

LOUISIANA MONTHLY MORBIDITY. LSASA

DISEASES REPORTED DURING THE MONTH OF

APRIL, 1974

BY PARISH OF RESIDENCE

LABORATORY REPORTING OF REACTIVE SEROLOGIC TESTS FOR SYPHILIS

Robert B. Emerson, Jr.
Roger Tulloch
Public Health Advisors
Section of Venereal Disease Control

In order to limit the spread of syphilis and thereby reduce the incidence of late destructive consequences and congenital syphilis, the Louisiana Health and Social and Rehabilitation

Services Administration attempts to apply intensive epidemiology around each known syphilis patient during the early infectious stages. In 1973, 28.1% of the people reported

BUREAU OF VITAL STATISTICS

DIVISION OF HEALTH MAINTENANCE AND AMBULATORY PATIENT SERVICES

Prepared by:

TABULATION
AND
ANALYSIS

	ASEPTIC MENINGITIS	DIPHThERIA	ENCEPHALITIS	ENCEPHALITIS, POST INFECTIONOUS	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 19 73	26	0	6	0	217	44	234	18	8	13	74	10	78	0	55	2	53	6688	264
TOTAL TO DATE 19 74	23	0	6	0	211	81	166	22	5	7	37	13	39	2	39	0	6	8597	231
TOTAL THIS MONTH	8	0	5	0	58	20	31	10	1	5	29	5	23	1	5	0	1	2404	67
ACADIA							1												11
ALLEN																			7
ASCENSION					1						9								2
ASSUMPTION																			1 1
AVOYELLES																			11
BEAUREGARD							1						1						5
BIENVILLE							1												7
BOSSIER					7		1			1									26
CADDO	1		1		4		2						2						270 4
CALCASIEU							2						1						69 1
CALDWELL																			6
CAMERON																			2
CATAHOULA					1		1												4
CLAIBORNE					2								1						1
CONCORDIA																			2
DESOTO																			6
EAST BATON ROUGE	1		2		5	1		1											140 3
EAST CARROLL																			1
EAST FELICIANA																			2
EVANGELINE															1				1 2
FRANKLIN							1												7 1
GRANT																			1
IBERIA					1		1	1											9
IBERVILLE							2												10

* INCLUDES RUBELLA AND CONGENITAL SYPHILIS

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APRIL, 1974



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Prepared by: TABULATION AND ANALYSIS	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
	JACKSON										1								6
JEFFERSON	3				9	3		1					2		2			131	5
JEFFERSON DAVIS																		4	
LAFAYETTE					2													22	
LAFOURCHE																		14	3
LASALLE																		1	
LINCOLN					1													66	
LIVINGSTON																	1	1	
MADISON					1													18	
MOREHOUSE							1											12	1
NATCHITOCHES																		36	
ORLEANS	1				12	9	7		1				5	1	2			941	35
OUACHITA					1		1			2								95	3
PLAQUEMINES	1																	3	
POINTE COUPEE																		3	
RAPIDES					4		4	2			2							93	
RED RIVER																		1	
RICHLAND																		33	
SABINE																			1
ST. BERNARD						2												8	
ST. CHARLES					1													8	
ST. HELENA																		1	
ST. JAMES																		3	
ST. JOHN																		4	
ST. LANDRY					1													35	
ST. MARTIN					1		2					1						8	
ST. MARY								1										8	1
ST. TAMMANY	1		1		1	2												33	
TANGIPAHOA							2											35	4
TENSAS																		2	
TERRIBONNE					1	3	1	2										18	
UNION																		11	
VERMILION																		3	
VERNON					2			2			18		15					67	2
WASHINGTON																		15	
WEBSTER										1								25	
WEST BATON ROUGE																		2	
WEST CARROLL																		1	
WEST FELICIANA																		30	
WINN																		5	
OUT OF STATE																		1	

From January 1, through April 30, 1 case of Malaria (contracted outside the U.S.A.) was also reported.

as having primary or secondary and 52.5% of those having early latent syphilis under one year were brought to treatment through the process of specially trained LHSRSA representatives interviewing patients with infectious syphilis and locating the suspects named.

