

**Basic Statistics on the Venereal Disease Problem
in the United States**

**VD FACT SHEET
1966**

Twenty-third Revision

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BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL
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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 case-finding are measured in terms of cases reported, the actual amount of casefinding 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 the statistics collected by the Venereal Disease Program of the National Communicable Disease Center, 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 through 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

The incidence of syphilis is defined as the number of new cases occurring in a given area within a specified period of time, usually a year.

Since the symptoms of primary and secondary syphilis appear soon after the disease is acquired, the number of primary and secondary cases occurring in the population within a given period of time would be the same as the incidence of syphilis.

Cases of primary and secondary syphilis are reportable by law in all of the 50 States and the District of Columbia. In the fiscal year ending June 30, 1966, physicians and clinics in the United States reported 22,473 cases to State or local departments of health. But the number of cases reported understates actual incidence for two reasons:

1. Not all cases are diagnosed, and
2. Not all diagnosed cases are reported.

In July 1962, the American Social Health Association, in cooperation with the American Medical Association, the National Medical Association, and the American Osteopathic Association sent a questionnaire to every private physician in the United States. One of the questions asked was "How many new cases of primary and secondary (infectious) syphilis did you treat between April 1 and June 30, 1962?"

One hundred and thirty-one thousand two hundred and forty-five responding physicians indicated they treated 13,930 cases of infectious syphilis during these three months (an estimate of 55,720 cases for the year 1962). These 55,720 cases plus 13,769 cases of infectious syphilis treated in 1962 by public clinics (not included in the survey) total an estimated 69,489 newly acquired cases of syphilis treated. Actually, 69,489 cases can be considered minimum incidence since it does not include cases treated by physicians who failed to respond to the survey nor cases occurring but not detected during the year. This estimate is presented only to show that the actual incidence of syphilis is much higher than reported new cases. In fact, if one considers that at least half of the cases occurring are not detected until the late or latent stages of disease, then the actual annual incidence of syphilis would be at least twice the estimated 69,489 cases treated in 1962.

Costs of Uncontrolled Syphilis

The statistics presented in Table 1 (next page) 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, 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. Approximately three percent of patients with syphilitic psychoses are maintained in private institutions and these have not been included in this report.

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 1964. It is based on the expected years of life remaining to persons of that age, color and sex. The loss of income is based on projected earnings of these persons for the productive years of life lost to age 65. The estimated earnings are based on the median total money income rate for adults for 1964.

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.*

*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 1

ESTIMATED ANNUAL COSTS OF UNCONTROLLED SYPHILIS
UNITED STATES, 1964*

MAN-YEARS OF SYPHILIS DISABILITY PER YEAR

Institutionalization for syphilitic insanity	17,100
Disability from cardiovascular syphilis including aneurysm	8,100
Disability from tabes dorsalis	100
Disability from syphilitic blindness	6,000

ECONOMIC COSTS OF SYPHILITIC PSYCHOSES
AND SYPHILITIC BLINDNESS PER YEAR

Maintenance of patients with syphilitic psychoses	\$46,424,000
Compensation to syphilitic blind	\$ 6,192,000

LOSS OF LIFE EXPECTANCY FROM DEATHS DUE TO SYPHILIS IN MAN-YEARS

White males	18,849
White females	8,462
Non-white males	8,422
Non-white females	5,056
Total population	40,789

LOSS OF INCOME TO AGE 65 AT 1964 MEDIAN TOTAL MONEY INCOME RATE	\$41,158,000
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*Estimates based on most recent year (1964) for which data is available.

Reported Mortality and Insanity Due to Syphilis

Mortality statistics are processed and tabulated in the National Center for Health Statistics (NCHS) from microfilm copies of the original 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 number of 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 casefinding 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 Diseases and 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. In "The Seventh Revision of the International Lists of Causes of Death," which was published in 1955 and became effective beginning January 1958, an increase of 3.3 percent for syphilis and its sequelae occurred by reason of a change in interpretation of "aneurysm of the aorta" reported in a sequence involving arteriosclerosis of sites other than the aorta. It should be noted, however, that the interpretation of such sequences reverted in 1959 to that used with the Sixth Revision. Mortality rates given in this FACT SHEET have been adjusted to the basis of the Seventh Revision. No adjustment was made for infant mortality since it was affected very little by changes in the Seventh Revision.

Insanity due to syphilis is measured by the rate of first admissions to mental hospitals because of syphilis. Excluded are first 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 2 (next page).

TABLE 2

REPORTED MORTALITY AND INSANITY DUE TO SYPHILIS
UNITED STATES
SELECTED YEARS 1940-1966

Calendar Year	SYPHILIS MORTALITY*			INFANT MORTALITY DUE TO SYPHILIS			FIRST ADMISSIONS TO MENTAL HOSPITALS DUE TO SYPHILIS			
	Total Number	Rate Per 100,000 Pop.		Total Number	Rate Per 10,000 Live Births		Rate/100,000 Pop.**	Number	Rate	
		Total	White		Nonwhite	Total				White
1940	14,064	10.7	7.3	40.2	1,251	5.30	2.50	25.20	7,694	6.1
1945	10,406	7.9	5.6	27.3	684	2.50	1.07	12.59	6,897	5.5
1950	7,568	5.0	3.7	16.1	201	.57	.24	2.59	3,751	2.6
1951	6,274	4.1	3.0	13.4	129	.34	.12	1.73	3,035	2.1
1952	5,719	3.7	2.7	11.4	92	.24	.10	1.14	2,602	1.8
1953	5,273	3.3	2.4	10.9	56	.14	.04	.77	2,360	1.5
1954	4,835	3.0	2.3	9.2	43	.11	.03	.54	2,145	1.3
1955	3,834	2.4	1.7	7.9	34	.08	.03	.41	1,663	1.0
1956	3,870	2.3	1.7	7.1	30	.06	.02	.31	1,373	.8
1957	3,825	2.2	1.7	6.9	20	.06	.05	.16	1,307	.8
1958	3,469	2.0	1.5	6.4	29	.07	.02	.36	1,321	.6
1959	3,069	1.7	1.3	4.9	19	.06	.02	.23	774	.4
1960	2,945	1.6	1.3	4.5	30	.07	.04	.24	742	.4
1961	2,850	1.6	1.2	4.5	20	.05	.02	.18	639	.3
1962	2,811	1.5	1.2	3.9	29	.07	.02	.33	452	.2
1963	2,666	1.4	1.1	3.5	19	.07	.01	.22	312	.1
1964	2,619	1.4	1.1	3.2	20	.05	.02	.18	260	.1
1965***	2,520	1.3	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
1966***	2,276	1.3	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

