

VD FACT SHEET

No. 1  
Jan. 1947

INCIDENCE

1. Definition of Incidence used by the VD Division:

The number of cases occurring in a stated area during a specific time period, usually one year.

2. Estimated number of new cases occurring in the U.S. (1945-1946)

Total Syphilis . . . . .	250,000
Acquired syphilis. . . . .	240,000
Congenital syphilis. . . . .	10,000
Gonorrhoea . . . . .	1,200,000

PREVALENCE

Definition: The total number of cases of a disease existing in a stated area at any stated point of time.

1. In the first two million selectees examined, the prevalence rate for syphilis based on serologic testing was 45.3 per 1,000 men tested, the rate for white males was 17.4 per 1,000; for non-white males 252.3 per 1,000.
2. In the age group 20-25 years the prevalence rate among non-white males was 19 times greater than among white males. In the 30-35 year age group the prevalence rate among non-white males was only 9 times greater than among white males (See following table):

Age Group	Prevalence Rate per 1,000 tested		
	White	Non-white	Total
21-25	10.1	191.2	30.1
26-30	20.9	293.7	54.4
31-35	37.7	357.2	83.2
Total	17.4	252.3	45.3

3. The prevalence of syphilis among examined contacts of primary-secondary syphilis is approximately 51 percent for whites and 60 percent for non-whites.
4. It is estimated that about 3 million persons in the United States have syphilis.

REPORTED MORBIDITY

1. Diagnosed cases reported for the first time in States and Territories in Fiscal year 1946 (by stage of disease and quarter)

Disease	Period				Distribution of reported cases			
	1945 July-Sept.	1945 Oct.-Dec.	1946 Jan.-Mar.	1946 Apr.-June	Total Fiscal '46	Percent male	Per- cent White	% rept. by Priv. Phys.
<b>Syphilis</b>								
Prim-Sec.	19,753	21,258	27,134	28,374	96,519	54.1	44.4	33.6
E. latent	26,963	25,076	29,640	28,999	110,678	44.4	30.5	26.9
L. latent	32,502	29,529	33,554	33,526	129,111	53.5	44.6	41.7
Congenital	3,453	3,176	3,683	3,858	14,170	43.7	51.5	23.3
Not Stated	5,205	4,542	5,430	6,159	21,336	51.9	46.6	55.1
Gonorrhoea	84,482	85,028	100,616	104,936	375,062	60.7	47.4	25.8
Chancroid	1,513	1,590	1,969	2,307	7,379	78.8	25.5	8.6
Granuloma	524	533	582	587	2,226	58.7	12.7	27.2
Lymphogranu.	692	567	662	797	2,718	67.4	12.0	13.7

2. Diagnosed Cases of VD reported for the first time in States and Territories Fiscal Years 1941 - 1946

S y p h i l i s						
	Primary & Secondary	Early Latent	Late and late latent	Con- genital	Not Stated	Gonorrhoea
1941	67,314	108,335	201,144	17,870	73,973	198,432
1942	77,725	116,031	206,351	18,922	70,143	220,432
1943	87,534	151,316	250,761	19,555	69,981	281,980
1944	81,137	126,446	206,860	15,458	44,092	311,795
1945	77,978	104,196	148,310	15,303	24,137	295,896
1946*	96,452	110,679	129,105	14,181	21,396	375,063

Diagnosed Cases of VD reported for the first time in Continental U.S. Fiscal Years 1941 - 1946

1941	66,953	108,129	200,395	17,510	73,551	191,894
1942	75,106	113,972	202,202	16,925	68,942	194,315
1943	85,267	149,466	247,093	17,579	68,483	276,768
1944	79,018	123,102	200,734	13,108	41,693	304,441
1945	76,336	100,401	144,566	12,912	23,875	287,196
1946	95,187	107,363	125,861	12,106	21,313	367,322

\* Differences from preceding table are due to late corrections received, not yet made in quarterly breakdown. Preceding table will be changed when final corrections are received.

## MORTALITY\*\* AND MENTAL HOSPITAL ADMISSIONS

	Syphilis Mortality rates per 100,000 population	Infant Mortality rates due to syphilis per 1,000 live births	Admissions rates to mental hospitals due to syphilis per 100,000 population
1933	15.1	.79	-
1934	15.9	.74	-
1935	15.4	.70	7.0
1936	16.2	.73	7.1
1937	16.1	.69	7.1
1938	15.9	.63	7.2
1939	15.0	.57	7.3
1940	14.4	.53	6.4
1941	13.3	.41	6.5
1942	12.2	.30	6.4
1943	12.1	.25	6.0
1944	11.3	.27	5.8

Number of deaths reported and number of mental hospital admissions reported to syphilis, 1944

	Total deaths			Infant deaths	Mental hospital admissions
	Total	White	Non-white		
Syphilis-All forms	14,916	9,415	5,501	746	7,727
Paresis	4,628	3,060	1,568		6,605
Tabes dorsalis	535	471	64		
Aortic aneurysm	2,807	1,977	830		
All other forms	6,946	3,907	3,039		1,122

R. T. C. DATA

1. From April 1942 through September 1946, approximately 380,000 people have been admitted for treatment in the various Rapid Treatment Centers and In-patient care facilities.
2. In September 1946 there were 65 Rapid Treatment Center Facilities of which 23 were Bed Contract Facilities.
3. Since January 1946 the following R. T. C. new admissions, readmissions and cost per patient day have been reported.