There is evidence, however, that many patients diagnosed as having early syphilis are never reported and therefore not interviewed by persons trained in venereal disease epidemiology. A national survey¹ conducted in 1968 by the American Social Health Association and the American Medical Association estimated that nine out of ten patients treated by private physicians for infectious syphilis in Louisiana went unreported. Clearly, these unreported cases must be brought to the attention of the official public health agency which has both the legal responsibility for communicable disease control and the capability to apply effective epidemiology.

A study published in the Journal of the American Medical Association indicates the main reason for under reporting is that, while physicians are not unsympathetic with case reporting laws, they do not want to violate the norms of trust and confidence they are expected to maintain with their patients.² It seems evident that conditions favoring reporting should be those that do not place the initiative (blame) on the physician and would put the epidemiologist in contact with the physician while the patient is still under observation. The most practical device at this time for detecting otherwise unreported cases would appear to lie in strengthening the program of investigating laboratory reports of reactive tests for syphilis. In excess of 25% of all the primary and secondary syphilis patients reported in Louisiana in 1973 were discovered as a result of follow-up of reactor reports. Unfortunately, many reactive findings are obtained in non-reporting laboratories. A survey of the 211 private laboratories in Louisiana performing serologic tests for syphilis in 1973 revealed that 164 (77.7%) claim to report all reactive findings directly to State health offices or to confirm such findings with laboratories that do. The remaining 47 laboratories neither report reactive findings themselves nor confirm same with laboratories that do. These 47 laboratories accounted for 149,486 specimens in 1973 of which 3,122 were reactive. This represents 28.8% of the serologic tests performed by private laboratories and 41.6% of the positive findings from private laboratories.

An analysis of the 289 private patients reported in Louisiana in 1973 as having early infectious syphilis shows that 54 (18.7%) were reported as a direct result of the diagnosing physician's own initiative. Another 46 (15.9%) were named contacts of known infections and had been referred to private physicians by public health investigators for evaluation. The remaining 189 patients (65.4%) were discovered as a result of follow-up performed on laboratory reports of reactive serologic tests for syphilis. Such reports are submitted to the Section of Venereal Disease Control. The Section matches the laboratory reports against case reports in a confidential file to see if the reaction may be due to a previously reported infection. This matching excludes over half the reports from further follow-up. If no case report is found, a request for inquiry is sent to a Communicable Disease Investigator who contacts the submitting physician to see if a diagnosis has been made and, if indicated, for permission to perform the epidemiology. At such times, the physician often requests the investigator to return the patient for further observation. Investigators contacted private physicians concerning over 2,400 laboratory reports in 1973.

A comparison of syphilis morbidity for the years 1960 and 1965 was made by the Public Health Service to determine if the adoption of laboratory report laws significantly affected the number of reported syphilis cases. Two groups of states were compared: 9 areas which passed notification requirements in 1961, 1962, and 1963 and 21 areas which had no such laws during the study period. The following table shows the changes in cases of primary and secondary patients reported by private physicians from these two groups.

LABORATORY REPORTING REQUIRED IN AREA	NUMBER OF CASES		PERCENT CHANGE
	1960	1965	
YES	841	2248	+ 167.3
NO	1346	1895	+ 40.8

The need for laboratory reporting requirements is well established. The enactment of legislation requiring such reporting has been urged by the American Medical Association's Environmental, Occupational, and Public Health Council,³ the American Social Health Association, the Association of State and Territorial Health Officers, the Council of State Governments, and the United States Public Health Service.

After studying the experiences of other states with laboratory reporting requirements in 1964⁴ the State Board of Health amended the Sanitary Code to require that laboratories in Louisiana report reactive syphilis tests.⁵ The Board instructed administrators to interpret the regulation as protective rather than punitive, and to work toward voluntary compliance. As indicated in the latest surveys however, some laboratory directors still feel that statutory requirements are needed before they will report.

Louisiana is one of only eight states where reactor follow-up programs do not receive adequate support from legislation. As indicated on the map in Figure 1, most of these states are relatively low syphilis incidence areas and they may not consider laboratory reporting as a high priority in their over-all public health programs. Louisiana reports almost as many cases as the other seven states combined (823 vs 1,049).