* Seventh Revision, International Lists of Causes of Death, 1955; see Mortality, page 5 for explanation.

** Does not include admissions to Veterans Administration and psychopathic hospitals; rate based on population of area reporting.

*** Estimated.

Source: Mortality and Natality Data, National Vital Statistics Division; 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 each case of syphilis and gonorrhea which comes to medical attention must be reported to the State or local health officer. The other venereal diseases are also reportable in most States. Every three months, each State submits to the Public Health Service a statistical summary of cases reported during the quarter. All cases not previously reported in the State, regardless of duration of infection or treatment status, are to be counted in the statistical report of cases. Reported morbidity, as reported cases are sometimes called, indicates the volume of successful casefinding.

The trend of reported cases or case rates of early syphilis over a period of years may be indicative of incidence trends if no significant changes in casefinding efforts or completeness of case reporting have occurred. Similarly, the trend of reported cases of syphilis in all stages of disease can be interpreted as indicative of prevalence trends subject to the limitations imposed by changes in casefinding efforts and completeness of case reporting. For these reasons, trends in reported cases and rates must be interpreted with caution since changes in casefinding efforts and completeness of case reporting are reflected in morbidity data just as much as changes in disease incidence and prevalence.

Reported venereal disease cases and rates are shown in Tables 3 through 9. Of particular recent interest is the slight decrease in primary and secondary syphilis cases which occurred in Fiscal Year 1966 after eight successive years of increases, the increases measuring as much as 50 percent per year in the years 1960 and 1961.

The differences in reported cases and rates between color groups as shown in Table 5 may be biased because nonwhites tend to utilize public diagnostic and treatment facilities where reporting is complete and whites tend to seek treatment at private diagnostic facilities where reporting is not complete.

The trend of reported cases of congenital syphilis by age is shown in Table 6, and Tables 7 and 8 show age specific cases and rates by color and sex for primary and secondary syphilis and for gonorrhea.

TABLE 3

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
Fiscal Years 1919-1940

Fiscal Year	ALL STAGES OF SYPHILIS		GONORRHEA	
	Cases	Rates	Cases	Rates
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

NOTE: Beginning in 1939, all States are included in the reporting area.

TABLE 4

CASES OF VENEREAL DISEASE REPORTED TO THE PUBLIC HEALTH SERVICE BY
STATE HEALTH DEPARTMENTS, AND RATES PER 100,000 POPULATION
Fiscal Years 1941-1966
(Known Military Cases Excluded)
United States

