

LOUISIANA MONTHLY MORBIDITY

DISEASES REPORTED DURING MONTH OF **DECEMBER, 1970** BY PARISH OF RESIDENCE

Louisiana Department
Louisiana State Library
Baton Rouge, Louisiana

SEROLOGIC ASSISTANCE IN RUBELLA DIAGNOSIS

JAN 25 1971

The rubella hemagglutination inhibition test, the most widely used technique for quantitating rubella antibodies, is a valuable diagnostic tool and an excellent means of expanding the surveillance system for rubella. The following is a listing of commonly encountered clinical problems relating to rubella in which serological testing can be helpful in diagnosis:

(Continued on Page 3)

DIVISION OF PUBLIC HEALTH STATISTICS - - LOUISIANA STATE DEPARTMENT OF HEALTH

RELEASED January 8, 1971	ASEPTIC MENINGITIS	DIPHThERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIONOUS	INFECTIOUS AND SERUM HEPATITIS	MEASLES	MENINGOCOCCAL INFECTIONS	PERTUSSIS	POLIOMYELITIS, PARALYTIC	RABIES IN ANIMALS	RHEUMATIC FEVER	RUBELLA *	SHIGELLOSIS	TYPHOID FEVER	OTHER SALMONELLOSIS	TETANUS	TUBERCULOSIS, PULMONARY	GONORRHEA	SYPHILIS, PRIMARY AND SECONDARY
TOTAL TO DATE 1969	53	42	39	5	872	125	109	14	0	42	14	38	42	4	344	8	740	10010	718
TOTAL TO DATE 1970	129	31	15	16	672	347	74	33	0	69	11	165	30	9	94	4	720	11753	796
TOTAL THIS MONTH	3	3	0	0	51	173	5	2	0	2	1	4	2	0	6	0	23	1076	92
ACADIA					1	4											1	4	
ALLEN						1													
ASCENSION	1					1													
ASSUMPTION																			
AVOUELLES																			
BEAUREGARD																			3
BIENVILLE																			1
BOSSIER																			5
CADDO					4	1												161	14
CALCASIEU																		33	4
CALDWELL																			1
CAMERON																			
CATAHOULA																			
CLAIBORNE																			4
CONCORDIA																			
DESOTO																	1	3	
EAST BATON ROUGE															4		1	44	8
EAST CARROLL																			3
EAST FELICIANA																			
EVANGELINE																	1	6	
FRANKLIN																			
GRANT							1												2
IBERIA		1																	4
IBERVILLE																			2

* Includes Rubella, Congenital Syndrome

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JACKSON																		1	
JEFFERSON					3	88	2								1		1	86	4
JEFFERSON DAVIS						1												3	
LAFAYETTE					3							1			1			12	
LAFOURCHE					1			1									1	12	
LASALLE																	1		
LINCOLN					2	1												4	1
LIVINGSTON					3													3	
MADISON																	1	2	3
MOREHOUSE																		22	
NATCHITOCHE					1													6	1
ORLEANS	2	1			13	47	1	1				2	2				11	392	32
OUACHITA						10												58	1
PLAQUEMINES																		1	1
POINTE COUPEE																			
RAPIDES					2													19	4
RED RIVER																		1	
RICHLAND																		16	2
SABINE																		2	
ST. BERNARD		1				2												1	3
ST. CHARLES																		1	1
ST. HELENA																		4	
ST. JAMES																	2		
ST. JOHN																			
ST. LANDRY					1	10												19	3
ST. MARTIN					1													1	
ST. MARY					2	1	1											2	1
ST. TAMMANY					1	1												45	1
TANGIPAHOA																		10	
TENSAS																			1
TERREBONNE						2											2	2	
UNION											1							5	2
VERMILION																			
VERNON					12	2						1						48	
WASHINGTON																		8	
WEBSTER						1												6	
WEST BATON ROUGE																		1	2
WEST CARROLL																		1	
WEST FELICIANA					1													8	
WINN										2								1	
OUT OF STATE																			

From January 1 through December 31 of 1970, the following cases were also reported:
 1 Brucellosis, 5 Leprosy, 2 Leptospirosis, 53 Malaria (contracted outside U.S.A.), and
 2 Trichinosis.

1. Confirmation of Acute Rubella Infection

Specimens Required:

Paired sera--first collected within 3 days after onset of illness, and a convalescent serum collected 1-2 weeks later.

Interpretation:

Only a 4-fold or greater rise in antibody titer is diagnostic of recent rubella infection. Stable, or falling titers indicate only past rubella infection at some undetermined time. In instances where stable rubella HI antibody titers are found, additional laboratory techniques such as CF or FA should be employed since antibody measurable by these latter two procedures appears later following the onset of rash than does the HI antibody.

2. Determination of Immune Status of Pregnant Women Exposed to Rubella

Specimens Required:

Single serum collected within 7 days after exposure.

If the first specimen contains no detectable rubella antibody, then a second serum should be collected 3-4 weeks after the exposure.

Interpretation:

The presence of any level of rubella antibody within the 7-day period after exposure indicates prior infection with rubella virus, and immunity to primary infection.

Absence of detectable rubella antibody at the time of exposure indicates susceptibility to rubella. The testing of a second serum 3-4 weeks after exposure will confirm whether or not rubella infection, apparent or inapparent, has resulted from the exposure.

3. Confirmation of Suspected Congenital Rubella Infection

Specimens Required:

Serum specimens from both the infant and mother (if infant is less than 6 months old, an additional serum should be obtained at 6-12 months of age).

Specimens for viral isolation are of limited value for diagnosis and management of rubella syndrome infants.

Interpretation:

Congenital rubella infection can be confirmed serologically by demonstrating the persistence of antibody above and beyond that which is passively transferred from the mother. In general, the presence of rubella antibody in specimens submitted when the suspect case is 6-12 months old confirms the diagnosis. Above the age of 12 months the chance of antibody having resulted from natural post-natal rubella must be weighed against the likelihood of congenital origin. The degree of confidence in the serologic diagnosis therefore decreases with age above 1 year.

4. Defining Need for Rubella Vaccination

Specimens Required:

Single Serum.

Interpretation:

The presence of any level of HI antibody (>1:8) indicates past rubella infection at some undetermined time, thus immunity to primary infection.

Absence of rubella HI antibody indicates susceptibility to rubella.