Basic Statistics on the Venereal Disease Problem in the United States

VD FACT SHEET 1960

Seventeenth Revision

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Communicable Disease Center
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CONTENTS

INTRODUCTION

The VD Fact Sheet is intended as a handy source of basic statistics on the venereal diseases in the United States. In this booklet, public health specialists, students, physicians, and other persons interested in medical data will find venereal diseases measured by incidence and prevalence. The general public will find tables showing the costs of uncontrolled venereal disease and the frequency of psychoses and deaths from syphilis. While the results of casefinding are measured in terms of cases reported, the actual amount of case-finding effort is seen in the volume of diagnostic examinations and epidemiologic activity. As there is no agent for immunizing the population, finding and treating cases continues to be the only feasible means of controlling venereal disease.

Facts on these aspects of the venereal disease problem and program are presented in the text and tables which follow. The information is current as of the date of publication, and it supersedes any previously published data. Where no source is cited, the data presented are based on statistics collected by the Venereal Disease Program or upon estimates made by the Program. Where data are indicated as being for "fiscal years," the period runs from July 1 of the previous year to June 30 of the year indicated on the table. Rates per 100,000 population shown in this Fact Sheet are based on appropriate population estimates obtained from the Bureau of the Census.

INCIDENCE AND PREVALENCE

The incidence of a disease is defined as the number of new cases occurring in a given area within a specified period of time, usually a year; prevalence is the number of cases existing at a point in time. Thus, if 2,000 cases of previously undiscovered syphilis exist in Norfolk, Va., on January 1, and 500 new cases occur during the ensuing year, the incidence of syphilis for the year would be 500 cases. The prevalence of cases at the beginning of the year would be 2,000 and the prevalence of cases at the end of the year would be 2,500 if no other cases were found and none cured during the year.

Reported cases understate incidence and prevalence. This occurs, first, because all cases diagnosed are not reported; second, because all cases occurring or existing do not come to medical attention. However, the Venereal Disease Program estimates that a minimum of 60,000 cases of syphilis occur in the United States each year, and that there are 1,200,000 persons in the population who need treatment for syphilis. The incidence of gonorrhea is estimated to be one million cases per year.

From time to time, prevalence data have been obtained on large groups of persons. One of these groups, Selective Service Registrants examined for military service in World War II, was not only a large group but a fairly random selection of the young male population. The syphilis prevalence rates per 1,000 examined, by age and race, for the first two million registrants examined are shown below:

TABLE 1

PREVALENCE RATES OF SYPHILIS DETECTED PER 1,000
MALE SELECTEES AND VOLUNTEERS EXAMINED

November, 1940 to August, 1941, by Race and Age

Age Groups	White	Nonwhite	Unknown	Total
18-20	11.1	105.8	29.7	55.1
21-25	10.2	191.7	25.3	30.1
26-30	21.0	294.8	46.6	54.4
31-35	37.9	357.8	80.6	83.5
36-40	44.4	375.6	103.2	101.9
TOTAL	17.6	245.2	41.0	46.1

In 1946, the prevalence of syphilis among examined sexual contacts of persons known to have primary or secondary syphilis was approximately 50

percent for white males, 51 percent for white females, 55 percent for nonwhite males, and 59 percent for nonwhite females. More recent data available for the total of all contacts to primary or secondary syphilis indicate that 32 percent of contacts examined in fiscal 1959 were infected compared to 54 percent in 1946.

COSTS OF UNCONTROLLED SYPHILIS

The statistics presented in Table 2 indicate the toll imposed by syphilis upon the manpower and economy of the country.

The estimate of man-years of disability for institutionalization of the syphilitic insane is based on the total number of patients in mental institutions and upon the proportion of those diagnosed as having syphilitic psychoses. Patients in state, county, private, and Veterans Administration hospitals for the permanent care of the insane are included.

The cost of maintenance is based upon the number of patients with syphilitic psychoses in tax supported institutions and upon the average per patient maintenance cost. The three percent of patients with syphilitic psychoses maintained in private institutions has not been included.

Disability attributed to cardiovascular syphilis and to locomotor ataxia is based on conservative estimates of the prevalence of these late manifestations of syphilis.

The loss of life expectancy indicates the loss of future years of life for persons dying of syphilis in 1958. It is based on the expected years of life remaining to persons of that age, race and sex. The loss of income indicates the probable earnings of these persons for the productive years of life lost to age 65. It is based on the average personal income for adults during 1958.

While disabilities and deaths from syphilis have been diminishing in recent years, costs and losses per case have been rising. As a result, total costs and income losses from syphilitic disabilities and deaths remain high compared to previous estimates.

On the basis of findings of research conducted in Macon County, Alabama, it has been estimated that the life expectancy of a Negro male between the ages of 25 and 60 years, infected with syphilis and receiving no appreciable treatment for his infection, is reduced by about 17 percent. a/

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a/ Shafer, J.K.; Usilton, Lida J.; Gleeson, Geraldine A.: Untreated Syphilis in the Male Negro: A prospective study of the effect on life expectancy. Public Health Reports, 69:684-690, July 1954. Milbank Memorial Fund Quarterly, 32: 262-274, July 1954.

TABLE 2

ESTIMATED ANNUAL COSTS OF UNCONTROLLED SYPHILIS*

MAN-YEARS OF SYPHILIS DISABILITY PER YEAR	
Institutionalization for syphilitic insanity (1958)	28,000
Disability from cardiovascular syphilis, including aneurysm (1958)	6,500
Disability from locomotor ataxia (1958)	700
Disability from syphilitic blindness (1959)	13,100
ECONOMIC COSTS OF SYPHILITIC PSYCHOSES AND SYPHILITIC BLINDNESS PER YEAR	
Maintenance of patients with syphilitic psychoses (1958)	$50,199,000
Maintenance of syphilitic blind (1959)	$ 5,700,000
LOSS OF LIFE EXPECTANCY DUE TO SYPHILIS IN MAN-YEARS PER YEAR (1958)	
White males	24,343
White females	10,268
Non-white males	15,190
Non-white females	8,136
Total population	57,937
LOSS OF INCOME TO AGE 65 AT 1958 ADULT INCOME RATE	$68,387,000

*Estimates based on most recent available data for years indicated.

REPORTED MORTALITY AND INSANITY DUE TO SYPHILIS

Mortality statistics are compiled by the National Office of Vital Statistics from duplicates of death certificates filed with state or local registrars. Mortality rates for syphilis are calculated by dividing the number of deaths in a given year by the population for that year and multiplying by 100,000 (rate per 100,000 population). The infant mortality rate for syphilis for a given year is obtained by dividing the deaths due to syphilis among children under one year of age by the number of live births in the year multiplied by 10,000 (rate per 10,000 live births).