Fiscal Years	SYPHILIS												CHAN- CROID		GRANULOMA INGUINALE		LYMPHO- GRANULOMA VENEREUM			
	All Stages*		Primary and Secondary		Early Latent		Late and Late Latent		Congenital		GONORRHEA		Cases		Rates		Cases		Rates	
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1941	485,560	368.2	68,231	51.7	109,018	82.6	202,984	153.9	17,600	13.4	193,468	146.7	3,384	2.5	639	.4	1,381	1.0		
1942	479,601	363.4	75,312	57.0	116,245	88.0	202,064	153.1	16,918	12.8	212,403	160.9	5,477	4.1	1,278	.9	1,888	1.4		
1943	575,593	447.0	82,204	63.8	149,390	116.0	251,958	195.7	16,164	12.6	275,070	213.6	8,354	6.4	1,748	1.3	2,593	2.0		
1944	467,755	367.9	78,443	61.6	123,038	96.7	202,848	159.6	13,578	10.7	300,676	236.5	7,878	6.1	1,759	1.3	2,858	2.2		
1945	359,114	282.3	77,007	60.5	101,719	79.9	142,187	111.8	12,339	9.7	287,181	225.8	5,515	4.3	1,857	1.4	2,631	2.0		
1946	363,647	271.7	94,957	70.9	107,924	80.6	125,248	93.6	12,106	9.0	368,020	275.0	7,091	5.2	2,232	1.6	2,603	1.9		
1947	372,963	264.6	106,539	75.6	107,767	76.4	121,980	86.5	12,271	8.7	400,639	284.2	9,039	6.4	2,403	1.7	2,688	1.9		
1948	338,141	234.7	80,528	55.9	97,745	67.9	123,972	86.1	13,309	9.2	363,014	252.0	8,631	6.0	2,315	1.6	2,494	1.7		
1949	288,736	197.3	54,248	37.1	84,331	57.6	121,931	83.3	14,295	9.8	331,661	226.7	7,218	4.9	2,611	1.8	2,170	1.5		
1950	229,723	154.2	32,148	21.6	64,786	43.5	112,424	75.5	13,446	9.0	303,992	204.0	5,796	3.9	2,017	1.4	1,635	1.1		
1951	198,640	131.8	18,211	12.1	52,309	34.7	107,133	71.1	12,836	8.5	270,459	179.5	5,707	3.1	1,637	1.1	1,332	.9		
1952	168,734	110.8	11,991	7.9	38,365	25.2	101,920	66.9	9,240	6.1	245,633	161.3	3,837	2.5	1,069	.7	1,235	.8		
1953	156,099	100.8	9,551	6.2	32,287	20.8	100,195	64.7	8,021	5.2	243,857	157.4	3,490	2.3	785	.5	1,103	.7		
1954	137,876	87.5	7,688	4.9	24,999	15.9	93,601	59.4	7,234	4.6	239,661	152.0	3,294	2.1	607	.4	917	.6		
1955	122,075	76.0	6,516	4.1	21,553	13.4	84,741	52.7	5,515	3.4	239,787	149.2	2,863	1.8	584	.4	875	.5		
1956	126,219	77.1	6,757	4.1	20,014	12.2	89,851	54.8	5,535	3.4	233,333	142.4	2,322	1.4	419	.3	602	.4		
1957	130,552	78.3	6,251	3.8	19,046	11.4	96,856	58.1	5,452	3.3	216,476	129.8	1,860	1.1	348	.2	449	.3		
1958	116,630	68.5	6,661	3.9	16,698	9.8	85,974	50.5	4,839	2.8	220,191	129.3	1,574	.9	332	.2	436	.3		
1959	119,981	69.3	8,178	4.7	17,592	10.2	86,776	50.1	5,215	3.0	237,318	137.1	1,604	.9	282	.2	485	.3		
1960	120,249	68.0	12,471	7.1	16,829	9.5	84,195	47.6	4,593	2.6	246,697	139.6	1,555	.9	273	.2	800	.5		
1961	125,262	69.7	18,781	10.4	19,146	10.7	80,942	45.0	4,388	2.4	265,665	147.8	1,595	.9	296	.2	842	.5		
1962	124,188	68.1	20,084	11.0	19,924	10.9	78,264	42.9	4,085	2.2	260,468	142.8	1,401	.8	203	.1	635	.3		
1963	128,450	69.3	22,045	11.9	18,683	10.1	81,736	44.1	4,140	2.2	270,076	145.7	1,242	.7	196	.1	589	.3		
1964	118,247	62.9	22,733	12.1	18,104	9.6	72,184	38.4	3,737	2.0	290,603	154.5	1,260	.7	145	.1	543	.3		
1965	113,018	59.7	23,250	12.3	17,315	9.1	67,636	35.7	3,505	1.9	310,155	163.8	1,083	.6	144	.1	873	.5		
1966	110,128	57.1	22,473	11.6	16,974	8.8	66,149	34.3	3,464	1.8	334,949	173.6	950	.5	164	.1	625	.3		

*Includes "Stage of Syphilis Not Stated."

TABLE 5

REPORTED VENEREAL DISEASE CASES AND CASE RATES PER 100,000 POPULATION BY COLOR AND SEX
Fiscal Years 1962-1966
(Known Military Cases Excluded)
UNITED STATES

