VD FACT SHEET - 1970

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

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Basic Statistics on the Venereal Disease Problem in the United States

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
Health Services and Mental Health Administration
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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 casefinding 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 Branch, State and Community Services Division of the Center for Disease Control, or upon estimates made by the Branch. 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 and Prevalence

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, 1970, physicians and clinics in the United States reported 20,186 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.*

The Venereal Disease Branch currently estimates that the actual occurrence of syphilis was about 75,000 cases in Fiscal Year 1970 of which 20,186 were diagnosed and reported to health departments.

Cases of syphilis which occur but go untreated cumulate to form a large reservoir of cases needing treatment. This reservoir of cases needing treatment (prevalence), most of which are in the latent stage of disease and are detectable only by means of bloodtests, is currently estimated to number about 510,000.

Gonorrhea is underreported for the same reasons given above for the underreporting of syphilis but the problem of underdiagnosis is more acute in females than males due to the frequent asymptomatic nature of disease in the female. The Venereal Disease Branch estimates that at least 2,000,000 cases of gonorrhea occurred in the United States in Fiscal Year 1970, of which 573,200 were diagnosed and reported to health departments.

Costs of Uncontrolled Syphilis

The statistics presented in Table 1 (below) indicate part of 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.

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 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, 1968*

MAN-YEARS OF SYPHILIS DISABILITY PER YEAR	
Institutionalization for syphilitic insanity	9,626
Disability from syphilitic blindness	4,000
ECONOMIC COSTS OF SYPHILITIC PSYCHOSES AND SYPHILITIC BLINDNESS PER YEAR	
Maintenance of patients with syphilitic psychoses	$40,703,000.
Compensation to syphilitic blind	$ 4,400,000.

*Estimates based on most recent year (1968) 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 number and rates for 1940-1967 have been adjusted to the basis of the Seventh Revision. An adaptation of the *Eighth Revision International Classification of Disease, Adapted for Use in the United States* – was used in 1968 and 1969, and reduced **reported** syphilis deaths by almost **68** percent. The comparability ratio is a measure that estimates the degree of comparability by cause. To make the 1940-1967 data (Table 2, page 5) for syphilis deaths comparable to the 1968-69 data, each of the numbers and death rates for 1940-67 must be multiplied by a comparability ratio of 0.3223. 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 FIRST ADMISSIONS TO MENTAL HOSPITALS WITH PSYCHOSES DUE TO SYPHILIS
UNITED STATES
SELECTED YEARS 1940-1969

Calendar Year	DEATHS DUE TO SYPHILIS*				INFANT DEATHS DUE TO SYPHILIS				FIRST ADMISSIONS**	
		Rate Per 100,000 Pop.				Rate Per 10,000 Live Births				
	Number	Total	White	All other	Number	Total	White	All other	Number	Rate
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	2,434	1.3	1.1	2.7	25	.07	.04	.22	232	.1
1966	2,193	1.1	1.0	2.2	25	.07	.03	.28	226	.1
1967	2,381	1.2	1.1	2.4	15	.04	.02	.15	162	.1
1968	730*	0.4*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	154	.1
1969	510*	0.3*	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

*Mortality numbers and rates for 1940-67 have been adjusted to "Seventh Revision, International Classification of Disease". The "Eighth Revision International Classification of Disease" was used in 1968 and 1969. See Mortality, page 4 for additional comments.

**Rate per 100,000 population. Does not include admissions to Veterans Administration and psychopathic hospitals.

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 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 previous 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. Similiarly, 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 8.

Table 4 shows that syphilis in all stages decreased from 575,593 cases in Fiscal Year 1943 to 87,934 cases in 1970. This decrease in cases is interpreted as indicative of a decrease in prevalence over the last 25 years.

The trend of cases in the primary and secondary stages of syphilis, usually interpreted as paralleling the actual occurrence of syphilis, has changed direction several times during the 27 years these data have been available (Table 4). Primary and secondary syphilis increased during and shortly after World War II to a peak of 106,539 cases in Fiscal Year 1947; cases then decreased rapidly to a low of 6,251 cases in Fiscal Year 1957. After 1957, cases increased rapidly but the increase slowed in 1962 with implementation of renewed nationwide efforts to control the occurrence of syphilis. Cases peaked in 1965, and relatively small decreases occurred thereafter until Fiscal 1970, when the trend changed from a downward to an upward direction again.