Since deaths from syphilis represent case-finding and treatment failures, mortality due to syphilis may be considered an inverse measure of the success of the syphilis control program.

It has been the practice since 1900 to revise the International Lists of Causes of Death about every 10 years to keep abreast of medical progress. These revisions have at times affected the continuity of syphilis mortality statistics. "The Sixth Revision of the International Lists of Causes of Death," which became effective in 1949, reduced reported syphilis deaths by about 26 percent. "The Seventh Revision of the International Lists of Causes of Death," which was published in 1955 and became effective beginning January 1958, increased reported syphilis deaths by about 3 percent. Mortality rates given in this Fact Sheet have been adjusted to the basis of the Seventh Revision for all years previous to 1958, using provisional comparability ratios. No adjustment was made for infant mortality since it was affected very little by changes in the Seventh Revision.

Comparability ratios were computed by dividing the number of deaths assigned to a specified cause or group of causes in the Seventh Revision by the number of deaths assigned to that cause or group of causes in the Sixth Revision. They are measures of the net effect of changes in classification and coding procedures and indicate the correspondence between the number of deaths assigned to a cause or group of causes by the new procedures and the number assigned to the corresponding cause or group of causes by the earlier procedures.

Based on a 10 percent sample, the National Office of Vital Statistics computed a provisional comparability ratio of 1.03 for syphilis and its sequelae. This ratio of more than 1.00 means that an increase of about 3 percent occurred in assignments by the Seventh Revision.

Insanity due to syphilis is measured by the rate of first admissions to mental hospitals because of syphilis. Excluded are admissions to psychopathic hospitals which provide only temporary care, and admissions to Veterans Administration

facilities. The number of admissions is obtained from "Patients in Mental Institutions" published by the National Institute of Mental Health. Since only first admissions are included in the rate, the figures over a period of years represent a measure of the trend of incidence of syphilitic insanity.

Data on mortality and insanity due to syphilis are presented in Table 3.

TABLE 3

REPORTED MORTALITY AND INSANITY DUE TO SYPHILIS
UNITED STATES
1940 - 1960

Calendar Year	Syphilis Mortality a/ Rates per 100,000 Population			Infant Mortality Due to Syphilis, Rates per 10,000 Live Births			First Admissions to Mental Hospitals Due to Syphilis Rates per 100,000 Population b/
	Total	White	Nonwhite	Total	White	Nonwhite	Total
1940	10.7	7.3	40.2	5.30	2.50	25.20	6.1
1941	9.9	6.9	35.2	4.10	1.80	21.00	6.1
1942	9.0	6.4	31.4	3.00	1.50	15.00	6.1
1943	9.0	6.4	41.2	2.52	1.18	12.76	5.8
1944	8.3	5.8	29.3	2.67	1.17	13.50	5.6
1945	7.9	5.6	27.3	2.50	1.07	12.59	5.5
1946	6.9	4.9	23.8	1.64	.66	9.20	4.7
1947	6.5	4.7	22.1	1.40	.51	8.21	4.2
1948	5.9	4.2	19.9	1.24	.49	6.31	3.7
1949	5.8	4.2	19.2	.84	.29	4.41	3.2
1950	5.0	3.7	16.1	.57	.24	2.59	2.6
1951	4.1	3.0	13.4	.34	.12	1.73	2.1
1952	3.7	2.7	11.4	.24	.10	1.14	1.8
1953	3.3	2.4	10.9	.14	.04	.77	1.5
1954	3.0	2.3	9.2	.11	.03	.54	1.3
1955	2.4	1.7	7.9	.08	.03	.41	1.0
1956	2.3	1.7	7.1	.06	.02	.31	.8
1957	2.2	1.7	6.9	.06	.05	.16	.8
1958	2.0	1.5	6.4	.06	---	---	.6
1959 c/	1.8	1.4	4.8	.07	---	---	---
1960 c/	1.8	---	---	---	---	---	---

a/ Seventh Revision, International Lists of Causes of Death; see Mortality, Page 5 for explanation

b/ Does not include admissions to V.A. and psychopathic hospitals; rate based on population of area reporting

c/ Estimated

Source: Mortality and Natality Data, National Office of Vital Statistics; First Admissions to Mental Hospitals, National Institute of Mental Health; Rates based on population estimates of the Bureau of the Census

REPORTED CASES OF VENEREAL DISEASE

All states require that syphilis and gonorrhea cases coming to medical attention be reported to the state or local health officer. Other venereal diseases are also reportable in most states. Quarterly, each state submits to the Public Health Service a summary of the cases reported to it. All cases not previously reported, regardless of duration, are to be included in the report. The reported morbidity, as reported cases are sometimes called, indicates the volume of successful casefinding.

The trend of reported cases of early syphilis (or reported case rates) over a period of years may be indicative of incidence trends if no significant changes in case-finding effort have occurred. Reported cases of syphilis in the later stages may be considered as an indication of past case-finding failure as well as present success. Trends in reported cases must be interpreted with caution since changes in case-finding effort are reflected in morbidity data just as much as changes in incidence and prevalence.

Reported cases of venereal diseases are shown in Table 4 through Table 8. During the years 1955-1958, reported cases of primary and secondary syphilis, the recently acquired infectious stage of the disease, remained fairly level at about 6,500 cases per year. However, in fiscal year 1959, reported cases of infectious syphilis began to increase and have continued to increase at an accelerated rate. These increases are believed to be due to a combination of better reporting by private physicians, to better casefinding, and to a real increase in incidence in some areas.

HEALTH DEPARTMENT CASE-FINDING ACTIVITIES

The correct interpretation of case-finding success depends upon a knowledge of the volume of case-finding effort. Table 9 shows the volume of case-finding effort in public clinics and cases of venereal disease found through these efforts. Total activity is indicated by the number of diagnostic examinations performed and investigations completed. The section of contact investigation indices indicate the volume of contacts named and the success in finding cases of syphilis on a per patient basis. It should be noted that at least one infected contact should be identified for each case of primary or secondary syphilis.