Disease, Stage	Fiscal Year	Total						White						Nonwhite											
		Total			Female			Total			Male			Total			Male			Female					
		Cases	Rates	Male	Cases	Rates	Female	Cases	Rates	Male	Cases	Rates	Female	Cases	Rates	Male	Cases	Rates	Female	Cases	Rates	Male	Cases	Rates	Female
All Stages of Syphilis*	1962	124,188	68.1	68,974	77.1	55,214	59.5	53,108	32.9	31,798	40.0	21,310	26.0	71,080	340.4	37,176	367.5	33,904	314.9	34,985	364.7	33,904	314.9	34,985	312.9
	1963	128,450	69.33	70,530	78.1	57,920	60.9	55,434	33.9	32,499	40.7	22,935	27.3	73,016	337.9	38,031	364.7	34,985	312.9	35,837	338.0	32,395	284.0	32,395	279.2
	1964	118,247	62.9	65,291	71.4	52,956	54.8	50,015	30.1	29,454	36.5	20,561	24.1	68,232	310.0	35,837	338.0	32,395	284.0	35,909	332.5	32,466	279.2	32,466	270.2
	1965	113,018	59.7	62,388	67.9	50,630	52.0	44,843	26.7	26,479	32.6	18,164	21.3	68,375	304.9	35,909	332.5	32,466	279.2	36,696	243.9	32,163	270.2	32,163	270.2
	1966	110,128	57.1	60,935	65.0	49,193	49.5	41,269	24.3	24,239	29.3	17,030	19.5	68,859	299.9	36,696	243.9	32,163	270.2	36,696	243.9	32,163	270.2	32,163	270.2
	1966	20,084	11.0	13,214	14.8	6,870	7.4	6,149	3.8	4,972	6.3	1,177	1.4	13,935	66.7	8,242	81.5	5,693	52.9	15,917	73.7	9,274	88.9	6,643	59.4
Primary and Secondary Syphilis	1962	22,045	11.9	14,074	15.6	7,971	8.4	6,128	3.8	4,800	6.0	1,328	1.6	15,917	73.7	9,274	88.9	6,643	59.4	16,580	75.3	9,534	89.9	7,046	61.7
	1963	22,733	12.1	14,349	15.7	8,384	8.7	6,153	3.7	4,815	5.9	1,338	1.5	16,580	75.3	9,534	89.9	7,046	61.7	17,679	78.8	10,138	93.9	7,541	64.8
	1964	23,250	12.3	14,351	15.6	8,899	9.1	5,571	3.3	4,213	5.2	1,358	1.6	17,679	78.8	10,138	93.9	7,541	64.8	17,737	77.2	10,163	67.6	7,574	63.6
	1965	22,473	11.6	13,730	14.6	8,743	8.8	4,736	2.8	3,567	4.3	1,169	1.3	17,737	77.2	10,163	67.6	7,574	63.6	13,175	63.1	6,453	63.8	6,722	62.4
	1966	19,924	10.9	10,800	12.1	9,124	9.8	6,749	4.2	4,347	5.4	2,402	2.9	13,175	63.1	6,453	63.8	6,722	62.4	12,401	57.4	6,356	56.8	6,356	56.8
	1966	18,104	9.6	9,880	10.8	8,224	8.5	5,614	3.4	3,652	4.5	1,962	2.3	12,490	56.8	6,228	58.7	6,262	54.9	12,620	56.3	6,343	54.0	6,262	54.9
Early Latent Syphilis	1962	16,974	8.8	9,729	10.4	7,245	7.3	4,399	2.6	2,963	3.6	1,436	1.6	12,575	54.8	6,766	44.9	5,809	48.8	12,575	54.8	6,766	44.9	5,809	48.8
	1963	18,683	10.1	10,010	11.0	8,673	9.1	6,282	3.4	3,965	5.0	2,317	2.8	13,175	63.1	6,453	63.8	6,722	62.4	12,401	57.4	6,356	56.8	6,356	56.8
	1964	18,104	9.6	9,880	10.8	8,224	8.5	5,614	3.4	3,652	4.5	1,962	2.3	12,490	56.8	6,228	58.7	6,262	54.9	12,620	56.3	6,343	54.0	6,262	54.9
	1965	17,315	9.1	9,522	10.4	7,793	8.0	4,695	2.8	3,179	3.9	1,516	1.8	12,620	56.3	6,343	54.0	6,262	54.9	12,620	56.3	6,343	54.0	6,262	54.9
	1966	16,974	8.8	9,729	10.4	7,245	7.3	4,399	2.6	2,963	3.6	1,436	1.6	12,575	54.8	6,766	44.9	5,809	48.8	12,575	54.8	6,766	44.9	5,809	48.8
	1966	78,264	42.9	42,536	47.5	35,728	38.5	37,306	23.1	21,324	26.9	15,982	19.5	40,958	196.1	21,212	209.6	19,746	183.4	41,694	192.9	21,531	206.5	20,163	180.3
Late and Late Latent Syphilis	1962	81,736	44.1	44,083	48.8	37,653	39.6	40,042	24.9	22,552	28.2	17,490	20.8	41,694	192.9	21,531	206.5	20,163	180.3	41,694	192.9	21,531	206.5	20,163	180.3
	1963	72,184	38.4	38,882	42.5	33,302	34.4	35,604	21.4	19,895	24.7	15,709	18.4	36,580	166.2	18,987	179.1	17,593	154.3	36,580	166.2	18,987	179.1	17,593	154.3
	1964	67,636	35.7	36,578	39.8	31,058	31.9	31,993	19.2	18,133	22.3	13,860	16.2	35,643	158.9	18,445	170.8	17,198	147.9	35,643	158.9	18,445	170.8	17,198	147.9
	1965	66,149	34.3	35,586	38.0	30,563	30.8	29,905	17.6	16,772	20.3	13,133	15.1	36,244	157.8	18,814	125.1	17,430	146.4	36,244	157.8	18,814	125.1	17,430	146.4
	1966	4,085	2.2	1,511	1.7	2,574	2.8	1,943	1.2	663	.8	1,280	1.6	2,142	10.3	848	8.4	1,294	12.0	2,142	10.3	848	8.4	1,294	12.0
	1966	4,140	2.2	1,497	1.7	2,643	2.8	1,938	1.2	684	.9	1,254	1.5	2,202	10.2	813	7.8	1,389	12.5	2,202	10.2	813	7.8	1,389	12.5
Congenital Syphilis	1962	3,737	2.0	1,396	1.5	2,341	2.4	1,794	1.1	644	.8	1,150	1.4	1,943	8.8	752	7.1	1,191	10.5	1,943	8.8	752	7.1	1,191	10.5
	1963	3,505	1.9	1,284	1.4	2,221	2.3	1,647	1.0	575	.7	1,072	1.3	1,858	8.3	709	6.6	1,149	9.9	1,858	8.3	709	6.6	1,149	9.9
	1964	3,464	1.8	1,345	1.4	2,119	2.1	1,546	.9	589	.7	957	1.1	1,918	8.4	756	5.0	1,162	9.8	1,918	8.4	756	5.0	1,162	9.8
	1965	260,468	142.8	189,159	211.3	71,309	76.8	69,475	43.0	50,107	63.1	19,368	23.6	190,993	914.6	139,052	1374.4	51,941	482.5	194,722	901.1	143,960	1380.4	50,762	454.0
	1966	270,076	145.7	199,289	220.7	70,787	74.5	75,354	46.0	55,329	69.3	20,025	23.9	194,722	901.1	143,960	1380.4	50,762	454.0	194,722	901.1	143,960	1380.4	50,762	454.0
	1966	290,603	154.5	217,633	238.1	72,970	75.5	81,280	49.0	59,056	73.1	22,224	26.1	209,323	951.0	158,377	1495.6	50,746	444.8	209,323	951.0	158,377	1495.6	50,746	444.8
Gonorrhea	1965	310,155	163.8	233,224	253.6	76,931	79.0	86,055	51.6	62,201	76.6	23,854	27.8	224,100	999.2	171,023	1583.7	53,077	456.4	224,100	999.2	171,023	1583.7	53,077	456.4
	1966	334,949	173.6	253,392	270.3	81,557	82.2	94,108	55.3	67,561	81.8	26,547	30.4	240,841	1048.7	185,831	1235.6	55,010	462.1	240,841	1048.7	185,831	1235.6	55,010	462.1

*Includes "Stage of Syphilis Not Stated."