The trend of reported cases of gonorrhea in the United States closely followed the trend of early syphilis from Fiscal Year 1941 through Fiscal 1965 in direction but not in magnitude of change. Whereas newly acquired syphilis decreased at the rate of about 40 percent per year in the late nineteen forties and early fifties, gonorrhea decreased at the rate of about 10 percent per year. Around 1960, 50 percent per annum increases were reported in early syphilis but gonorrhea has never increased more than 15 percent per year.

Since 1965, the reported incidence of syphilis has declined but gonorrhea has increased about 15 percent each year. The Venereal Disease Branch believes the difference in trend between gonorrhea and early syphilis, especially since 1965, was due to the intensified efforts to control syphilis which were implemented in 1962.

Reported Cases of Venereal Disease—Continued

Table 5 shows that most of the congenital syphilis which has been reported in recent years is among adults and reflects the high incidence of syphilis 20 or more years ago. Cases diagnosed among infants increased between Fiscal Years 1957 and 1965 in tandem with the increase in acquired (primary and secondary) syphilis but remains at a relatively low level.

Table 6 shows geographic variations in the reported case rates of venereal disease.

Tables 7 and 8 show the age distribution of newly acquired venereal disease. These tables show that the 20-24 year-old age group has the highest risk of acquiring venereal disease; for males, the reported risk of acquiring gonorrhea is higher than for females. The difference between sexes in reported rates of gonorrhea may result from failure to diagnose the disease in females because of the greater frequency of asymptomatic disease in females. The gonorrhea rate for males age 20-24 in Calendar Year 1969 was 2,366 cases per 100,000 males, or one reported case for every 42 males in this age group.

The difference in reported cases and rates between color groups shown in Tables 7 and 8 may be biased because the major minority group in particular tends 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.

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 1941–1970

(Known Military Cases Excluded)

United States

Fiscal Years	SYPHILIS										GONORRHEA		CHANCROID		GRANULOMA INGUINALE		LYMPHO-GRANULOMA VENEREUM	
	All Stages*		Primary and Secondary		Early Latent		Late and Late Latent		Congenital									
	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
1967	103,546	53.2	21,090	10.8	15,618	8.0	62,653	32.2	3,050	1.6	375,606	193.0	787	.4	128	.1	380	.2
1968	98,195	49.9	20,182	10.3	15,379	7.8	58,905	29.9	2,596	1.3	431,380	219.2	827	.4	174	.1	349	.2
1969	96,679	48.1	18,679	9.3	15,399	7.7	59,262	29.5	2,223	1.1	494,227	245.9	959	.5	126	.1	525	.3
1970	87,934	43.8	20,186	10.0	15,425	7.7	49,537	24.6	1,903	0.9	573,200	285.2	1,189	.6	168	.1	587	.3

*Includes "Stage of Syphilis Not Stated."

TABLE 5a

REPORTED CASES OF CONGENITAL SYPHILIS, BY AGE*
UNITED STATES
SELECTED YEARS 1957-1970

Age Group	1957		1965		1969		1970	
	Cases	Percent	Cases	Percent	Cases	Percent	Cases	Percent
0 - 1 Year	180	3.3	373	10.6	277	12.5	300	15.8
1 - 4 Years	79	1.4	59	1.7	57	2.6	44	2.4
5 - 9 Years	190	3.5	44	1.3	25	1.1	13	0.6
10 Years and Over	5,003	91.8	3,029	86.4	1,864	83.8	1,546	81.2
GRAND TOTAL	5,452	100.0	3,505	100.0	2,223	100.0	1,903	100.0

*Approximately 90% of congenital cases are reported by age. Cases not reported by age have been prorated according to known ages.