TABLE 4

CASES OF SYPHILIS AND GONORRHEA REPORTED TO THE PUBLIC HEALTH SERVICE BY STATE HEALTH DEPARTMENTS, AND RATES PER 100,000 POPULATION
All Reporting Areas in United States
1919 - 1960

Fiscal Year	SYPHILIS		GONORRHEA	
	Cases	Rates per 100,000	Cases	Rates per 100,000
1919	100,466	113.2	131,193	147.8
1920	142,869	145.3	172,387	175.4
1921	184,090	172.3	189,927	177.7
1922	171,824	157.7	152,959	140.4
1923	172,258	156.2	156,826	142.2
1924	194,936	174.2	161,676	144.5
1925	201,692	181.2	166,208	149.3
1926	205,595	196.1	164,808	157.2
1927	196,457	171.9	160,793	140.7
1928	185,437	174.2	147,219	138.3
1929	195,559	169.2	156,544	135.4
1930	213,309	185.4	155,875	135.5
1931	229,720	197.4	155,895	134.0
1932	242,128	208.2	154,051	132.5
1933	238,656	193.4	149,823	121.4
1934	231,129	186.7	153,542	124.1
1935	255,856	205.6	162,763	130.8
1936	267,717	212.6	163,465	129.8
1937	336,258	264.3	182,460	143.4
1938	480,140	372.0	198,439	153.8
1939	478,738	367.1	182,314	139.8
1940	472,900	359.7	175,841	133.8
1941	485,560	368.2	193,468	146.7
1942	479,601	363.4	212,403	160.9
1943	575,593	447.0	275,070	213.6
1944	467,755	367.9	300,676	236.5
1945	359,114	282.3	287.181	225.8
1946	363,647	271.7	368,020	275.0
1947	372,963	264.6	400,639	284.2
1948	338,141	234.7	363,014	252.0
1949	288,736	197.3	331,661	226.7
1950	229,723	154.2	303,992	204.0
1951	198,640	131.8	270,459	179.5
1952	168,734	110.8	245,633	161.3
1953	156,099	100.8	243,857	157.4
1954	137,876	87.5	239,661	152.0
1955	122,075	76.0	239,787	149.2
1956	126,219	77.1	233,333	142.4
1957	130,552	78.3	216,476	129.8
1958	116,630	68.5	220,191	129.3
1959	119,981	69.3	237,318	137.0
1960	120,249	68.0	246,697	139.6

NOTE: Beginning in 1939, all States are included in the reporting area.
Military cases excluded after 1940.
Rates based on population estimates by the Bureau of the Census.

TABLE 5

CASES OF VENEREAL DISEASE REPORTED TO THE PUBLIC HEALTH SERVICE
FISCAL YEARS 1950 - 1960
(Known Military Cases Are Excluded)

Fiscal Year	SYPHILIS					GONORRHEA	OTHER VENEREAL DISEASES		
	Total Syphilis a/	Primary and Secondary	Early Latent	Late and Late Latent	Congenital		Chancroid	Granuloma Inguinale	Lympho-Granuloma Venereum
				United States					
1950	229,723	32,148	64,786	112,424	13,446	303,992	5,796	2,017	1,635
1951	198,640	18,211	52,309	107,133	12,836	270,459	4,707	1,637	1,332
1952	168,734	11,991	38,365	101,920	9,240	245,633	3,837	1,069	1,235
1953	156,099	9,551	32,287	100,195	8,021	243,857	3,490	785	1,103
1954	137,876	7,688	24,999	93,601	7,234	239,661	3,294	607	917
1955	122,075	6,516	21,553	84,741	5,515	239,787	2,863	584	875
1956	126,219	6,757	20,014	89,851	5,535	233,333	2,322	419	602
1957	130,552	6,251	19,046	96,856	5,452	216,476	1,860	348	449
1958	116,630	6,661	16,698	85,974	4,839	220,191	1,574	332	436
1959	119,981	8,178	17,592	86,776	5,215	237,318	1,604	282	485
1960	120,249	12,471	16,829	84,195	4,593	246,697	1,555	273	800
				United States and Territories					
1950	238,640	32,838	68,392	115,363	15,062	313,517	5,890	2,022	1,653
1951	208,137	18,709	55,734	110,864	14,638	278,898	4,769	1,645	1,341
1952	176,462	12,447	40,646	105,389	10,426	253,984	3,969	1,089	1,237
1953	162,805	9,855	33,831	103,970	8,986	251,986	3,579	791	1,111
1954	141,838	7,898	25,834	96,017	7,649	245,077	3,348	613	925
1955	124,925	6,698	22,232	86,392	5,779	244,363	2,937	590	883
1956	128,645	6,885	20,591	91,252	5,702	238,568	2,366	420	611
1957	132,510	6,323	19,492	98,135	5,597	220,614	1,887	352	463
1958	118,404	6,746	17,125	87,071	4,978	224,268	1,607	333	458
1959	121,598	8,285	17,998	87,725	5,345	241,004	1,673	282	504
1960	121,474	12,577	17,206	84,845	4,672	249,719	1,587	276	805

a/ Includes "Stages of Syphilis Not Stated."

TABLE 6

REPORTED SYPHILIS CASE RATE PER 100,000 POPULATION
FISCAL YEARS 1941 - 1960

Fiscal Year	Total Including Not Stated	Primary and Secondary	Primary, Secondary and Early Latent	Late and Late Latent	Congenital
			United States Civilians		
1941	368.2	51.7	134.4	153.9	13.4
1942	363.4	57.1	145.1	153.1	12.8
1943	447.0	63.8	179.8	195.7	12.6
1944	367.9	61.7	158.5	159.6	10.7
1945	282.3	60.5	140.5	111.8	9.7
1946	271.7	70.9	151.6	93.6	9.0
1947	264.6	75.6	152.0	86.5	8.7
1948	234.7	55.9	123.8	86.1	9.2
1949	197.3	37.1	94.7	83.3	9.8
1950	154.2	21.6	65.1	75.5	9.0
1951	131.8	12.1	46.8	71.1	8.5
1952	110.8	7.9	33.1	66.9	6.1
1953	100.8	6.2	27.0	64.7	5.2
1954	87.5	4.9	20.7	59.4	4.6
1955	76.0	4.1	17.5	52.7	3.4
1956	77.1	4.1	16.4	54.8	3.4
1957	78.0	3.7	15.2	57.8	3.3
1958	68.5	3.9	13.7	50.5	2.8
1959	69.3	4.7	14.9	50.1	3.0
1960	68.0	7.1	16.6	47.6	2.6

TABLE 7

REPORTED VENEREAL DISEASE CASE RATES PER 100,000 POPULATION BY COLOR AND SEX
UNITED STATES CIVILIANS
Fiscal Years 1956 - 1960