It is difficult to predict the impact of report-

Figure 1

LOCATION OF AREAS WHICH REQUIRE PRIVATE LABORATORIES TO REPORT REACTIVE SEROLOGIC TESTS FOR SYPHILIS TO HEALTH DEPARTMENT WITH THE NUMBER OF REPORTED PRIMARY AND SECONDARY SYPHILIS PATIENTS INDICATED FOR FISCAL YEAR 1973

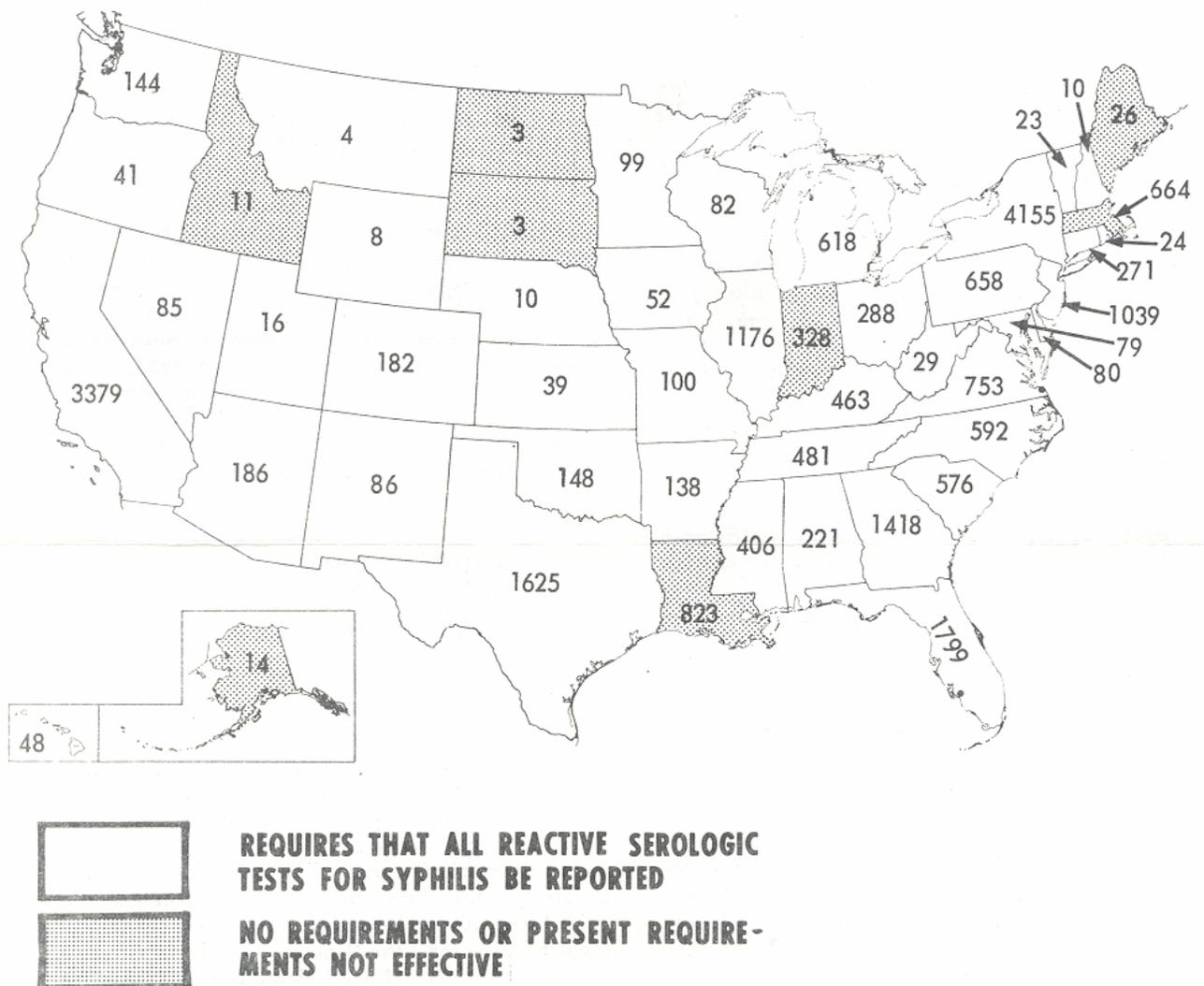
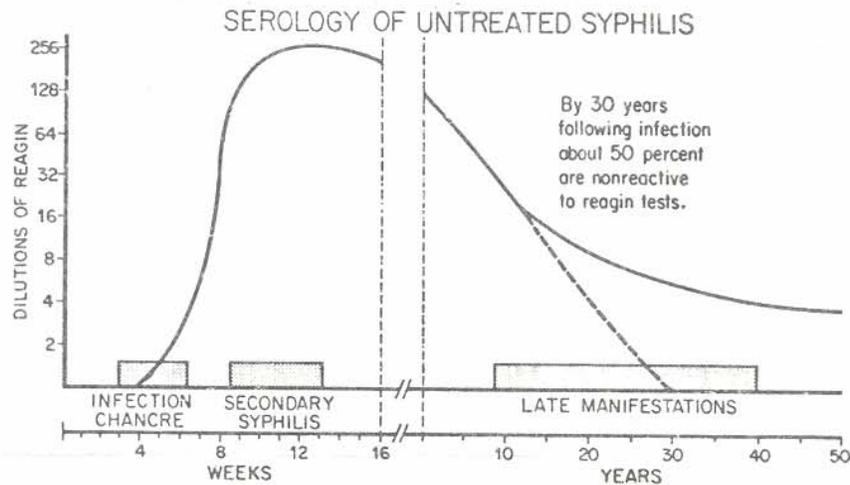


