Venereal Disease Morbidity, 1951

Syphilis Rates

In the 1951 fiscal year 198,640 cases of syphilis in all stages were reported for the first time to the Public Health Service. This represents a reported syphilis case rate of 132 per 100,000 civilian population. The geographic distribution of total syphilis cases reported per 100,000 population is shown in figure 1.

The number of syphilis cases reported has declined steadily since 1947. For the country as a whole, reported syphilis rates decreased by 49 percent, from 261 cases per 100,000 civilian population in 1947. In all States except Iowa, the reported syphilis rate has decreased as compared to 5 years ago (fig. 3). The relative size of the decreases in the various States does not appear to be correlated with the level of the syphilis rate in 1947. Since 1947 there has been a considerable decrease even in the States that had a low reported morbidity at that time.

Factors Influencing Rates

A number of factors may account for the changes in syphilis morbidity rates in the last 5 years, and the relative importance of these factors may vary widely from State to State. These factors include the relative efficiency of case finding in 1951 compared to 1947, including both the type and intensity of case-finding effort; the size of the backlog of undiscovered cases, i. e., case-finding efficiency prior to 1947; completeness of reporting both during the 5-year period and prior to it; population changes during the period; and decrease in incidence not associated with effects of the control program, such as changing socioeconomic conditions and population mobility.

During the 5-year period there was no recorded evidence to indicate a letdown in case-finding activities. As far as public clinic activities are concerned, diagnostic observations increased from 1,373,000 in the fiscal year 1947 to 2,359,000 in 1951. Neither is there any evidence to indicate that case-finding activities in fiscal 1951 were of poorer quality or less well directed at groups in the population who are most likely to be infected.

The Division of Venereal Disease of the Bureau of State Services, Public Health Service, has prepared this section.

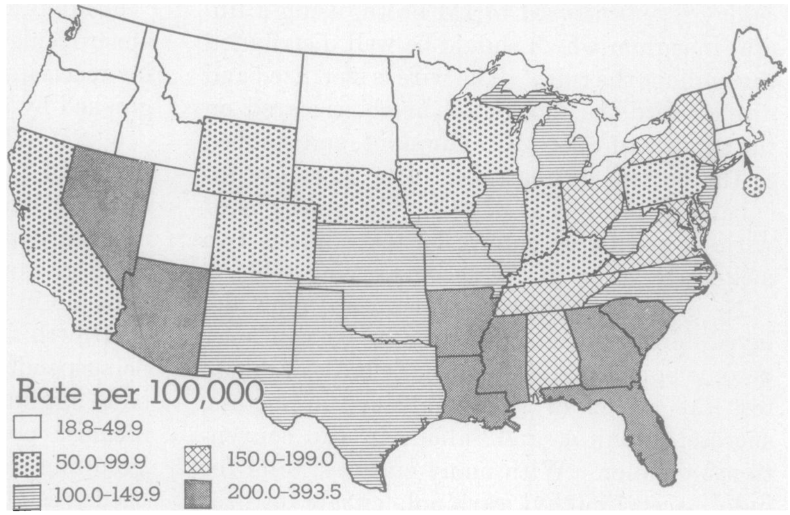

Figure 1. Reported syphilis case rates per 100,000 civilian population, fiscal year 1951.

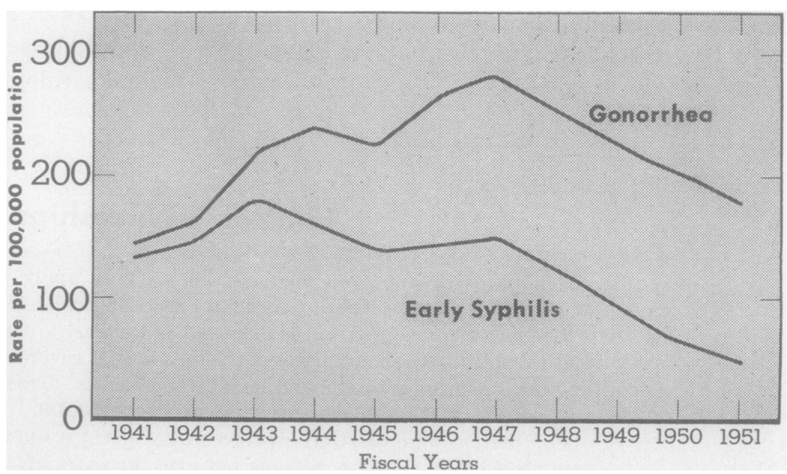

Figure 2. Trend in early syphilis and gonorrhea reported case rates, continental United States, civilians, fiscal years 1941–51 (includes primary, secondary, and early latent).

