
UNION																		1	
VERMILION					1												2		
VERNON					2													79	1
WASHINGTON																	1	9	9
WEBSTER																		1	
WEST BATON ROUGE																		6	2
WEST CARROLL																			
WEST FELICIANA																		12	16
WINN					1												1	2	
OUT OF STATE																			

From January 1 through May 31 of 1969, the following cases were also reported: 23 Malaria (contracted outside U.S,A); 1 Brucellosis, 4 Leptospirosis.

## RECOMMENDATION OF THE PUBLIC HEALTH SERVICE ADVISORY COMMITTEE ON IMMUNIZATION PRACTICES

*The Public Health Service Advisory Committee on Immunization Practices developed the following recommendation in close collaboration with the Committee on the Control of Infectious Diseases, American Academy of Pediatrics which endorses the recommendation. (Reprinted from the Morbidity and Mortality Weekly Report, Vol. 18, No. 15, Week Ending April 12, 1969.)*

### PRELICENSING STATEMENT ON RUBELLA VIRUS VACCINE

#### INTRODUCTION

The live, attenuated rubella virus vaccine\* soon to become available appears to be a highly effective immunizing agent and the first suitable method of controlling rubella.

Rubella is generally a mild illness, but if the infection is acquired by a woman in the early months of pregnancy, it poses a direct hazard to the fetus. Preventing infection of the fetus is the principal objective of rubella control. This can best be achieved by eliminating the transmission of virus among children, who are the major source of infection for susceptible pregnant women. Furthermore, the live, attenuated rubella virus vaccine is safe and protective for children, but not for pregnant women because of an undetermined risk of the vaccine virus for the fetus.

#### RUBELLA

Rubella is one of the common childhood exanthems. Most cases occur in school-age children particularly during the winter and spring. By early adulthood, approximately 80 to 90 percent of individuals in the United States have serological evidence of immunity.

Rubella is clinically variable, and its common features, such as post-auricular and sub-occipital lymphadenopathy and transient erythematous rash, are often overlooked or misdiagnosed. A mild febrile illness may not be recognizable as rubella, and moreover, subclinical infection occurs, which further decreases the reliability of clinical history.

Complications of rubella are rare in children, but in adults, particularly women, the illness is commonly accompanied by transient polyarthritis. Far more important is the frequent occurrence of fetal abnormalities when a woman acquires rubella in the first trimester of pregnancy.

#### RUBELLA IMMUNITY

Immunity following rubella appears to be long lasting, even after mild illness or clinically inapparent infection.

\*Its official name is Rubella Virus Vaccine, Live.

The only reliable evidence of immunity is a positive serological test. However, because of the variation among reagents and technical procedures, results of serological tests should be accepted only from laboratories of recognized competency that regularly perform these tests.

At the present time, the hemagglutination-inhibition (HI) antibody determination is particularly useful for evaluating immunity. It is a rapid and sensitive procedure. The complement fixation (CF) and other serological tests are less useful.

#### LIVE RUBELLA VIRUS VACCINE

Live rubella virus vaccine is prepared in cell culture of avian or mammalian tissues. It is administered as a single subcutaneous injection. Although vaccinees shed virus from the pharynx at times for 2 or more weeks after vaccination, there is no clear evidence of communicability. Approximately 95 percent of susceptible vaccinees develop antibodies, but titers are lower than those observed following natural rubella infection. Recent investigations have shown that vaccination affords protection against illness following either natural exposure or artificial challenge.

Antibody levels have declined very little during the 3-year period of observation of children who were among the first to be immunized with rubella vaccine. Long-term protection is likely, but its exact duration can be established only by continued observation.

More than 30,000 susceptible children have received live rubella virus vaccine in field investigations, with almost no untoward reactions. Only rarely has transient arthralgia or evanescent rash been reported in children.

Many susceptible women have had lymphadenopathy, arthralgia, and transient arthritis beginning 2 to 4 weeks after vaccination; however, fever, rash, and other features of naturally acquired rubella have occurred less commonly. Not enough susceptible men have been vaccinated to show whether they experience comparable reactions as frequently as women.