TABLE 5b

REPORTED CASES OF CONGENITAL SYPHILIS UNDER ONE YEAR OF AGE
Case Rates per 10,000 Live Births**
UNITED STATES
SELECTED YEARS 1957-1970

1957		1965		1969		1970	
Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
180	0.4	373	0.8	277	0.8	300	0.8

**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 6
REPORTED VENEREAL DISEASE CASES AND CASE RATES PER 100,000 POPULATION*
UNITED STATES
(Known Military Cases Excluded)
Fiscal Year 1970

STATE	SYPHILIS				GONORRHEA		OTHER VENEREAL DISEASES	
	All Stages		Primary and Secondary					
	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
Alabama	413	11.8	171	4.9	6,879	196.8	8	.2
Alaska	85	34.1	13	5.2	2,211	888.0	1	.4
Arizona	876	52.6	256	15.4	3,841	230.7	1	.1
Arkansas	807	40.6	264	13.3	6,729	338.8	3	.2
California	10,298	54.0	2,009	10.5	95,334	500.3	118	.6
Colorado	283	13.8	43	2.1	3,618	176.9	5	.2
Connecticut	453	15.2	128	4.3	5,953	199.2	6	.2
Delaware	385	72.2	91	17.1	1,259	236.2	1	.2
Florida	2,839	45.4	1,290	20.6	20,511	327.9	277	4.4
Georgia	3,488	77.0	1,264	27.9	23,911	527.6	395	8.7
Hawaii	66	9.0	8	1.1	975	132.3	1	.1
Idaho	14	2.0	6	.8	1,265	177.4	3	.4
Illinois	5,979	54.4	1,154	10.5	53,319	485.3	41	.4
Indiana	1,594	31.2	464	9.1	7,978	156.2	1	.0
Iowa	620	22.3	33	1.2	4,959	178.4	0	.0
Kansas	1,420	62.3	79	3.5	5,166	226.8	5	.2
Kentucky	999	31.4	144	4.5	4,319	135.8	1	.0
Louisiana	2,140	57.8	742	20.0	10,193	275.1	53	1.4
Maine	171	17.7	14	1.5	930	96.4	0	.0
Maryland	2,766	74.7	400	10.8	13,093	353.8	14	.4
Massachusetts	1,944	35.8	260	4.8	7,499	138.1	3	.1
Michigan	3,562	40.7	581	6.6	19,871	227.1	110	1.3
Minnesota	335	9.1	94	2.5	3,962	107.2	1	.0
Mississippi	489	21.0	217	9.3	6,892	295.8	39	1.7
Missouri	3,479	75.5	258	5.6	13,664	296.3	64	1.4
Montana	51	7.4	3	.4	523	76.0	0	.0
Nebraska	381	26.5	34	2.4	2,584	179.7	1	.1
Nevada	293	65.5	110	24.6	1,597	357.3	42	9.4
New Hampshire	77	10.8	7	1.0	457	64.1	0	.0
New Jersey	4,768	67.3	747	10.5	9,394	132.6	11	.2
New Mexico	783	80.1	200	20.5	2,442	249.9	0	.0
New York	11,100	60.7	3,439	18.8	49,614	271.4	56	.3
North Carolina	1,417	27.9	509	10.0	14,606	287.7	86	1.7
North Dakota	44	7.3	12	2.0	387	64.1	0	.0
Ohio	3,888	36.3	412	3.8	24,175	225.5	60	.6
Oklahoma	1,574	62.2	95	3.8	4,860	192.2	5	.2
Oregon	198	9.8	35	1.7	6,651	328.0	8	.4
Pennsylvania	4,340	36.8	357	3.0	16,434	139.5	35	.3
Rhode Island	351	39.7	59	6.7	828	93.7	1	.1
South Carolina	1,075	41.1	447	17.1	11,365	434.3	64	2.4
South Dakota	88	13.5	29	4.4	1,097	167.7	0	.0
Tennessee	785	19.9	227	5.7	14,732	373.0	34	.9
Texas	6,044	55.0	2,522	23.0	41,561	378.2	90	.8
Utah	117	11.2	15	1.4	876	84.1	2	.2
Vermont	22	5.0	2	.5	431	98.4	0	.0
Virginia	1,328	29.6	270	6.0	13,920	310.3	32	.7
Washington	208	6.2	57	1.7	8,347	250.7	3	.1
West Virginia	837	46.0	23	1.3	1,522	83.7	2	.1
Wisconsin	912	21.6	72	1.7	6,687	158.1	4	.1
Wyoming	68	21.5	5	1.6	210	66.2	0	.0
U.S. Totals**	87,934	43.8	20,186	10.0	573,200	285.2	1,944	1.0