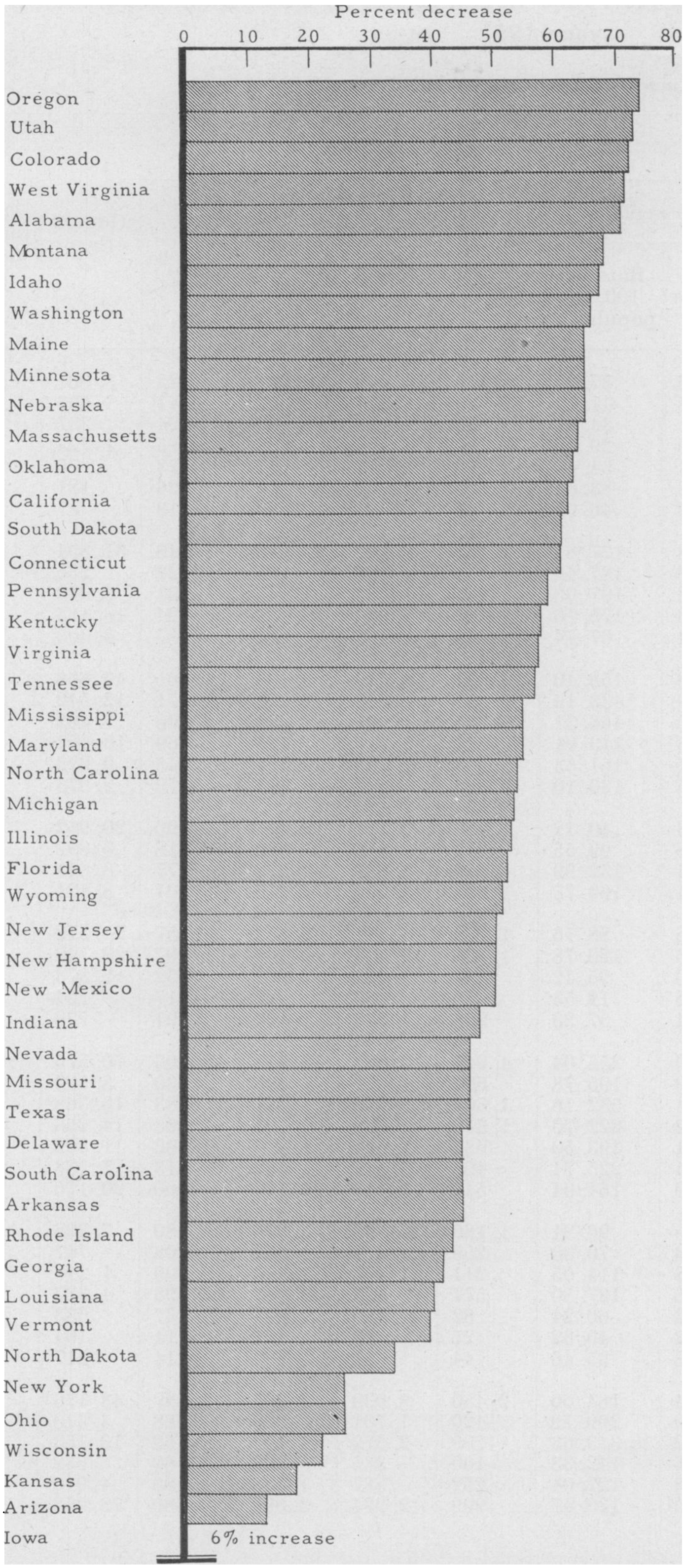

Figure 3. Percentage decrease in reported syphilis case rates for each State from fiscal year 1947 to 1951.

To understand the implications of syphilis morbidity statistics, it is important to realize that the stage of disease being reported may vary from primary to paresis, and the duration from less than 1 month to 30 years or more. All cases not previously reported, regardless of duration, should be included in current case reports. Therefore, the total of reported syphilis cases in any one year does not connote incidence data for that year even if case reporting were complete.

Because of the nature of syphilis, neither can prevalence data be directly inferred from morbidity data. Many cases in the population are excluded from current morbidity reporting because they have been previously reported for the same infection. While total syphilis morbidity or number of cases reported for the first time may not be properly applied directly to either incidence or prevalence, it has considerable value as an expression of the volume of successful case-finding activity.