Figure 2



ing the remaining syphilis reactors. If 3,200 more reactor reports were made in a year, we can assume that half would be matched to previous reports on file and thereby excluded from further follow-up. By applying present yield ratios to 1,600 reactors, we could expect a base of 268 newly reported cases of early syphilis.

These cases should in turn produce 99 more cases through epidemiology. More important to interrupting the chain of infection however, would be the 370 sex contacts who would receive prophylactic treatment before they could incubate to infectious disease. Factors which might affect this model are the possibilities that the population of private reactors would have lower yield, and that (as expressed by lab directors themselves) the unreported tests may not be as specific as the VDRL performed by the State Bureau of Laboratories.

Many private laboratories confirm their reactive syphilis tests with the State laboratories. One advantage in this procedure for many physicians is the record of a standardized quantitative VDRL result. Rises in titer of more than one tube can signal treatment failure or reinfection. The titer is also very suggestive of the duration of infection. Recent experience in Louisiana would vary slightly from the schema in Figure 2⁶ in that titers in late primary are somewhat higher, and that the decline in titer is more rapid. Over half the follow-up of VDRL's reactive to 8 dilutions or above for people under 45 years results in a previously unreported case of early syphilis.

The laboratory report does not preempt the physician's responsibility to report, and test

results are never construed as diagnoses. The laboratory report simply acts as a signal to contact a physician and no follow-up can be conducted without the express permission of said physician. Clearly, such a program can function successfully only if there exist good open lines of communication and cooperation between physicians and investigators. Despite understandable reservations on the part of many individuals, laboratory reporting of syphilis tests remains a basic and effective tool for controlling the spread of syphilis.

REFERENCES

- 1 William A. Fleming et al., "National Survey of Venereal Disease Treated by Physicians in 1968," *The Journal of the American Medical Association*, CCXI (March 16, 1970), 1827-30.
- 2 Roy L. Cleeve et al., "Physicians Attitude Toward Venereal Disease Reporting," *The Journal of the American Medical Association*, CCII (December 1967), 941-46.
- 3 Editorial, "AMA Environmental, Occupational and Public Health Council Issues Venereal Disease Statement," *Journal of the Mississippi State Medical Association*, XIV (September 1973), 401-02.
- 4 See Charles L. Wilbar, Jr. and J. Thomas Millington, "Reporting of Reactive Serologic Tests by Laboratories as an Aid to Syphilis Control," *American Journal of Public Health*, LII (July 1962), 1095-1100. The Board also surveyed eleven state health officers, all of whom endorsed the procedure.
- 5 State of Louisiana, State Board of Health, *Sanitary Code*, Chapter 1, Section 1.025.
- 6 Reproduced from *Syphilis, Modern Diagnosis and Management*, Public Health Service Publication No. 743 (Washington: U.S. Government Printing Office, 1961), 17