* Rates less than .05 are shown as .0
** Includes District of Columbia Cases.

TABLE 7

PRIMARY AND SECONDARY SYPHILIS
MORBIDITY AND AGE-SPECIFIC CASE RATES PER 100,000 POPULATION BY AGE-GROUPS, COLOR, AND SEX
UNITED STATES

Calendar Years 1956, 1966-1969

MORBIDITY											AGE-SPECIFIC CASE RATES PER 100,000 POPULATION										
		White			All Other			Total			White			All Other			Total				
AGE	YEAR	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	YEAR	AGE
0-14	1956	4	6	10	13	55	68	17	61	78	.0	.0	.0	.4	1.7	1.0	.1	.2	.2	1956	0-14
	1966	5	7	12	64	166	230	69	173	242	.0	.0	.0	1.4	3.7	2.6	.2	.6	.4	1966	
	1967	8	2	10	68	161	229	76	163	239	.0	.0	.0	1.5	3.5	2.5	.2	.6	.4	1967	
	1968	7	12	19	63	167	230	70	179	249	.0	.0	.0	1.4	3.6	2.5	.2	.6	.4	1968	
	1969	24	13	37	72	149	221	96	162	258	.1	.1	.1	1.5	3.2	2.4	.3	.6	.4	1969	
15-19	1956	127	139	266	400	497	897	527	636	1,163	2.8	2.8	2.8	59.3	68.7	64.2	10.1	11.3	10.7	1956	15-19
	1966	239	227	466	1,492	1,888	3,380	1,731	2,115	3,846	3.2	3.0	3.1	133.2	163.6	148.6	20.0	24.0	22.1	1966	
	1967	255	190	445	1,551	1,810	3,361	1,806	2,000	3,806	3.5	2.5	3.0	135.7	151.7	143.9	21.4	22.8	22.1	1967	
	1968	253	189	442	1,359	1,623	2,982	1,612	1,812	3,424	3.3	2.5	2.9	113.7	131.4	122.7	18.3	20.3	19.3	1968	
	1969	287	251	538	1,338	1,547	2,885	1,625	1,798	3,423	3.7	3.2	3.4	109.4	121.2	115.4	18.1	19.7	18.9	1969	
20-24	1956	399	138	537	739	482	1,221	1,138	620	1,758	10.9	3.0	6.4	136.1	72.4	101.1	27.0	11.6	18.4	1956	20-24
	1966	749	325	1,074	2,760	2,199	4,959	3,509	2,524	6,033	14.9	5.3	9.7	382.8	256.0	313.7	61.2	36.2	47.5	1966	
	1967	798	368	1,166	2,825	2,161	4,986	3,623	2,529	6,152	14.8	5.6	9.7	370.2	236.4	297.3	59.0	33.6	45.0	1967	
	1968	787	317	1,104	2,468	1,834	4,302	3,255	2,151	5,406	14.6	4.6	9.0	320.9	190.6	248.5	52.9	27.6	38.8	1968	
	1969	949	441	1,390	2,244	1,661	3,905	3,193	2,102	5,295	16.7	6.2	10.9	270.0	160.9	209.6	49.0	25.8	36.1	1969	
25-29	1956	394	104	498	464	301	765	858	405	1,263	8.3	2.0	5.0	81.1	43.5	60.5	16.1	6.9	11.3	1956	25-29
	1966	656	217	873	2,179	1,287	3,466	2,835	1,504	4,339	14.0	4.2	8.9	350.9	176.5	256.6	53.3	25.8	38.9	1966	
	1967	679	204	883	2,127	1,171	3,298	2,806	1,375	4,181	13.7	3.8	8.6	328.2	155.5	235.4	50.0	22.6	35.7	1967	
	1968	742	200	942	1,741	1,050	2,791	2,483	1,250	3,733	14.1	3.5	8.6	258.3	133.9	191.4	41.8	19.4	30.1	1968	