Furthermore, the number of cases in the early stages of syphilis is useful as a minimum base for estimates of incidence, and the number of cases in the later stages may be considered as an indication of past case-finding failure. For the most part, gonorrhea cases reported may be used as a minimum base for estimating incidence. If these points are kept in mind, the data presented in the table and in the figures will be more meaningful. All data are for civilians only and by fiscal year.

Gonorrhea Declining Slowly

The trend in gonorrhea cases reported per 100,000 population has also been downward since 1947 (fig. 2). The numerical decrease has closely paralleled the decrease in early syphilis reported case rates (including primary, secondary, and early latent). Relatively, however, gonorrhea has decreased much more slowly. Reported gonorrhea rates in the fiscal year 1951 represent a decrease of 36 percent over 1947 while early syphilis rates decreased by 69 percent. In 1951, there were 179.2 cases of gonorrhea reported per 100,000 civilians.

Cases of venereal disease reported to the Public Health Service by State health departments, fiscal year 1951

[Known military cases excluded]

Federal Security Agency Regions	Syphilis: Total syphilis [1]: Number	Syphilis: Total syphilis [1]: Rate per 100,000 population	Syphilis: Primary and secondary	Syphilis: Early latent	Syphilis: Late and late latent	Syphilis: Congenital	Gonorrhea	Other venereal disease
Region I total	3, 526	37. 95	419	669	2, 061	222	3, 001	38
Connecticut	838	41. 73	76	315	362	41	697	16
Maine	321	34. 97	85	52	160	24	237	2
Massachusetts	1, 360	29. 08	187	205	873	95	1, 723	18
New Hampshire	184	34. 46	10	12	137	23	76	2
Rhode Island	648	83. 61	14	61	443	26	181	0
Vermont	175	46. 05	47	24	86	13	87	0
Region II total	39, 078	127. 81	2, 153	8, 196	27, 046	1, 240	31, 894	682
Delaware	598	187. 46	53	196	184	28	236	4
New Jersey	5, 173	107. 03	287	1, 551	3, 080	231	3, 940	49
New York	26, 173	175. 75	1, 165	3, 964	20, 101	694	18, 415	494
Pennsylvania	7, 134	67. 74	648	2, 485	3, 681	287	9, 303	135
Region III total	19, 550	158. 40	2, 491	6, 519	9, 186	1, 061	45, 869	1, 211
District of Columbia	3, 279	433. 16	82	917	2, 203	71	12, 542	406
Maryland	3, 850	166. 31	385	991	2, 083	206	7, 462	209
North Carolina	4, 595	113. 91	891	2, 210	1, 125	369	13, 667	369
Virginia	5, 211	161. 53	741	1, 769	2, 354	245	9, 223	207
West Virginia	2, 615	130. 10	392	632	1, 421	170	2, 975	20
Region IV total	24, 183	140. 12	1, 476	6, 154	12, 737	1, 196	20, 962	373
Kentucky	2, 908	99. 55	310	656	1, 600	318	3, 897	39
Michigan	8, 494	132. 99	559	1, 899	3, 922	277	8, 644	250
Ohio	12, 781	160. 75	607	3, 599	7, 215	601	8, 421	84
Region V total	16, 846	88. 16	1, 793	4, 147	9, 852	757	24, 572	669
Illinois	10, 516	120. 78	1, 206	2, 804	6, 109	397	20, 749	645
Indiana	3, 770	95. 42	334	982	2, 202	252	2, 373	20
Minnesota	586	19. 53	50	85	421	17	724	0
Wisconsin	1, 974	57. 20	203	276	1, 120	91	726	4
Region VI total	42, 790	255. 04	4, 941	13, 037	18, 871	4, 295	70, 575	2, 883
Alabama	5, 979	195. 78	604	1, 872	1, 596	330	3, 593	201
Florida	10, 494	382. 16	1, 301	3, 739	4, 971	483	13, 368	772
Georgia	7, 612	222. 70	1, 340	2, 008	3, 161	1, 103	14, 258	1, 217
Mississippi	8, 531	393. 50	682	1, 631	4, 812	1, 406	11, 502	293
South Carolina	4, 754	225. 74	465	2, 344	1, 632	313	7, 738	178
Tennessee	5, 420	164. 94	549	1, 443	2, 699	660	20, 116	222
Region VII total	10, 765	96. 81	1, 180	2, 593	5, 975	580	7, 306	95
Iowa	1, 853	70. 30	259	377	1, 052	108	767	4
Kansas	2, 168	114. 05	211	468	1, 350	109	1, 248	7
Missouri	5, 456	137. 50	577	1, 425	2, 943	298	4, 337	81
Nebraska	803	60. 24	62	160	427	37	633	3
North Dakota	252	40. 32	27	82	111	14	104	0
South Dakota	233	35. 46	44	81	92	14	217	0
Region VIII total	27, 744	184. 00	2, 480	8, 039	12, 205	2, 889	43, 176	1, 050
Arkansas	5, 729	299. 79	420	1, 701	3, 020	588	3, 518	122
Louisiana	9, 192	343. 63	709	2, 372	4, 102	1, 159	10, 163	601
New Mexico	965	142. 33	100	385	398	82	632	4
Oklahoma	2, 708	122. 04	252	587	1, 680	180	4, 910	82
Texas	9, 150	120. 47	999	2, 994	3, 005	880	23, 953	241