TABLE 6a

REPORTED CASES OF CONGENITAL SYPHILIS, BY AGE*
 UNITED STATES
 Fiscal Years 1963-1966

Age Group	1963		1964		1965		1966	
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent
0 - 1 Year	410	9.9	374	10.0	373	10.6	370	10.7
1 - 4 Years	58	1.4	59	1.6	59	1.7	33	1.0
5 - 9 Years	47	1.1	24	0.6	44	1.3	72	2.1
10 Years and Over	3,625	87.6	3,280	87.8	3,029	86.4	2,989	86.2
GRAND TOTAL	4,140	100.0	3,737	100.0	3,505	100.0	3,464	100.0

*Since 1962, approximately 90% of congenital cases have been reported by age. Cases not reported by age have been prorated according to known ages.

TABLE 6b

REPORTED CASES OF CONGENITAL SYPHILIS, UNDER ONE YEAR OF AGE
 Case Rates per 10,000 Live Births**
 UNITED STATES
 Fiscal Years 1963-1966

Cases	1964		1965		1966	
	Rate	Cases	Rate	Cases	Rate	Cases
410	0.9	374	0.8	373	0.8	370
						1.0

**Live births are reported in Monthly Vital Statistics Report, National Center for Health Statistics, (DHEW-PHS)

INFANT MORTALITY DUE TO SYPHILIS - See Table 2.