	1969	938	248	1,186	1,592	980	2,572	2,530	1,228	3,758	17.1	4.2	10.5	223.6	120.1	245.9	40.9	18.4	29.2	1969	
30-39	1956	461	130	591	476	291	767	937	421	1,358	4.5	1.2	2.8	41.8	22.1	31.2	8.2	3.4	5.7	1956	30-39
	1966	913	243	1,156	2,134	1,195	3,329	3,047	1,438	4,485	9.7	2.4	5.9	181.5	84.0	128.1	28.7	12.5	20.3	1966	
	1967	877	215	1,092	2,060	1,139	3,199	2,937	1,354	4,291	9.2	2.1	5.6	174.3	80.0	122.8	27.5	11.8	19.4	1967	
	1968	1,019	216	1,235	1,791	957	2,748	2,810	1,173	3,983	10.9	2.2	6.4	155.2	67.2	106.6	26.8	10.3	18.2	1968	
	1969	1,278	273	1,551	1,640	889	2,529	2,918	1,162	4,080	13.6	2.7	8.0	139.8	62.0	97.0	27.7	10.2	18.6	1969	
40-49	1956	215	54	269	153	78	231	368	132	500	2.3	.5	1.4	15.1	6.9	10.8	3.5	1.2	2.3	1956	40-49
	1966	448	111	559	810	383	1,193	1,258	494	1,752	4.3	1.0	2.6	70.4	29.0	48.3	10.9	4.0	7.3	1966	
	1967	489	116	605	733	371	1,104	1,222	487	1,709	4.7	1.0	2.8	63.4	27.5	44.1	10.6	3.9	7.1	1967	
	1968	482	117	599	652	332	984	1,134	449	1,583	4.6	1.1	2.8	55.9	24.3	38.8	9.8	3.6	6.6	1968	
	1969	603	131	734	667	271	938	1,270	402	1,672	5.8	1.2	3.4	56.7	19.5	36.6	10.9	3.2	6.9	1969	
50 +	1956	120	29	149	88	38	126	208	67	275	.7	.2	.4	6.0	2.5	4.2	1.1	.3	.7	1956	50 +
	1966	234	40	274	314	129	443	548	169	717	1.2	.2	.6	16.5	6.0	10.9	2.6	.7	1.5	1966	
	1967	222	51	273	309	93	402	531	144	675	1.1	.2	.6	16.2	4.2	9.8	2.5	.6	1.4	1967	
	1968	224	47	271	290	83	373	514	130	644	1.1	.2	.6	15.0	3.7	8.9	2.3	.5	1.3	1968	
	1969	264	51	315	250	79	329	514	130	644	1.3	.2	.7	12.7	3.4	7.7	2.3	.5	1.3	1969	
Total	1956	1,720	600	2,320	2,333	1,742	4,075	4,053	2,342	6,395	2.4	.8	1.6	26.7	18.6	22.5	5.0	2.8	3.9	1956	Total
	1966	3,244	1,170	4,414	9,753	7,247	17,000	12,997	8,417	21,414	3.9	1.3	2.6	87.0	59.8	72.9	13.9	8.4	11.1	1966	
	1967	3,328	1,146	4,474	9,673	6,906	16,579	13,001	8,052	21,053	4.0	1.3	2.6	85.0	55.8	69.8	13.8	8.0	10.8	1967	
	1968	3,514	1,098	4,612	8,362	6,045	14,407	11,876	7,143	19,019	4.2	1.2	2.7	72.6	48.0	59.7	12.5	7.0	9.6	1968	
	1969	4,343	1,408	5,751	7,803	5,576	13,379	12,146	6,984	19,130	5.1	1.6	3.3	66.5	43.3	54.4	12.6	6.8	9.6	1969	

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 1966-1969. Rates are based on cases excluding Alaska and Hawaii for 1956. For 1966-1969 rates are based on numbers for the United States, including Alaska and Hawaii.