Disease, Stage and Year		TOTAL			WHITE			NONWHITE		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total Syphilis (includes Not Stated)	1956	77.1	81.1	73.2	33.2	38.3	28.3	437.9	437.2	438.6
	1957	78.3	86.2	70.7	34.6	43.1	26.5	437.6	444.9	430.8
	1958	68.5	74.3	63.0	29.5	35.3	24.1	383.0	392.9	373.8
	1959	69.3	75.7	63.2	30.7	36.7	24.9	377.3	390.1	365.3
	1960	68.0	76.3	60.6	32.3	39.1	25.8	352.0	371.1	334.0
Primary and Secondary Syphilis	1956	4.1	5.2	3.1	1.6	2.4	0.9	25.0	29.1	21.2
	1957	3.8	4.9	2.6	1.6	2.4	0.8	21.8	26.3	17.6
	1958	3.9	5.2	2.7	1.6	2.5	0.7	22.6	27.0	18.6
	1959	4.7	6.6	2.9	2.0	3.3	0.7	26.6	33.4	20.2
	1960	7.1	10.1	4.2	3.1	5.3	1.0	38.7	48.0	29.9
Early Latent Syphilis	1956	12.2	10.6	13.7	4.1	4.2	4.1	78.6	64.3	92.0
	1957	11.4	11.3	11.5	4.4	5.4	3.5	68.9	60.1	77.2
	1958	9.8	9.4	10.2	3.4	3.8	3.0	61.9	55.6	67.8
	1959	10.2	10.1	10.2	3.5	4.1	3.1	62.9	58.7	66.9
	1960	9.5	10.0	9.2	3.4	4.1	2.9	57.9	56.0	59.6
Late and Late Latent Syphilis	1956	54.8	59.9	50.0	24.8	29.5	20.4	302.1	313.9	291.2
	1957	58.1	65.6	50.9	26.2	33.3	19.5	320.0	334.9	306.2
	1958	50.5	56.0	45.2	22.6	27.4	18.1	275.3	289.7	261.9
	1959	50.1	55.2	45.2	23.0	27.4	18.7	266.4	279.1	254.6
	1960	47.6	53.0	42.8	23.8	28.0	19.7	237.4	251.5	224.0
Congenital Syphilis	1956	3.4	2.6	4.1	1.5	1.0	2.0	18.9	15.8	21.7
	1957	3.3	2.5	4.0	1.4	1.0	1.8	18.6	15.3	21.6
	1958	2.8	2.1	3.6	1.2	0.8	1.6	16.1	12.9	19.1
	1959	3.0	2.3	3.7	1.4	1.0	1.8	15.8	12.4	19.1
	1960	2.6	1.9	3.3	1.3	0.9	1.7	12.7	10.0	15.4
Gonorrhea	1956	142.4	201.0	86.8	32.4	47.3	18.1	1048.5	1481.6	645.4
	1957	129.8	185.3	76.9	29.3	42.7	16.6	956.8	1374.4	568.3
	1958	129.3	183.7	77.5	29.3	42.4	16.8	937.4	1338.1	563.7
	1959	137.1	194.6	82.3	33.3	48.1	19.1	964.2	1373.7	580.8
	1960	140.1	203.2	79.9	37.6	55.7	20.2	948.7	1371.8	549.0

Populations used to calculate rates are based on estimates by the Bureau of the Census.

TABLE 8

REPORTED VENEREAL DISEASE CASE RATES PER 100,000 POPULATION
United States Civilians
Fiscal Year 1960

STATE	SYPHILIS		GONORRHEA	OTHER VENEREAL DISEASES
	Total	Primary & Secondary		
Alaska	11.5	2.5	253.5	.0
Alabama	54.7	10.0	105.6	2.2
Arizona	86.6	16.5	215.6	5.6
Arkansas	114.0	11.2	527.4	2.2
California	50.9	8.4	121.6	.8
Colorado	14.6	1.9	67.4	.4
Connecticut	22.3	3.3	61.2	.2
Delaware	190.8	7.8	192.6	2.2
District of Columbia	305.3	57.6	1369.4	46.8
Florida	87.1	9.6	241.5	7.3
Georgia	88.7	19.6	278.3	8.9
Hawaii	10.9	.8	27.7	.3
Idaho	5.2	1.1	39.5	.0
Illinois	85.5	9.2	198.2	.7
Indiana	26.0	1.8	43.7	.1
Iowa	39.8	.5	41.7	.1
Kansas	63.7	2.9	90.9	.2
Kentucky	82.4	2.7	112.0	.1
Louisiana	223.1	21.8	176.5	3.3
Maine	2.8	.4	13.1	.0
Maryland	104.9	9.2	240.1	1.3
Massachusetts	48.5	4.6	37.7	.1
Michigan	42.0	1.8	101.9	1.3
Minnesota	4.8	1.5	31.9	.0
Mississippi	24.2	4.3	288.8	3.3
Missouri	69.9	2.2	163.7	1.0
Montana	44.5	3.1	48.8	.0
Nebraska	26.5	1.2	69.0	.0
Nevada	56.3	5.1	106.3	3.7
New Hampshire	20.1	.5	12.2	.0
New Jersey	85.7	7.4	79.7	.5
New Mexico	106.6	4.8	190.6	.8
New York	102.9	14.3	120.8	.8
North Carolina	83.9	6.5	192.5	2.5
North Dakota	8.3	1.4	84.8	.0
Ohio	44.0	1.4	97.0	.4
Oklahoma	68.3	2.6	190.8	.7
Oregon	39.1	3.9	56.1	.4
Pennsylvania	107.3	3.8	57.6	.2
Rhode Island	28.9	1.1	17.8	.1
South Carolina	121.2	11.9	437.1	3.4
South Dakota	23.1	3.1	95.9	.2
Tennessee	46.4	11.3	299.5	1.8
Texas	45.4	9.2	219.4	1.9
Utah	11.4	.6	36.1	.0
Vermont	5.9	1.3	29.9	.0
Virginia	98.3	6.3	172.7	1.6
Washington	17.7	6.6	56.8	.1
West Virginia	76.8	1.4	63.5	.3
Wisconsin	22.0	1.7	26.8	.1
Wyoming	8.2	.9	25.5	.3
UNITED STATES TOTAL	68.0	7.1	139.6	1.6

Source: Cases - Morbidity reports submitted to PHS.
Population - estimates prepared by Bureau of the Census.

TABLE 9

HEALTH DEPARTMENT CASE-FINDING ACTIVITIES, UNITED STATES
Fiscal Years 1955 - 1960

Clinic and Epidemiologic Data	1955	1956	1957	1958	1959	1960
Diagnostic examinations in public clinics	1,707,475	1,571,750	1,777,498	1,925,552	1,911,557	1,832,075
Percent of examinations in which one or more venereal diseases were found	17.1	16.7	15.2	13.4	13.1	13.3
Number of contact investigations completed	227,372	219,547	207,757	212,896	223,755	220,052
Number of other suspect investigations completed	148,279	147,430	175,612	186,304	208,068	227,523
Contact investigation indices a/:						
Approximate number of contacts obtained from each primary and secondary syphilis patient (contact index)	3.00	3.60	3.45	3.66	3.95	3.95
Approximate number of syphilis infections identified in the contacts of each primary and secondary patient (epidemiologic index)	.76	.91	.86	.91	1.07	1.07
Approximate number of syphilis infections brought to treatment in the contacts of each primary and secondary patient (brought-to-treatment index)	.41	.50	.48	.49	.54	.52
Approximate number of primary and secondary syphilis infections brought to treatment in the contacts of each primary and secondary patient (lesion-to-lesion index)	.22	.27	.27	.29	.30	.31

a/ Indices for 1955 - 1958 computed on a slightly different basis.