TABLE 8

GONORRHEA
MORBIDITY AND AGE-SPECIFIC CASE RATES PER 100,000 POPULATION BY AGE GROUPS, COLOR AND SEX

UNITED STATES
Calendar Years 1956, 1961 - 1965

AGE	YEAR	MORBIDITY										AGE-SPECIFIC CASE RATES PER 100,000 POPULATION									
		White					Nonwhite					White					Nonwhite				
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Year	
1956	1956	130	648	778	619	2,203	2,822	749	2,851	3,600	.6	3.0	1.8	18.7	66.8	42.7	2.9	11.5	7.1	1956	
1961	1961	193	930	1,123	962	2,097	3,059	1,155	3,027	4,182	.8	3.8	2.3	23.8	52.0	37.9	3.9	10.7	7.3	1961	
1962	1962	156	710	866	1,039	1,976	3,015	1,195	2,686	3,881	.6	2.9	1.7	25.0	47.7	36.3	4.0	9.4	6.7	1962	
1963	1963	205	803	1,008	1,083	1,957	3,040	1,288	2,760	4,048	.8	3.3	2.0	25.5	46.1	35.8	4.3	9.6	6.9	1963	
1964	1964	218	889	1,107	1,338	2,159	3,497	1,556	3,048	4,604	.8	3.6	2.2	30.8	49.7	40.2	5.2	10.5	7.8	1964	
1965	1965	298	741	1,039	1,274	2,212	3,486	1,572	2,953	4,525	1.1	3.0	2.0	28.6	49.9	39.2	5.2	10.0	7.6	1965	
1956	1956	3,454	3,359	6,813	20,769	17,579	38,348	24,223	20,938	45,161	75.7	68.2	71.8	3076.0	2430.4	2742.1	462.9	372.0	415.7	1956	
1961	1961	6,068	5,662	11,730	24,924	15,477	40,401	30,992	21,139	52,131	106.5	95.4	100.8	2454.0	1849.1	2465.0	476.8	312.0	392.7	1961	
1962	1962	6,409	5,611	12,020	24,912	14,742	39,659	31,332	20,358	51,679	103.5	86.6	94.0	2890.0	1631.3	2245.7	444.1	275.8	358.0	1962	
1963	1963	7,341	6,317	13,658	26,834	16,017	40,851	34,175	20,334	54,509	113.1	94.2	103.5	2932.7	1469.3	2185.7	461.5	265.5	361.9	1963	
1964	1964	7,968	7,140	15,108	30,315	15,643	43,958	38,283	22,783	61,066	117.0	101.9	109.3	3096.5	1536.6	2300.2	491.4	283.9	386.2	1964	
1965	1965	8,808	7,485	16,293	34,026	16,628	50,654	42,834	24,113	66,947	121.3	102.4	111.8	3240.6	1539.6	2377.0	515.3	287.4	400.8	1965	
1956	1956	10,127	3,633	13,760	42,842	18,091	60,933	52,969	21,724	74,693	275.1	77.3	164.4	7886.2	2714.1	5041.2	1255.8	406.8	781.8	1956	
1961	1961	16,614	6,026	22,640	49,599	18,447	68,046	66,213	24,473	90,686	392.1	120.8	245.4	8117.7	2540.9	5089.5	1365.8	428.2	858.6	1961	
1962	1962	17,675	6,602	24,277	49,580	17,374	67,314	67,255	24,336	91,591	407.7	127.5	255.2	8009.2	2396.5	4949.3	1357.3	411.2	842.3	1962	
1963	1963	20,296	7,147	27,443	53,741	17,357	71,098	74,037	24,504	98,541	438.6	129.9	270.9	8267.8	2254.2	5006.9	1402.7	390.6	853.0	1963	
1964	1964	21,386	7,662	29,048	59,451	17,308	76,759	80,837	24,970	105,807	439.0	133.4	273.6	8691.7	2174.4	5182.9	1455.0	381.7	874.7	1964	
1965	1965	23,178	8,847	32,025	64,123	18,797	82,920	87,301	27,644	114,945	461.8	148.6	291.9	9018.7	2262.0	5377.4	1523.3	407.5	918.5	1965	
1956	1956	7,630	2,148	9,778	29,334	9,512	38,846	36,964	11,660	48,624	159.8	41.2	98.1	5125.7	1372.5	3071.0	692.6	198.6	434.2	1956	
1961	1961	10,680	2,830	13,510	30,556	9,473	40,029	41,236	12,303	53,539	241.0	59.1	146.5	5314.1	1361.1	3149.4	823.6	224.3	510.3	1961	
1962	1962	11,392	3,087	14,479	29,928	8,891	38,819	41,320	11,978	53,298	260.8	64.8	158.5	5186.3	1283.0	3056.4	835.5	219.5	512.3	1962	
1963	1963	12,266	2,811	15,077	31,990	8,076	39,466	43,656	10,887	54,543	276.1	58.3	162.8	5365.8	1155.4	3073.7	868.3	197.3	517.2	1963	
1964	1964	12,689	3,123	15,812	34,402	8,409	42,811	47,091	11,532	58,623	279.7	63.5	167.2	5781.8	1184.4	3280.5	917.6	204.9	544.8	1964	
1965	1965	14,210	3,680	17,890	37,955	52,165	52,165	52,165	12,360	64,525	308.8	73.9	186.7	6294.4	1214.0	3538.3	1002.0	217.1	592.0	1965	
1956	1956	7,537	2,251	9,788	24,030	6,869	30,899	31,567	9,120	40,687	73.5	20.3	45.9	2110.3	521.7	1259.0	277.4	73.7	171.5	1956	
1961	1961	10,904	2,492	13,396	26,453	6,923	33,376	37,357	9,415	46,772	106.9	22.8	63.5	2157.7	478.8	1249.1	326.8	76.2	196.7	1961	
1962	1962	10,973	2,746	13,719	25,788	6,646	32,434	36,761	9,392	46,153	109.4	25.5	65.9	2108.6	458.0	1213.4	326.8	76.8	196.6	1962	
1963	1963	11,331	2,578	13,909	27,652	6,189	33,841	38,983	8,759	47,742	114.2	24.3	67.7	2277.8	427.7	1271.7	350.0	72.7	205.9	1963	
1964	1964	11,357	2,538	13,895	29,464	6,713	36,177	40,821	9,251	50,072	116.2	24.4	68.8	2451.2	466.2	1368.8	371.9	78.0	219.3	1964	
1965	1965	11,927	2,843	14,770	31,563	6,255	37,818	43,490	9,098	52,588	123.8	27.8	74.4	2654.6	437.4	1444.0	401.9	78.0	234.0	1965	
1956	1956	2,243	827	3,070	4,471	1,507	5,978	6,714	2,334	9,048	23.4	8.3	15.7	439.2	133.8	278.7	63.7	21.1	41.9	1956	
1961	1961	3,737	986	4,723	6,237	1,503	7,740	9,974	2,489	12,463	37.6	9.4	23.2	569.6	124.2	335.8	90.4	21.4	54.9	1961	
1962	1962	3,822	937	4,759	6,516	1,541	8,057	10,338	2,478	12,816	38.1	8.8	23.1	590.2	125.0	344.9	92.9	20.9	55.8	1962	
1963	1963	4,348	1,024	5,372	7,449	1,531	8,980	11,797	2,555	14,352	42.9	9.5	25.7	666.3	122.0	378.6	104.7	21.3	61.7	1963	
1964	1964	4,073	988	5,061	8,132	1,462	9,594	12,205	2,650	14,655	39.8	9.1	24.0	719.0	114.5	398.6	107.3	20.2	62.3	1964	
1965	1965	4,224	982	5,186	9,064	1,459	10,523	13,288	2,421	15,709	40.9	8.8	24.4	794.4	112.4	431.4	116.0	19.8	66.2	1965	
1956	1956	953	311	1,264	1,126	480	1,606	2,079	791	2,870	5.6	1.7	3.6	76.0	30.9	52.9	11.3	4.0	7.5	1956	
1961	1961	1,648	416	2,064	1,804	517	2,321	3,452	933	4,385	9.0	2.0	5.3	101.9	27.3	63.3	17.2	4.1	10.3	1961	
1962	1962	1,619	364	1,983	1,752	561	2,313	3,371	4,296	4,296	8.7	1.7	5.0	97.3	28.8	61.7	16.5	4.0	9.9	1962	
1963	1963	1,766	383	2,149	1,938	467	2,405	3,704	850	4,554	9.4	1.8	5.3	106.0	23.4	62.9	17.9	3.6	10.3	1963	
1964	1964	2,041	548	2,589	2,741	509	3,250	4,782	1,057	5,839	10.7	2.5	6.4	132.5	24.9	83.3	22.8	4.4	13.0	1964	
1965	1965	2,069	606	2,675	2,493	518	3,011	4,562	1,124	5,686	10.7	2.7	6.4	132.5	24.7	83.3	21.5	4.6	12.4	1965	
1956	1956	32,074	13,177	45,251	123,191	56,241	179,432	155,265	69,418	224,683	44.5	17.4	30.6	1409.5	600.0	990.9	192.4	81.7	135.7	1956	
1961	1961	49,844	19,342	69,186	140,535	56,437	194,972	190,379	73,779	264,158	63.8	23.6	43.2	1388.7	502.0	930.1	215.7	79.4	145.8	1961	
1962	1962	52,046	20,057	72,103	139,515	52,096	191,611	191,561	72,153	263,714	65.9	24.1	44.4	1369.7	468.8	893.4	214.5	76.4	163.5	1962	
1963	1963	57,553	21,055	78,608	150,087	49,594	199,681	207,640	70,649	278,289	71.9	28.9	47.8	1420.7	436.4	910.6	229.0	73.7	149.2	1963	
1964	1964	59,732	22,888	82,620	165,843	52,203	218,046	225,575	75,091	300,666	73.6	26.7	49.5	1535.9	448.9	972.2	245.3	77.1	158.8	1964	
1965	1965	64,714	25,164	89,878	180,498	54,549	235,047	245,212	79,713	324,925	78.7	29.0	53.2	1636.7	459.2	1026.0	263.1	80.8	169.3	1965	

Note: Cases not reported by age have been included on the basis of the known age distribution. Rates are based on population estimates of the Bureau of the Census. Numbers include Alaska and Hawaii for 1956 and 1961-1965. Rates are based on cases excluding Alaska and Hawaii for 1956. For 1961-1965, rates are based on numbers for the United States, including Alaska and Hawaii.