GONORRHEA

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

UNITED STATES

Calendar Years 1956, 1966-1969

		MORBIDITY									AGE-SPECIFIC CASE RATES PER 100,000 POPULATION										
		White			All Other			Total			White			All Other			Total				
AGE	YEAR	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	YEAR	AGE
0-14	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	0-14
	1966	226	839	1,065	1,181	2,000	3,181	1,407	2,839	4,246	.9	3.4	2.1	26.2	44.5	35.3	4.6	9.6	7.1	1966	
	1967	283	877	1,160	1,419	2,216	3,635	1,702	3,093	4,795	1.1	3.5	2.3	31.0	48.7	39.8	5.6	10.5	8.0	1967	
	1968	400	1,060	1,460	1,828	2,516	4,344	2,228	3,576	5,804	1.6	4.3	2.9	39.6	54.9	47.2	7.3	12.2	9.7	1968	
	1969	448	1,200	1,648	1,835	2,770	4,605	2,283	3,970	6,253	1.8	4.9	3.3	39.4	59.9	49.6	7.6	13.6	10.5	1969	
15-19	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	3,076.0	2,430.4	2,742.1	462.9	372.0	415.7	1956	15-19
	1966	10,639	8,505	19,144	38,708	18,180	56,888	49,347	26,685	76,032	141.6	111.2	126.3	3,456.1	1,575.4	2,501.7	571.5	303.2	436.1	1966	
	1967	12,988	10,767	23,755	45,903	21,732	67,635	58,891	32,499	91,390	178.4	141.8	159.7	4,016.0	1,821.6	2,895.3	699.1	369.9	531.0	1967	
	1968	16,259	13,608	29,867	52,813	25,725	78,538	69,072	39,333	108,405	213.5	176.6	194.9	4,419.5	2,083.0	3,232.0	783.8	439.9	610.6	1968	
	1969	20,424	18,295	38,719	60,009	30,343	90,352	80,433	48,638	129,071	263.3	232.8	248.0	4,906.7	2,378.0	3,615.5	895.8	532.4	712.5	1969	
20-24	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	7,886.2	2,714.1	5,041.2	1,255.8	406.8	781.8	1956	20-24
	1966	26,857	10,463	37,320	69,676	19,343	89,019	96,533	29,806	126,339	535.7	171.2	335.5	9,663.8	2,251.8	5,630.6	1,683.5	427.6	994.4	1966	
	1967	32,820	13,645	46,465	79,586	22,826	102,412	112,406	36,471	148,877	610.3	206.2	387.4	10,430.7	2,497.4	6,106.9	1,830.4	484.3	1,088.9	1967	
	1968	41,155	16,799	57,954	90,474	26,057	116,531	131,629	42,856	174,485	764.4	245.9	474.4	11,765.1	2,708.6	6,732.0	2,139.3	549.9	1,251.1	1968	
	1969	51,629	21,799	73,428	102,631	31,162	133,793	154,260	52,961	207,221	907.5	306.1	573.2	12,350.3	3,019.6	7,181.6	2,366.0	649.5	1,412.2	1969	
25-29	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	5,125.7	1,372.5	3,071.0	692.6	198.6	434.2	1956	25-29
	1966	16,325	4,087	20,412	41,222	8,629	49,851	57,547	12,716	70,263	347.7	80.0	208.3	6,638.0	1,183.7	3,689.9	1,082.3	217.9	630.0	1966	
	1967	19,795	4,853	24,648	46,409	9,896	56,305	66,204	14,749	80,953	398.4	91.1	239.3	7,161.9	1,314.2	4,018.9	1,178.6	242.5	691.9	1967	
	1968	24,059	5,814	29,873	49,991	10,448	60,439	74,050	16,262	90,312	456.5	102.8	273.4	7,417.1	1,332.7	4,145.3	1,245.8	252.6	729.3	1968	