TABLE 10

PRIMARY AND SECONDARY SYPHILIS
AGE-SPECIFIC CASE RATES by AGE GROUPS, RACE and SEX
Calendar Years 1956, 1957, 1958, 1959

AGE	YEAR	WHITE			NONWHITE			TOTAL		
		Male	Female	Total	Male	Female	Total	Male	Female	Total*
0-9	1956					.3	.2			
	1957	.1		.1	.2	.3	.2	.1	.1	.1
	1958				.2	.5	.4		.1	.1
	1959	.1		.1	.4	.4	.4	.1	.1	.1
10-14	1956		.1	.1	1.6	6.2	3.9	.2	.9	.5
	1957		.1		1.6	6.7	4.1	.2	.9	.5
	1958		.1		1.4	7.7	4.5	.2	1.0	.6
	1959	.1	.2	.1	1.4	5.4	3.4	.3	.9	.5
15-19	1956	2.4	2.7	2.6	56.9	64.6	60.9	9.4	10.7	10.1
	1957	2.4	2.8	2.6	54.8	73.8	64.5	9.1	11.9	10.5
	1958	3.0	2.3	2.6	59.6	68.0	64.0	10.0	10.5	10.2
	1959	4.1	2.2	3.1	76.7	88.4	82.7	13.0	12.8	12.9
20-24	1956	10.8	2.9	6.4	136.6	75.4	103.0	27.0	12.0	18.6
	1957	11.7	3.1	6.9	133.9	81.9	105.4	27.9	13.0	19.5
	1958	11.6	2.7	6.7	152.8	80.5	113.7	30.1	12.5	20.4
	1959	17.4	3.1	9.6	187.7	97.6	139.8	40.2	15.1	26.5
25-29	1956	8.6	2.0	5.2	83.6	42.8	61.2	16.6	6.8	11.5
	1957	8.7	2.0	5.2	91.9	38.4	62.9	17.8	6.3	11.8
	1958	9.9	1.5	5.5	101.5	47.9	72.7	20.1	7.1	13.3
	1959	15.6	2.1	8.6	135.2	58.7	94.3	29.3	9.0	18.7
30-34	1956	5.6	1.4	3.4	52.1	28.7	39.5	10.5	4.4	7.3
	1957	5.4	1.3	3.3	54.6	21.9	36.9	10.5	3.6	6.9
	1958	7.8	1.1	4.4	64.4	25.5	43.2	13.7	3.9	8.6
	1959	11.8	1.4	6.4	94.2	27.1	57.6	20.3	4.4	12.0
35-39	1956	3.4	.9	2.1	28.4	15.6	21.5	5.8	2.4	4.0
	1957	4.1	.6	2.3	32.2	12.6	21.8	6.9	1.9	4.3
	1958	4.4	.8	2.6	28.5	14.6	21.1	6.8	2.3	4.5
	1959	7.1	1.2	4.1	48.6	19.0	33.3	11.3	3.2	7.1
40-44	1956	2.4	.7	1.6	18.9	7.6	12.9	4.1	1.4	2.7
	1957	2.5	.6	1.5	20.8	6.3	13.0	4.3	1.2	2.7
	1958	2.8	.9	1.8	22.1	8.1	14.6	4.6	1.6	3.1
	1959	4.2	.7	2.4	27.0	10.2	18.0	6.3	1.7	3.9
45-49	1956	1.9	.6	1.2	13.7	7.2	10.3	3.0	1.2	2.1
	1957	1.9	.5	1.2	12.3	6.1	9.1	2.9	1.1	2.0
	1958	1.7	.7	1.2	12.3	5.5	8.7	2.7	1.2	1.9
	1959	2.4	.4	1.4	16.4	6.7	11.3	3.7	1.1	2.4
50+	1956	.8	.2	.5	5.6	2.5	4.0	1.2	.4	.7
	1957	.7	.2	.5	4.9	2.0	3.4	1.1	.4	.7
	1958	.9	.2	.5	4.8	1.2	2.9	1.2	.3	.7
	1959	1.1	.3	.7	6.9	2.4	4.6	1.5	.5	1.0
Total	1956	2.4	.8	1.6	26.7	18.6	22.5	5.0	2.8	3.9
	1957	2.4	.8	1.6	27.0	18.4	22.5	5.1	2.7	3.9
	1958	2.8	.7	1.7	29.5	18.8	24.0	5.7	2.7	4.2
	1959	4.1	.8	2.4	39.1	22.7	30.7	8.0	3.3	5.6

*Includes race and sex not stated.

TABLE 11

GONORRHEA
AGE-SPECIFIC CASE RATES by AGE GROUPS, RACE and SEX
Calendar Years 1956, 1957, 1958, 1959