TABLE 9

REPORTED VENEREAL DISEASE CASES AND CASE RATES PER 100,000 POPULATION*

 UNITED STATES
 (Known Military Cases Excluded)
 Fiscal Year 1966

State	Syphilis						Other Venereal Diseases	
	All Stages		Primary and Secondary		Gonorrhea		Cases	Rates
	Cases	Rates	Cases	Rates	Cases	Rates		
Alabama	1,928	56.1	1,252	36.4	4,056	118.0	45	1.3
Alaska	32	14.6	7	3.2	1,040	470.6	0	-
Arizona	561	35.4	201	12.7	3,158	199.1	10	.6
Arkansas	1,257	64.5	152	7.8	6,064	311.0	11	.7
California	11,726	64.1	1,768	9.7	40,243	220.0	77	.4
Colorado	509	26.4	59	3.1	2,195	113.6	5	.3
Connecticut	644	22.8	103	3.7	2,762	97.9	3	.1
Delaware	517	104.0	46	9.3	1,100	221.3	3	.6
Dist. of Columbia	1,473	186.7	468	59.3	9,941	1259.9	381	48.3
Florida	6,320	110.6	2,103	36.8	10,619	185.9	265	4.6
Georgia	2,526	59.2	1,014	23.8	12,149	285.0	117	2.7
Hawaii	130	20.1	35	5.4	402	62.0	5	.8
Idaho	17	2.4	9	1.3	1,049	152.9	2	.3
Illinois	7,188	67.8	1,260	11.9	31,153	294.0	12	.1
Indiana	1,075	22.0	76	1.6	4,540	93.1	4	.1
Iowa	851	30.9	72	2.6	2,873	104.2	5	.1
Kansas	977	44.5	62	2.8	2,798	127.5	2	.1
Kentucky	1,723	54.8	125	4.0	3,455	110.0	16	.5
Louisiana	2,869	81.8	649	18.5	5,509	157.4	63	1.8
Maine	279	28.6	4	.4	402	41.2	0	-
Maryland	3,243	93.7	555	16.0	6,741	194.7	13	.4
Massachusetts	1,787	33.6	331	6.2	4,401	82.9	5	.1
Michigan	5,784	70.7	1,057	12.9	14,765	180.1	130	1.5
Minnesota	204	5.8	56	1.6	2,187	61.6	2	.1
Mississippi	951	41.3	647	28.1	4,401	191.3	35	1.5
Missouri	3,503	78.4	214	4.8	8,622	192.9	54	1.2
Montana	145	20.8	35	5.0	473	68.0	2	.2
Nebraska	373	25.6	78	5.3	1,080	74.0	1	.1
Nevada	231	53.5	32	7.4	687	159.0	1	.2
New Hampshire	79	11.9	14	2.1	296	44.7	5	.8
New Jersey	3,943	58.5	828	12.3	4,016	59.6	13	.1
New Mexico	942	93.5	101	10.0	1,567	155.6	2	.2
New York	18,866	104.7	3,329	18.5	37,889	210.2	98	.5
North Carolina	2,242	46.5	976	20.2	10,318	214.0	87	1.8
North Dakota	19	3.1	5	.8	442	69.1	0	-
Ohio	4,277	41.9	623	6.1	14,527	142.1	26	.3
Oklahoma	1,204	49.3	110	4.5	3,446	140.8	8	.3
Oregon	362	19.2	55	2.9	2,532	133.7	3	.2
Pennsylvania	4,961	43.1	567	4.9	8,790	76.4	23	.2
Rhode Island	348	38.9	31	3.5	359	40.1	0	-
South Carolina	1,742	70.0	882	35.5	7,121	286.2	22	.8
South Dakota	115	16.5	36	5.2	659	94.7	1	.1
Tennessee	1,389	36.4	342	9.0	9,962	261.1	36	1.0
Texas	5,528	53.2	1,544	14.9	28,560	275.0	105	1.0
Utah	139	14.1	18	1.8	427	43.4	0	-
Vermont	21	5.3	2	.5	208	52.4	2	.5
Virginia	1,972	45.9	296	6.9	8,060	187.7	28	.7
Washington	251	8.6	48	1.6	3,449	117.8	5	.2
West Virginia	1,436	79.2	100	5.5	934	51.6	3	.2
Wisconsin	1,368	33.1	89	2.1	2,362	57.1	3	.1
Wyoming	101	30.2	7	2.1	160	47.8	0	-
United States Total	110,128	57.1	22,473	11.6	334,949	173.6	1,739	.9

*Rates less than .05 not shown.

Health Department Casefinding Activities

Casefinding investigations fall into two categories: (1) the investigation of sex contacts of patients with recently acquired and infectious disease, and (2) the investigation of persons other than sex contacts who are suspected of having venereal disease. Most of the latter group of suspects are persons with reactive tests for syphilis which are generated by the estimated 38,000,000 serologic tests performed annually in the United States, and are referred to in Table 10 as positive diagnostics. Thousands of the investigations of positive diagnostics and sex contacts carry health department casefinding workers into the offices of private physicians who make the medical determination of whether or not the suspects have syphilis.