See footnotes at end of table.

Cases of venereal disease reported to the Public Health Service by State health departments, fiscal year 1951—Continued

[Known military cases excluded]

Federal Security Agency Regions	Syphilis						Gonorrhea	Other venereal disease
	Total syphilis [1]		Primary and secondary	Early latent	Late and late latent	Congenital		
	Number	Rate per 100,000 population						
Region IX total	1, 454	41. 73	198	335	747	91	1, 807	20
Colorado	661	50. 08	106	150	358	46	1, 077	7
Idaho	280	47. 22	19	65	182	9	350	11
Montana	187	31. 38	36	54	73	8	185	0
Utah	130	18. 81	22	18	41	15	92	2
Wyoming	196	69. 01	15	48	93	13	103	0
Region X total	12, 704	83. 75	1, 080	2, 620	8, 453	505	21, 297	655
Arizona	1, 508	202. 14	190	540	710	68	1, 449	13
California	9, 789	93. 94	751	1, 839	6, 794	375	17, 359	483
Nevada	360	229. 30	24	37	276	23	222	8
Oregon	387	25. 43	47	90	233	17	694	25
Washington	660	28. 41	68	114	440	22	1, 573	126
Continental United States	198, 640	132. 24	18, 211	52, 309	107, 133	12, 836	270, 459	7, 676

[1] Including stage not stated.

Source: Form PHS–688 FSA–PHS—Division of Venereal Disease, Office of Statistics, 2/6/52 (ML: MWS) bk

Source of Morbidity Reports

Since syphilis is a reportable disease in all States, morbidity reports are received from private physicians as well as from clinics, hospitals, and other public facilities. Although we know that morbidity reporting is not complete, some indication of the relative volume of successful case-finding activity can be obtained by comparing reporting by public facilities and reporting by private physicians. In the fiscal year 1951, about two-thirds of all syphilis was reported by public facilities and one-third, by private physicians. Four-fifths of the reports of congenital syphilis were received from public facilities. Only 14 percent of the gonorrhea cases were reported by private physicians.

Race and Sex

Morbidity data reported to this division are classified by race and sex. In actual numbers of cases in the fiscal year 1951, about 1.8 times as much syphilis was reported among nonwhite persons as among white (figs. 4 and 5). In terms of syphilis case rates specific for race and sex, however, the rates for white males and for white females are 60.2 and 44.9 per 100,000, respectively, while the rates for nonwhite persons are 765.8 per 100,000 for males and 810.7 for females. Among white persons, the rate for males is higher than for females, but among nonwhite persons the reverse is true. Gonorrhea cases reported among nonwhites are three times as high as among white persons, and the race-sex specific