AGE	YEAR	WHITE			NONWHITE			TOTAL		
		Male	Female	Total	Male	Female	Total	Male	Female	Total*
0-9	1956	.4	2.1	1.2	8.6	25.6	17.0	1.4	5.3	3.3
	1957	1.1	1.9	1.5	18.1	27.3	22.7	3.4	5.4	4.4
	1958	.2	1.6	.9	7.4	25.7	16.5	1.2	5.0	3.1
	1959	.4	1.9	1.1	8.4	26.8	17.5	1.5	5.5	3.4
10-14	1956	1.1	6.0	3.5	51.3	188.9	120.1	7.1	28.7	17.7
	1957	1.2	4.9	3.0	54.5	165.3	109.8	7.4	24.5	15.8
	1958	1.0	6.0	3.5	54.7	178.8	116.7	7.5	27.6	17.3
	1959	1.0	6.1	3.5	57.5	146.6	101.9	7.9	24.1	15.8
15-19	1956	83.3	69.0	75.9	2966.2	2360.6	2653.0	455.3	363.6	407.8
	1957	75.3	66.1	70.6	2904.3	2184.4	2534.6	436.8	337.0	385.6
	1958	83.3	74.5	78.8	2992.7	2435.2	2708.7	444.9	368.9	406.0
	1959	95.1	79.0	86.9	3090.3	2181.9	2627.3	462.4	338.3	399.3
20-24	1956	266.8	76.9	160.6	7934.6	2745.8	5080.5	1254.9	410.4	783.3
	1957	263.0	75.6	157.5	7385.5	2528.4	4722.4	1203.3	383.5	743.6
	1958	268.4	85.9	167.5	7658.5	2676.7	4962.4	1239.3	412.8	783.7
	1959	322.1	93.2	197.2	7413.7	2487.2	4797.4	1268.8	396.9	794.7
25-29	1956	160.8	41.3	98.6	5169.1	1395.1	3102.9	698.1	201.4	438.3
	1957	152.8	38.7	93.6	4706.9	1251.2	2832.7	652.5	183.2	407.6
	1958	157.4	40.3	96.8	4881.6	1438.0	3029.7	685.0	208.1	437.2
	1959	186.0	47.6	114.3	4823.9	1371.5	2977.5	715.7	208.3	451.7
30-34	1956	91.0	23.8	56.1	2770.3	691.4	1655.0	369.0	97.6	227.6
	1957	89.2	22.4	54.6	2661.4	648.8	1574.7	356.1	92.6	218.9
	1958	100.0	25.9	61.7	2821.8	712.5	1676.8	381.6	103.9	237.2
	1959	111.2	26.1	67.3	2764.2	669.0	1620.3	386.1	100.3	237.5
35-39	1956	52.3	17.1	34.0	1384.9	358.0	835.3	180.6	52.0	113.8
	1957	53.8	15.7	34.0	1366.1	341.5	818.8	182.3	49.4	113.2
	1958	55.8	17.4	35.9	1421.9	363.7	858.2	191.6	53.7	119.9
	1959	62.8	16.2	38.6	1459.6	370.3	878.5	203.5	53.8	125.6
40-44	1956	30.4	9.7	19.8	597.9	169.6	369.7	86.1	26.6	55.5
	1957	29.4	8.8	18.8	591.0	151.7	356.3	83.6	23.7	52.7
	1958	30.8	11.4	20.8	682.7	178.7	412.8	92.4	28.5	59.4
	1959	38.2	11.2	24.3	750.6	178.6	443.5	104.6	28.1	65.0
45-49	1956	19.1	7.1	13.0	296.3	95.2	192.3	45.5	15.8	30.4
	1957	18.7	6.3	12.4	290.9	80.7	181.2	44.9	13.8	29.0
	1958	20.2	7.2	13.6	331.0	93.1	206.0	50.3	16.0	32.7
	1959	21.5	6.6	13.9	340.4	83.6	204.2	52.4	14.5	33.0
50+	1956	5.9	1.7	3.7	77.5	30.5	53.5	11.7	3.9	7.6
	1957	6.4	1.6	3.9	73.7	23.0	47.6	11.9	3.3	7.4
	1958	6.4	1.6	3.9	83.3	24.1	52.8	12.7	3.4	7.8
	1959	6.9	1.5	4.1	90.5	22.8	55.5	13.7	3.2	8.2
Total	1956	86.4	17.5	30.7	1410.2	600.7	991.5	192.6	81.9	135.9
	1957	42.9	16.5	29.4	1319.9	544.9	919.3	182.7	75.3	127.6
	1958	45.1	18.4	31.4	1372.5	592.8	969.7	191.4	82.9	135.8
	1959	52.4	19.5	35.6	1367.0	544.3	942.4	199.0	79.0	137.5

*Includes race and sex not stated.

TABLE 12

REPORTED CASES OF CONGENITAL SYPHILIS, BY AGE
CONTINENTAL UNITED STATES

Age	1957		1958		1959		1960	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
0 - 1 Year	108	3.3	117	4.0	98	3.8	132	4.7
1 - 4 Years	47	1.4	44	1.5	26	1.0	52	1.9
5 - 9 Years	114	3.5	66	2.3	33	1.3	28	1.0
10 Years and Over	2,998	91.8	2,694	92.2	2,417	93.9	2,570	92.4
Total, Known Age	3,267	100.0	2,921	100.0	2,574	100.0	2,782	100.0
Unknown Age	2,185		1,918		2,641		1,811	
GRAND TOTAL	5,452		4,839		5,215		4,593	

CASES UNDER 1 YEAR OF AGE

Case rates of congenital syphilis under 1 year of age per 10,000 live births were estimated in fiscal year 1957 to be 0.4, in 1958 to be 0.5, in 1959 to be 0.5, and in 1960 to be 0.5.

INFANT MORTALITY DUE TO SYPHILIS - See Table 3

"VD Fact Sheet 1960"

PENICILLIN IN THE TREATMENT OF SYPHILIS

CONGENITAL SYPHILIS

Recommended treatment for early congenital syphilis (less than 2 years) consists of (1) Procaine penicillin G in oil with 2-percent aluminum monostearate (PAM) or aqueous procaine penicillin G, in a total dosage of 100,000 u/kg. of body weight, given in divided doses at 2 or 3 day intervals; or (2) benzathine penicillin G in a single injection of 50,000 u/kg. of body weight. Late congenital syphilis is treated with the same schedules as for comparable manifestations of acquired syphilis.

The earlier that penicillin therapy is instituted for congenital syphilis, the more satisfactory the results. This is apparent from Table 13, which shows the child's age at time of treatment and the results 18-21 months after treatment. All types and amounts of penicillin are included.

TABLE 13

RESULTS OF PENICILLIN THERAPY FOR EARLY CONGENITAL SYPHILIS, 18-21 MONTHS POST-TREATMENT, BY AGE OF CHILD AT TIME OF TREATMENT

Age at Time of Treatment	Number		Percent		Failure	
	Treated	Observed	Seronegative	Seropositive	Serologic	Clinical
Under 3 Months	107	38	92.1	-	1.7	6.2
3-5 Months	139	52	95.1	3.8	1.1	-
6-11 Months	96	44	80.7	17.9	-	1.4
12-24 Months	130	47	42.4	52.6	5.0	-

EARLY SYPHILIS

Benzathine penicillin G and PAM are the most widely used penicillin preparations for the treatment of early syphilis. Since benzathine penicillin G maintains a detectable blood level for a much longer period of time than PAM, a smaller total dosage is required for satisfactory results. The recommended schedules are 2,400,000 units of benzathine penicillin G administered in a single session (1,200,000 units in each buttock) or 4,800,000 units of PAM, 2,400,000 units at first session, and subsequent injections of 1,200,000 units given at 2 or 3 day intervals. If aqueous procaine penicillin G is used,

600,000 units should be administered daily for 8 days to total 4,800,000 units.

Results of treatment for secondary syphilis with benzathine penicillin G and PAM are shown in Table 14.