\*\* Based on death certificates reporting syphilis as cause of death.

Month	New Admissions			Read- missions	% syphilis admissions contributed by read- missions for syphilis	Cost per patient day
	Primary- secondary	Early latent	Gonorrhea not w/syph			
Jan.	4,706	4,402	1,460	1,001	6.1	\$4.24
Feb.	4,244	4,059	1,244	974	6.9	4.31
Mar.	4,720	4,105	1,315	1,103	7.7	4.21
April	4,950	3,974	1,333	965	7.5	4.76
May	5,095	3,858	1,331	1,068	8.0	4.41
June	4,622	3,065	1,015	918	7.9	5.24
July	5,073	3,356	926	1,064	9.4	4.88
Aug.	5,429	4,054	1,037	1,185	8.1	4.53
Sept.	4,863	3,844	841	1,210	9.1	4.60

## PENICILLIN IN THE TREATMENT OF SYPHILIS

### Early Syphilis

Only 25 percent of patients with early syphilis admitted to clinics for routine therapy receive the minimum protective regimen of 20 arsenical injections together with heavy metals.

Under present penicillin schedules for in-patients (ranging in duration from 4 to 14 days), 99 percent complete treatment.

Comparative effectiveness of penicillin and  
massive arsenotherapy in secondary syphilis

Results 12-15 months posttreatment	Penicillin therapy 300,000-2,400,000 units (with or without other drugs)	Massive arsenotherapy (Intravenous drip and multiple injections)
Total cases observed	2566	504
Percent retreated	22	12
Percent positive	20	21
Percent negative	58	67

Comparative toxicity of penicillin and massive  
arsenotherapy (all diagnoses)

	Penicillin therapy (with or without other drugs)	Massive arsenotherapy
Total cases reported	158,916	12,405
Severe reactions per 1,000	5.32	48.13
Deaths per 1,000	.14	1.45

### Congenital Syphilis

There is a significantly greater percentage of patients with satisfactory progress among children treated at less than 6 months of age than among children treated at 6 months to two years of age or children treated at two years of age or over.

Age of child at time of treatment	Satisfactory progress	Unsatisfactory progress
	6 to 18 months posttreatment	6 to 18 months posttreatment
Less than 6 months	95.7 percent	4.3 percent
6 months - 1 year 11 months	75.0 "	25.0 "
2 years and over	61.4 "	38.6 "

### Syphilis in Pregnancy

Penicillin therapy among pregnant syphilitic women is equally effective in preventing congenital syphilis when given in the third trimester as when given in the second or first trimester.

Penicillin therapy administered as late as the third trimester is more than seven times as effective as weekly injections of arsenicals and heavy metal started after the fifth month of pregnancy; more effective than routine injections of 10 or more arsphenamine and 10 or more heavy metal started before the fifth month.

Outcome of pregnancy by gestation period  
at time of mother's treatment

Duration of pregnancy at time of mother's treatment with penicillin	Percent of total live births		
	Congenital syphilis	Non-syphilitic	Indeterminate
First trimester	3.3	80.0	16.7
Second trimester	2.9	74.3	22.9
Third trimester	3.5	78.9	17.5
Conception occurred after treatment	1.1	69.3	29.5

## PENICILLIN IN THE TREATMENT OF GONORRHEA

Two hour schedule - Na P aqueous

200,000 units dissolved in 6 cc. of water in three intramuscular injections:

0 hour	-	50,000 units (1.5 cc)
1 hour	-	50,000 units (1.5 cc)
2 hours	-	100,000 units (3 cc)

Cure\* - 94 percent

Three-hour schedule - Na P aqueous

200,000 units dissolved in 6 cc. of water in four intramuscular injections:

0 hour	-	40,000 units (1.2 cc)
1 hour	-	40,000 units (1.2 cc)
2 hours	-	40,000 units (1.2 cc)
3 hours	-	80,000 units (2.4 cc)

Cure\* - 96 percent.

Single injection - Ca P in POB

200,000 units in peanut oil and 4.8% beeswax

Cure\* - 92 percent

\* Clinically and bacteriologically free of infection, i.e., without signs or symptoms and with three or more cultures - all negative - during the observation period.