## RECOMMENDATIONS FOR VACCINE USE

Live rubella virus vaccine is recommended for boys and girls between the age of 1 year and puberty. Vaccine should not be administered to infants less than 1 year old because of possible interference from persisting maternal rubella antibody.

Children in kindergarten and the early grades of elementary school deserve initial priority for vaccination because they are commonly the major source of virus dissemination in the community. A history of rubella illness is usually not reliable enough to exclude children from immunization.

Vaccination of adolescent or adult males is of much lower priority because so few are susceptible. However, the vaccine may be useful in preventing or controlling outbreaks of rubella in circumscribed population groups.

**Pregnant women should not be given live rubella virus vaccine.** It is not known to what extent infection of the fetus with attenuated virus might take place following vaccination, or whether damage to the fetus could result. Therefore, *routine* immunization of adolescent girls and adult women should *not* be undertaken because of the danger of inadvertently administering vaccine before pregnancy becomes evident.

Women of child-bearing age may be considered for vaccination only when the possibility of pregnancy in the following 2 months is essentially nil; each case must be considered individually. This cautious approach to vaccinating post-pubertal females is indicated for two reasons: First, because of the theoretical risk of vaccination in pregnancy; and second, because significant congenital anomalies occur regularly in approximately 3 percent of all births, and their fortuitous appearance after vaccine had been given during pregnancy could lead to serious misinterpretation.

If vaccination of a woman of child-bearing age is contemplated, the following steps are indicated:

Optimally, the woman should be tested for susceptibility to rubella by the HI test (See *Rubella Immunity*).

If immune, she should be assured that vaccination is unnecessary.

If susceptible, she may be vaccinated only if she understands that it is imperative for her to avoid becoming pregnant for the following 2 months. (To ensure this, a medically acceptable method for pregnancy prevention should be followed. This precaution also applies to women in the immediate

post-partum period.) Additionally, she should be informed of the frequent occurrence of self-limited arthralgia and possible arthritis beginning 2 to 4 weeks after vaccination.

### Use of Vaccine after Exposure to Natural Infection

There is no evidence that live rubella virus vaccine given after exposure will prevent illness. There is, however, no contraindication to vaccinating children already exposed to natural rubella. For women exposed to rubella, the concepts listed previously apply.

### Precautions in Using Live Rubella Virus Vaccine

**Pregnancy:** *Live rubella virus vaccine is contraindicated.* (See *Recommendations for Vaccine Use.*)

**Altered Immune State:** Attenuated rubella virus infection might be potentiated by severe underlying diseases, such as leukemia, lymphoma, or generalized malignancy, and when resistance has been lowered by therapy with steroids, alkylating drugs, antimetabolites, or radiation. Vaccination of such patients should be avoided.

**Severe Febrile Illness:** Vaccination should be postponed until the patient has recovered.

**Hypersensitivity of Vaccine Components:** Rubella vaccine is produced in cell culture. Care should be exercised in administering vaccine to persons with known hypersensitivity to the species from which the cells were derived (indicated in the labeling). The vaccine contains a small amount of neomycin and should not be given to individuals known to be sensitive to this antibiotic.

### Simultaneous Administration of Live Rubella Virus Vaccine and Other Live Virus Vaccines

Simultaneous administration of live rubella virus vaccine and other live virus vaccines should be deferred until results of controlled clinical investigations are available. Until then, it is recommended that rubella vaccination be separated by at least 1 month from administration of other live virus vaccines.

## SURVEILLANCE

Careful surveillance of rubella infection is particularly important with an effective vaccine in use. Emphasis should be placed upon improved diagnosis and reporting of rubella, of the congenital rubella syndrome, and of complications of the disease. Competent laboratory investigation of all infants with birth defects suspected of being due to rubella is essential. It will likewise be important to observe patterns of vaccine use and determine their effectiveness.