TABLE 14

PENICILLIN IN THE TREATMENT OF SECONDARY SYPHILIS

Results 2 years following Treatment

Schedule of Treatment	Total Cases	Cumulative Percent Retreated			
		Total	Clinical or Serologic Failure	Reinfection	Seronegative *
Benzathine penicillin G 2,500,000 units 1 injection	155	5.5	0.9	4.6	94.5 ± 2.4
Procaine Penicillin G and Aluminum Monostearate 4,800,000 units					
Single session	166	7.7	3.8	3.9	91.0 ± 2.6
2-4 sessions	415	11.7	7.8	3.9	88.3 ± 2.1

* Or less than 4 Kahn units

NEUROSYPHILIS

A cooperative study conducted by the Public Health Service and leading neurosyphilologists in the United States has demonstrated that penicillin is the most effective treatment yet known for neurosyphilis.

Asymptomatic Neurosyphilis- Among 765 patients with asymptomatic neurosyphilis, approximately 75 percent of whom were treated with a minimum of 4,800,000 units of penicillin, only one bona fide progression to symptomatic neurosyphilis was observed; 11 other patients exhibited minor neurologic changes. In contrast, among 467 patients treated with metal chemotherapy, 29 progressed to symptomatic neurosyphilis and an additional 15 showed minor neurologic changes.

Paresis- Six hundred and twenty-nine patients were treated for paresis with

penicillin only, 60 percent of whom received a minimum of 6,000,000 units. Paresis was diagnosed as severe in 330, as moderately severe in 141, and as mild in 158. Five years after treatment, 42 percent of those with severe psychoses were in remission or showed significant improvement, 45 percent remained unchanged, and only 13 percent had progressed or died from paresis. Progression or death from paresis occurred in 7.0 percent of those with moderately severe psychosis and in less than one percent of those with mild psychosis. Further proof of the effectiveness of penicillin is the fact that among those who survived, one-third of those who had been institutionalized, and two-thirds of those who had been unable to work at time of treatment, were gainfully employed 5 years later.

The total recommended dosage of penicillin for both symptomatic and asymptomatic neurosyphilis is 6,000,000 to 9,000,000 units. Any benefit from more than 10,000,000 units is doubtful and has not been demonstrated. Treatment schedules are as follows:

Benzathine penicillin G - 3,000,000-unit session at 7-day intervals.

PAM - 1,200,000 units at 3-day intervals.

Aqueous procaine penicillin G - 600,000 units daily.

SYPHILIS IN PREGNANCY

Congenital syphilis is completely preventable. Adequate treatment of the mother during the first 18 weeks of gestation prevents infection of the baby; adequate treatment after the 18th week cures the baby in utero.

In two studies, comprising 528 infants born to treated syphilitic mothers, approximately 98 percent of the children were nonsyphilitic (Table 15). The percentage varied slightly by stage of mother's syphilis during pregnancy.

In the absence of relapse or reinfection a woman treated with penicillin for syphilis will not require further treatment in the event of pregnancy. The two syphilitic children reported in Table 16 were born to mothers with an unsatisfactory course following treatment for secondary syphilis - one was reinfected, the other experienced a serologic relapse.

TABLE 15

OUTCOME OF PREGNANCY BY STAGE OF SYPHILIS AT TIME OF MOTHER'S TREATMENT DURING PREGNANCY

Stage of Disease at Time of Mother's Treatment with Penicillin	Total Live Births		Nonsyphilitic		Syphilitic	
	Number	Percent	Number	Percent	Number	Percent
A. Aqueous Penicillin - 2,400,000 units or more						
Primary or Secondary	160	100.0	156	97.5	4	2.5
Early Latent	90	100.0	89	98.8	1	1.1
TOTAL	250	100.0	245	98.0	5	2.0
B. PAM - One Session - 30,000 - 80,000 units per kilogram						
Primary or Secondary	48	100.0	45	93.8	3	6.2
Early Latent	174	100.0	172	98.9	2	1.1
Late (Latent, CNS, Congenital)	56	100.0	56	100.0	0	0.0
TOTAL	278	100.0	273	98.2	5	1.8
Total A and B						
Primary or Secondary	208	100.0	201	96.6	7	3.4
Early Latent	264	100.0	261	98.9	3	1.1
Late (Latent, CNS, Congenital)	56	100.0	56	100.0	0	0.0
TOTAL	528	100.0	518	98.1	10	1.9

TABLE 16

OUTCOME OF PREGNANCY IN WOMEN TREATED FOR SYPHILIS PRIOR TO, BUT NOT DURING, PREGNANCY

	Total Live Births		Nonsyphilitic		Syphilitic	
	Number	Percent	Number	Percent	Number	Percent
Series A	154	100.0	153	99.4	1	0.6
Series B	229	100.0	228	99.6	1	0.4
TOTAL	383	100.0	381	99.5	2	0.5

PENICILLIN IN THE TREATMENT OF GONORRHEA

The presently recommended schedule of treatment for uncomplicated gonorrhea in males is a single intramuscular injection of 600,000 to 1,200,000 units of PAM; in females, 1,800,000 units of PAM, or 600,000 units of PAM plus 1,200,000 units of benzathine penicillin G (or 1,800,000 to 2,400,000 units of a new preparation combining procaine penicillin G and benzathine penicillin G). The failure to control this disease has resulted, however, in less standardization of treatment for gonorrhea than for syphilis. Reports from 65 clinics representing 19 states, the D. C. and Puerto Rico indicate that schedules routinely employed for uncomplicated gonorrhea in males vary in dosage from 600,000 to 2,400,000 units; and for uncomplicated gonorrhea in females from 600,000 to 3,600,000 units. The schedule most frequently used (for both males and females) is 1,200,000 units of PAM.

The results of a study conducted at Columbia, S. C., where alternate female patients were treated with 600,000 and 1,800,000 units of PAM are shown in Table 17.

TABLE 17

COMPARISON OF 600,000 AND 1,800,000 UNITS OF PAM IN THE TREATMENT OF GONORRHEA IN THE FEMALE

Results of cultures following treatment	600,000 units		1,800,000 units	
	Number	Percent	Number	Percent
Positive	13	16.8	4	3.8
Two consecutive negatives	58	75.3	94	88.7
Single negative	6	7.8	8	7.5
TOTAL	77	100.0	106	100.0

PENICILLIN REACTIONS

Since penicillin is the drug of choice for the treatment of both syphilis and gonorrhea, the Venereal Disease Branch is concerned with the frequency and severity of reactions to penicillin therapy. Through the cooperation of venereal disease clinics two studies have been conducted to determine their frequency-- one in 1954, the other in 1959. The 1959 study was patterned after the 1954 study, the single departure being a request that, if possible, patients be detained in the clinic for a 30-minute period following treatment.