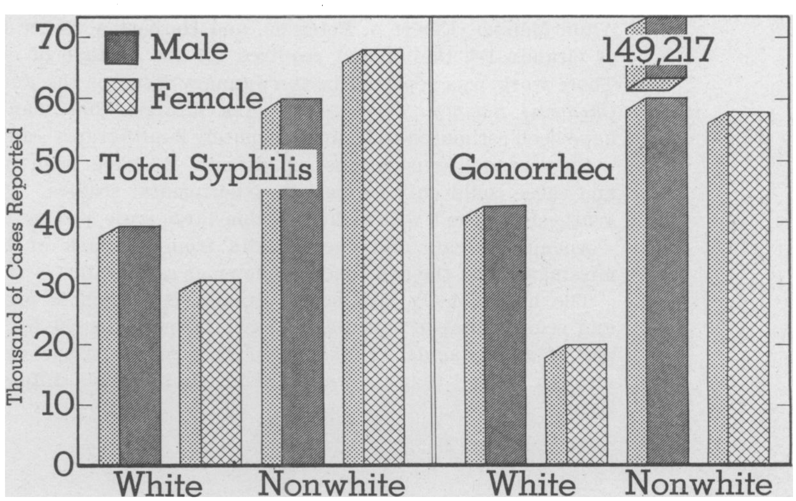

Figure 4. Reported cases of syphilis and gonorrhea, by race and sex, continental United States, fiscal year 1951 (known military cases excluded).

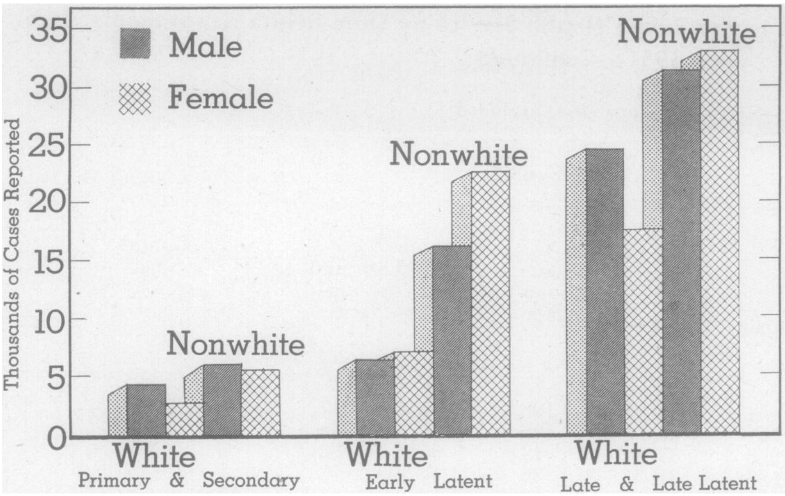

Figure 5. Reported cases of acquired syphilis, by race and sex, by stage, continental United States, fiscal year 1951 (known military cases excluded).

rates per 100,000 population are 65.6 for white males, 29.5 for white females, 1,900.9 for nonwhite males, and 688.9 for nonwhite females.

Congenital Syphilis

Congenital syphilis morbidity has not shown a downward trend during the past few years such as has been shown by all other stages of syphilis. Interpretation of this sustained volume of cases reported depends on more complete information, particularly as to age of the infected persons which indicates the duration of the disease. Only recently have such data been obtained. The following age distribution was noted for the continental United States in the fiscal year 1951:

Known age:	*Number*	*Percent*
Under 1 year	715	6.4
1–4 years	812	7.2
5–9 years	1,928	17.1
Under 10, age unknown	35	.3
10 years and over	7,759	69.0
Total	11,249	100.0
Unknown age	1,587	
Grand total	12,836	

Ninety-four percent of the congenital syphilis cases were in persons 1 year of age and over. These represent past case-finding failure as well as present success. Whether the number of cases actually occurring or the fraction of undiscovered cases of congenital syphilis occurring each year is decreasing is a problem to be solved by detailed age data over a period of several years.

Synthetic Vitamin B[6]

Success in the synthetic production of vitamin B_6, in its pure form, was recently announced by the Public Health Service.

In the laboratory of biochemistry, at the National Cancer Institute, Drs. Alton Meister, Elbert A. Peterson, and Herbert A. Sober have produced 1 gram of vitamin B6, the amount required for the lifetime of one healthy individual. Their work was reported in the January issue of the *Journal of the American Chemical Society*. So potent is the vitamin that man's daily requirements have been estimated to be approximately 2 milligrams—about 1/15,000 of an ounce.

Only crude preparations of vitamin B_6 have been available in the past, and these could only be used in experimental studies. Publication of the new synthesis method will make possible large-scale production of the vitamin.

Anemia in cats and dogs results from the lack of B_6. If the vitamin is missing in rats, the deficiency is known as acrodynia.

The human body also needs vitamin B_6, which is present in meat, cereals, and yeast. Lack of this dietary essential prevents the body from making proper use of amino acids. It is known that cancer tissue contains a low level of vitamin B_6 and that its way of using amino acids differs from that of normal tissue.