For many years, the proficiency of the interviewing-contact investigation process in ferreting out the foci of syphilis infections in the community has been measured by a series of epidemiologic indices. The indices presented in Table 10 are based only on infectious cases diagnosed in health department clinics and do not include cases diagnosed and reported by private physicians. These indices are defined as follows:

The Contact Index is the average number of sex contacts elicited per infectious (primary and secondary) syphilis case interviewed.

The Epidemiologic Index is the average number of cases of syphilis identified per infectious case interviewed. A number of these identified cases will already have been diagnosed and treated.

The Brought-to-Treatment Index is the average number of previously not diagnosed cases of syphilis brought to treatment per infectious case interviewed.

The Lesion-to-Lesion Index is the average number of infectious (lesion or primary or secondary) cases brought to treatment per infectious case interviewed.

TABLE 10
HEALTH DEPARTMENT CASEFINDING ACTIVITIES, UNITED STATES
FISCAL YEARS 1961-1966

	1961	1962	1963	1964	1965	1966
Number of positive diagnostics investigated.	239,835	234,305	243,257	241,016	245,715	257,009
Number of contacts investigated.	225,541	186,784	179,715	192,580	186,386	183,634
Contact Investigation Indices:						
Contact Index	4.10	4.03	3.98	3.86	3.69	3.59
Epidemiologic Index	1.22	1.24	1.17*	1.13*	1.11*	1.13*
Brought-to-Treatment Index	.55	.52	.47*	.46*	.45*	.45*
Lesion-to-Lesion Index	.33	.32	.30	.31	.32	.30

*Excludes Missouri, South Carolina, and Tennessee.

Treatment of Syphilis

Congenital Syphilis

Recommended treatment for early congenital syphilis (less than 2 years) consists of aqueous procaine penicillin G in total dosage of 100,000 μ /kg. in 10 equally divided daily doses. Late congenital syphilis is treated with the same schedules as for comparable manifestations of acquired syphilis.

The earlier penicillin therapy is instituted for congenital syphilis, the more satisfactory the results.

Early Syphilis

Benzathine penicillin G and procaine penicillin G in oil with 2-percent aluminum monostearate (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.

For the patient who is sensitive to penicillin, erythromycin (20-30 grams) or tetracycline (30-40 grams) is recommended for the treatment of syphilis.

Epidemiologic Treatment

The treatment of all sex contacts of patients with early infectious syphilis is recommended as the most effective procedure for preventing the spread of syphilis. Although clinically and serologically negative at time of initial examination, some of these contacts will have incubating syphilis and some, particularly females who may have an inconspicuous or no primary lesion, will already have developed syphilis. It is suggested, therefore, that contacts be treated for syphilis (rather than for incubating syphilis) with a dosage of 2,400,000 units of benzathine penicillin G.

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. 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.

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 severe in 330, moderately severe in 141, and 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 units at 7-day intervals.

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

Aqueous procaine penicillin G — 600,000 units daily.

Treatment of Gonorrhoea

The treatment of gonorrhoea is in a state of uncertainty although penicillin still remains the drug of choice. Some strains of the gonococcus are developing increasing resistance to penicillin, but this resistance is relative and not absolute. As a result it is necessary to recommend on an interim basis short acting penicillin preparations in larger doses. Treatment schedules are presently being evaluated and until results are available the following are recommended:

Uncomplicated gonorrhoea in men: Aqueous procaine penicillin G, 2,400,000 units in one IM injection.

Uncomplicated gonorrhoea in women: Aqueous procaine penicillin G, 4,800,000 units IM in two injection sites at one visit, or the combination of aqueous procaine penicillin G and procaine penicillin G in oil with 2 percent aluminum monostearate for two separate IM injections of 2,400,000 units in each site given at one visit.

Prophylactic or epidemiologic treatment for gonorrhea (male and female) is accomplished with the same treatment schedules as for uncomplicated gonorrhea.

Treatment of gonorrhea with severe complications must be individualized using large amounts of short acting penicillin.

Excluding the likelihood of reinfection, retreatment is indicated if the discharge in uncomplicated male gonorrhea persists for three or more days following initial therapy and the smear, F.A., or culture is still positive. In uncomplicated gonorrhea in the female retreatment is indicated if followup cultures or F.A. procedures remain positive for gonococci. Retreatment consists of doubling the original dosage at a single visit or in divided doses on two successive days.

Gonorrhea patients sensitive to penicillin may be treated effectively with tetracycline, erythromycin, or oleandomycin. These may be administered as a single oral dose of 1.5 grams or 0.5 gram given orally every 4-6 hours until 2-3 grams have been given.

Gonorrhea patients who are sexual contacts to infectious syphilis should be given full prophylactic therapy for syphilis (2,400,000 units of benzathine penicillin G) as well as recommended therapy for gonorrhea. While long acting forms of penicillin (such as benzathine penicillin) are ideal in syphilotherapy, they are not indicated in routine gonorrhea treatment.

Penicillin Reactions

Since penicillin is the drug of choice for the treatment of both syphilis and gonorrhea, the Venereal Disease Program is concerned with the frequency and severity of reactions to penicillin therapy. Through the cooperation of venereal disease clinics three studies at 5-year intervals (1954, 1959 and 1964) have been conducted to determine their frequency.

The 1959 and 1964 studies were 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. Reactions to penicillin were reported in 5.9/1,000 patients treated in 1954, in 9.7/1,000 treated in 1959, and in 8.0/1,000 treated in 1964. The increase over 1954 is attributed mainly to the delay in dismissing patients after treatment.

In each study, urticaria was the most frequent type of reaction, occurring in from 4-6/1,000 patients treated. Moderate to severe anaphylaxis was observed in 0.21 to 0.35/1,000 patients. The only death reported during a study period occurred in 1964.