	1969	29,652	7,504	37,156	52,990	12,111	65,101	82,642	19,615	102,257	541.7	127.7	327.4	7,442.4	1,484.2	4,260.5	1,335.7	293.2	794.1	1969	
30-39	1956	7,537	2,251	9,788	24,030	6,969	30,899	31,567	9,120	40,687	73.5	20.3	45.9	2,110.3	521.7	1,259.0	277.4	73.7	171.5	1956	30-39
	1966	12,667	2,824	15,491	31,619	6,493	38,112	44,286	9,317	53,603	134.3	28.0	79.4	2,688.7	456.6	1,467.0	417.4	81.0	242.3	1966	
	1967	14,155	3,033	17,188	33,588	6,196	39,784	47,743	9,229	56,972	149.1	30.3	88.1	2,841.6	435.1	1,526.6	447.2	80.7	257.7	1967	
	1968	16,778	3,567	20,345	35,432	6,486	41,918	52,210	10,053	62,263	179.6	35.8	105.4	3,070.4	455.2	1,625.4	497.4	88.3	284.5	1968	
	1969	19,457	4,034	23,491	35,380	6,721	42,101	54,837	10,755	65,592	207.6	40.5	121.5	3,016.2	468.7	1,614.9	520.0	94.4	298.9	1969	
40-49	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	40-49
	1966	4,323	950	5,273	9,483	1,341	10,824	13,806	2,291	16,097	41.8	8.6	24.7	824.6	101.6	438.2	120.0	18.6	67.5	1966	
	1967	4,758	977	5,735	9,461	1,419	10,880	14,219	2,396	16,615	45.7	8.8	26.7	817.7	105.3	434.5	122.9	19.3	69.2	1967	
	1968	5,373	1,135	6,508	9,915	1,461	11,376	15,288	2,596	17,884	51.4	10.2	30.2	849.6	106.9	448.9	131.6	20.8	74.2	1968	
	1969	5,902	1,250	7,152	9,827	1,325	11,152	15,729	2,575	18,304	56.4	11.3	33.2	835.6	95.3	434.6	135.2	20.6	75.9	1969	
50 +	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	50 +
	1966	1,708	503	2,211	2,410	537	2,947	4,118	1,040	5,158	8.8	2.2	5.2	126.6	25.1	72.8	19.2	4.2	11.1	1966	
	1967	1,877	430	2,307	2,445	482	2,927	4,322	912	5,234	9.6	1.8	5.4	127.8	21.9	71.2	20.0	3.6	11.1	1967	
	1968	2,027	457	2,484	2,487	419	2,906	4,514	876	5,390	10.2	1.9	5.7	128.3	18.7	69.5	20.6	3.4	11.3	1968	
	1969	2,347	506	2,853	2,744	577	3,321	5,091	1,083	6,174	11.6	2.1	6.4	139.5	25.1	77.8	22.9	4.1	12.7	1969	
Total	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	1,409.5	600.0	990.9	192.4	81.7	135.7	1956	Total
	1966	72,745	28,171	100,916	194,299	56,523	250,822	267,044	84,694	351,738	88.1	32.1	59.2	1,734.2	466.4	1,075.4	284.7	84.8	181.6	1966	
	1967	86,676	34,582	121,258	218,811	64,767	283,578	305,487	99,349	404,836	104.2	38.9	70.5	1,922.6	523.2	1,193.5	323.2	98.2	206.9	1967	
	1968	106,051	42,440	148,491	242,940	73,112	316,052	348,991	115,552	464,543	126.6	47.3	85.6	2,110.0	580.0	1,310.3	366.2	113.0	235.1	1968	
	1969	129,859	54,588	184,447	265,416	85,009	350,425	395,275	139,597	534,872	153.6	60.3	105.4	2,260.6	660.6	1,423.9	410.5	135.0	267.9	1969	

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 1966-1969. Rates are based on cases excluding Alaska and Hawaii for 1956. For 1966-1969 rates are based on numbers for the United States, including Alaska and Hawaii.