Results of these two studies are shown in Table 18. Reactions to penicillin were reported in 9.7/1,000 patients treated in 1959 and in 5.9/1,000 patients treated in 1954. This increase, amounting to 64 percent in the frequency of reactions reported, is attributable, at least in part, to the delay in dismissing patients after treatment. This is evidenced by the fact that a significant increase is noted only among patients treated on single session schedules. In general, such patients are not seen following treatment; but by detaining them in the clinic for a half-hour the clinicians were afforded an opportunity to observe reactions which otherwise would not have come to their attention.

In both studies, urticaria was the most frequent type of reaction, occurring in approximately 5/1,000 patients treated. Moderate to severe anaphylaxis also occurred with approximately the same frequency in 1959 as in 1954, 0.3/1,000 and 0.2/1,000 respectively. However, mild anaphylactoid reactions, generalized pruritis, vertigo or syncope, gastrointestinal disturbances, and chills, fever or headache were reported more frequently in 1959. No fatal reactions occurred during either study period.

TABLE 18

COMPARATIVE FREQUENCY OF REACTIONS TO PENICILLIN
IN 1959 and 1954,
BY VARIOUS FACTORS KNOWN TO INFLUENCE THE RATE

	1959 STUDY			1954 STUDY		
	Total Cases	Cases Reacting		Total Cases	Cases Reacting	
		Number	Rate/1,000		Number	Rate/1,000
Grand Total	25,550	248	9.7	19,510	116	5.9
Epidemiologic treatment	5,938	32	5.4	3,757	10	2.7
Gonorrhea	15,104	83	5.5	12,026	29	2.4
Syphilis	3,229	122	37.8	3,442	77	22.4
Procaine penicillin G in oil	10,294	122	11.9	12,179	97	8.0
Benzathine penicillin G	6,164	74	12.0	7,109	17	2.4
Single session schedule	21,502	122	5.7	17,710	51	2.9
2-7 day schedule	1,768	45	25.5	694	14	20.2
Schedules of 8 or more days	2,280	81	35.5	1,106	51	46.1
Previous penicillin						
Reacted	154	18	116.9	121	12	99.2
Did not react	20,547	185	9.0	14,214	56	3.9
No previous penicillin	2,866	26	9.1	3,750	34	9.1
White - Male	1,546	24	15.5	965	7	7.3
Female	1,121	16	14.3	670	7	10.4
Negro - Male	11,297	78	6.9	9,548	32	3.4
Female	8,702	84	9.7	7,738	51	6.6
10-19 years of age	5,127	23	4.5	3,908	12	3.1
20-29	11,660	95	8.1	9,512	37	3.9
30-39	4,513	52	11.5	3,674	34	9.3
40-49	1,595	33	20.7	1,252	21	16.8
50 years and over	1,102	36	32.7	1,012	11	10.9

ALTERNATE ANTIBIOTICS

For the patient who is sensitive to penicillin, erythromycin or tetracycline is recommended for the treatment of syphilis. Suggested schedules are 20–30 gms. of erythromycin or 30–40 gms. of tetracycline, given over a period of 10–15 days.

Erythromycin* (oral) is currently being evaluated by the Public Health Service. In order to establish a minimum dosage requirement for syphilis, the initial schedule consisted of 10 grams covering a period of 8 to 10 days. Since this dosage proved inadequate (Table 19), the second schedule was increased to 15 grams, 1.5 gms. a day for 10 days (Table 20). Although better than the 10-gram schedule (except for seronegative primary, the stage of syphilis most amenable to treatment and most subject to reinfection), these preliminary data indicate that the 15-gram dosage is also too low.

A 20-gram schedule is now being used. It is doubtful, however, if any oral therapy covering a period of days, regardless of dosage, will give results which compare favorably with injectable repository preparations such as benzathine penicillin G (Table 14), since the majority of venereal disease clinic patients are too irresponsible to follow a prescribed schedule of treatment.

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*Ilosone (propionyl erythromycin ester) furnished through the courtesy of Eli Lilly & Company.

TABLE 19

PRELIMINARY RESULTS OF PROPIONYL ERYTHROMYCIN IN THE TREATMENT OF EARLY SYPHILIS

SCHEDULE: 10 gms. total in 8 to 11 days

Months Observed	Cases Observed	CUMULATIVE PERCENT Clinical or Serorelapse	Probable Reinfection	Total Retreated	Percent of All other cases Seropos.	Seroneg.
		Seronegative Primary Syphilis				
3	34	-	11.8	11.8	-	88.2
6	32	3.0	11.8	14.8	-	85.2
9	28	6.5	15.3	21.9	-	78.1
12	22	6.5	19.2	25.8	-	74.2
		Seropositive Primary Syphilis				
3	89	2.2	2.2	4.3	67.5	28.1
6	70	6.1	8.6	14.6	34.1	51.2
9	57	9.1	8.6	17.6	22.8	59.5
12	47	9.1	12.6	21.6	25.4	52.9
		Secondary Syphilis				
3	83	2.3	2.4	4.7	95.3	-
6	66	16.6	3.9	20.5	71.8	7.6
9	51	23.9	3.9	27.8	52.6	19.5
12	44	30.7	10.6	41.3	42.9	15.8
		Total Syphilis				
3	206	1.9	3.9	5.7	67.6	26.7
6	167	9.8	7.3	16.9	42.4	40.7
9	137	14.5	8.0	22.4	29.3	48.3
12	113	16.9	13.1	29.9	27.5	42.6

TABLE 20

PRELIMINARY RESULTS OF PROPIONYL ERYTHROMYCIN IN THE TREATMENT OF EARLY SYPHILIS

SCHEDULE: 15 gms. total in 8 to 11 days

Months Observed	Cases Observed	CUMULATIVE PERCENT Clinical or Serorelapse	Probable Reinfection	Total Retreated	Percent of All other cases Seropos.	Seroneg.
		Seronegative Primary Syphilis				
3	13	-	7.7	7.7	15.4	76.9
6	8	13.2	20.9	34.1	-	65.9
9	6	29.7	20.9	50.6	-	49.4
		Seropositive Primary Syphilis				
3	50	-	2.0	2.0	78.0	20.0
6	33	8.2	2.0	10.2	47.9	41.9
9	13	8.2	2.0	10.2	37.4	52.4
		Secondary Syphilis				
3	37	-	-	-	97.3	2.7
6	20	10.0	-	10.0	70.0	25.0
9	12	10.0	8.6	18.6	69.1	17.3
		Total Syphilis				
3	100	-	2.0	2.0	77.0	21.0
6	61	7.7	3.6	11.4	49.2	39.4
9	30	11.0	6.2	17.3	43.0	39.7

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