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 9 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 9 are based only on infectious syphilis 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 9
HEALTH DEPARTMENT CASEFINDING ACTIVITIES, UNITED STATES*
SELECTED FISCAL YEARS 1964–1970

	1964	1966	1967	1968	1969	1970
Number of positive diagnostics investigated.	241,016	257,009	231,517	223,939	232,264	204,846
Number of contacts investigated.	192,580	183,634	176,583	167,432	169,893	174,516
Contact Investigation Indices:						
Contact Index	3.86	3.59	3.40	3.23	3.20	3.15
Epidemiologic Index	1.13	1.13	1.07	1.01	.98	1.10
Brought-to-Treatment Index	.46	.45	.44	.41	.41	.40
Lesion-to-Lesion Index	.31	.30	.28	.26	.24	.26

*For the years 1964 through 1969 the Contact Investigation Indices were based on data submitted on 90 percent or more of the cases reported by the V.D. Clinics in the United States. In 1970 the indices were based on 75 percent of U.S. Clinic Cases.

Treatment of Syphilis

CONGENITAL SYPHILIS

For the treatment of very small infants with congenital syphilis, aqueous procaine penicillin G is the preferred form of penicillin, the schedule consisting of 100,000 u/kg. of body weight in 10 equally divided daily doses. Benzathine penicillin G in a single injection of 50,000 u/kg. is recommended for all other children under 12 years of age or under 70 pounds in weight. Older or heavier children are generally treated with schedules recommended for adults in comparable stages of 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 three-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 or tetracycline in a total dosage of 30-40 grams administered over a 10-15 day period 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 the absence of relapse or reinfection, a woman adequately treated for syphilis will not require further treatment in the event of pregnancy. Those women who are allergic to penicillin should receive erythromycin in a total dosage of 30-40 grams over a 10-15 day period. Tetracycline is not recom-

mended in pregnancy. Especially careful followup is indicated for both mother and child after therapy with alternate antibiotics.

LATENT SYPHILIS

If no spinal fluid examination is done, treatment must encompass the possibility of asymptomatic neurosyphilis. In this case 6.0 – 9.0 million units of benzathine penicillin G, given in doses of 3.0 million units (1.5 in each buttock each session) at 7 day intervals is recommended. In patients who have a nonreactive spinal fluid a single injection of 2.4 million units of benzathine penicillin G suffices.

LATE SYPHILIS

This includes asymptomatic neurosyphilis, cardiovascular syphilis and late benign (gummatous) syphilis. Benzathine penicillin G, PAM, or aqueous procaine penicillin G in a dosage of 6.0 to 9.0 million units total are sufficient. Benzathine penicillin is given in 3.0 million unit doses at 7 day intervals. PAM is given as 1.2 million unit doses at 3 day intervals and aqueous procaine penicillin G is given in daily dosage of 600,000 units. No additional benefits from dosages in excess of 9.0 million units have been demonstrated.

Treatment of Gonorrhea

The treatment of gonorrhea 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. Treatment schedules presently recommended are as follows:

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

Uncomplicated gonorrhea in women: Aqueous procaine penicillin G, 4,800,000 units IM in two injection sites 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 or culture is still positive. In uncomplicated gonorrhea in the female retreatment is indicated if followup cultures 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 administered as an initial oral dose of 1.5 grams followed by 0.5 grams every 6 hours for 4 days, a total dosage of 9 grams. This dosage, however, is inadequate to abort incubating syphilis.

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 Branch is concerned with the frequency and severity of reactions to penicillin therapy. Through the cooperation of venereal disease clinics four studies at 5-year intervals (1954, 1959, 1964, and 1969) have been conducted to determine their frequency.

The 1959, 1964 and 1969 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, 8.0/1,000 treated in 1964, and 6.2/1,000 treated in 1969. The increase over 1954 is attributed mainly to the delay in dismissing patients after treatment.

The decrease observed in the most recent survey period is probably attributable to better history taking and the availability of more highly purified penicillin products.

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 0.36/1,000 patients. The only death reported during a study period occurred in 1964.