

# Public Health Reports

Vol. 66

MAY 11, 1951

No. 19

## Physical Status of Men Examined Through Selective Service in World War II

By MARCUS S. GOLDSTEIN, Ph. D.\*

Large numbers of young men are currently being called up by Selective Service for physical examinations, and again a general mobilization of manpower may become necessary in the national defense. The experiences of the last war with reference to rejections for physical or mental defects, specific causes for rejection, and related matters indicate what may be expected in another national emergency. A résumé of these findings may stimulate medical and public health measures commensurate with the needs and urgency of the time.

### Selective Service

#### *General Organization*

The Selective Training and Service Act became law September 6, 1940. National headquarters of the Selective Service System<sup>1</sup> in Washington was responsible for formulating policies, for transmitting to State offices the calls for men made by the armed forces, and for serving in general as a coordinating agency. State headquarters of Selective Service carried out the same general functions within each State. The burden of registration and classification of men for service in the armed forces rested with 6,443 local boards throughout the country. Each local board consisted of not less than three responsible citizens who represented a county or an area of approximately 30,000 population and were appointed by the Governor of each State.

#### *Medical Organization*

The purpose of medical examinations in Selective Service is best expressed in one of its own publications (1):

The medical program of the Selective Service System during World War II was based on the need for selection of mentally alert and physically fit men who could

\*Public Health Administrator, Division of Public Health Methods, Public Health Service.

<sup>1</sup> The Selective Service System has published a comprehensive report, in three volumes, on Physical Examination of Selective Service Registrants (1-3) from which much of the present paper is derived.

make use of the tools of modern warfare . . . to assure final victory. Concomitant with this need was the obligation of all who controlled this selection to protect from the rigorous demands of military life men who might be able to live useful and normal civilian lives but whose physical or mental defects would almost inevitably make them liabilities to the armed services under conditions of military life. The fulfillment of this obligation, both to the armed forces and to the men whose health and efficiency depended on the decisions made in the selective process, devolved largely upon the medical organization of Selective Service.

One or more physicians were assigned to each State branch of Selective Service by the President upon recommendation of the Governor. These medical officers recommended physicians for appointment as examining physicians for local boards and as members of medical advisory boards. At least one examining physician was appointed to each local board. No physician could conduct the physical examination of a close relative or of anyone connected in a business capacity with the physician. The examining physician could not be a member of the local board itself.

Specialists were appointed to serve as members of medical advisory boards. These advisory boards were established in broad population areas to reexamine registrants whose physical fitness for military service seemed doubtful to the physicians of the local boards.

In the period, November 1940 to June 1946, a total of 44,120 physicians served at one time or another, without compensation, as examiners on local boards. Of 8,314 physicians appointed on or before November 18, 1940, 5,153, or 62 percent, were still serving on June 30, 1946.

On March 13, 1941, provision was made through Selective Service to add examining dentists to the medical personnel of each local board, much in the same manner as that for examining physicians.

### *The Physical Examination*

Between November 1940 and December 1941, the peacetime period of Selective Service, the examining physicians of the local boards were instructed to make a complete physical examination of each registrant referred for examination and to record all defects, minor as well as those which were disqualifying. At the end of the physical examination and after the results of serological tests for syphilis were ascertained, the examining physician or medical advisory board chairman advised the local board whether the registrant was qualified for general or limited military service, respectively, or was disqualified for any form of service under the current physical standards set by the Army. Registrants forwarded for induction were reexamined by Army medical boards comprising Army reserve medical officers and civilian physicians. The final decision as to acceptance or rejection of the registrants selected by the local board for induction was made at the induction stations by the Army medical examiners.

Beginning January 1, 1942, shortly after the declaration of war, local examining physicians were required to ascertain only the readily detectable defects which would make the registrants altogether unfit for military service or fit for limited service only. A "List of Defects" (1, p. 249) was issued to the physicians as a guide in this procedure. The only major change in the following 2-year period was that, beginning in August 1942, the local boards no longer placed men in the limited-service group; men who would earlier have come under this category were now subject to examination at induction stations and were inducted on a quota basis.<sup>2</sup>

### *Classification*

Two classifications were based on physical qualifications, namely, class I for registrants considered qualified, and class IV for those unacceptable for induction into military service:

*Class I-A.* Included men acceptable for general military service. This classification was applicable to men before a physical examination, when deferment was not allowed, as well as to nondeferred men receiving a physical examination and still considered acceptable.

*Class I-B.* Included registrants found to have defects upon physical examination which made them acceptable for limited service only. This group was considered a reservoir which could be utilized as the need arose. Shortly after the outbreak of war, physical standards of the Army were lowered in regard to teeth and eye requirements, and many in class I-B became acceptable for general military service; others in this class, still not acceptable, were placed in the new class I-A remediable.

*Class I-A Remediable.* Established February 26, 1942, this class included registrants certified by the armed forces as acceptable for general military service if and when their remediable defects were corrected. The classification gradually disappeared as the armed forces inducted men with certain remediable defects for correction within the service. Men in class I-A remediable who were not inducted were eventually placed in class IV-F. Although officially discontinued in August 1942, class I-A remediable continued to appear on physical examination reports until December 1943.

*Class I-A (L).* This classification was established in July 1943 to designate men found acceptable for limited service after examination at the induction stations. Such men were sent home but could be called for induction on special demands for limited service personnel.

*Class IV-F.* Men unconditionally rejected as "physically, mentally, or morally unfit."

### *Deferment*

Deferment from military service during the war on grounds other than physical disqualification was allowed mainly on account of occupation in industry or agriculture essential to the war effort (class II), dependency (class III), and age of registrant, or a combination of these considerations. Indeed, Selective Service adopted three basic principles in this regard: (1) a plan for deferments should be formulated

<sup>2</sup> On a basis of not more than 10 percent of registrants accepted, by color, at any induction station on any given day. In February 1943, the quota basis was restricted to not more than 5 percent.

**Table 1. Occupational deferments by Selective Service at various periods of World War II<sup>1</sup>**

Date	Number of registrants			Percent of registrants		
	Total	Industry <sup>2</sup>	Agriculture <sup>3</sup>	Total	Industry <sup>2</sup>	Agriculture <sup>3</sup>
Dec. 31, 1942 <sup>4</sup> .....	1, 244, 140	1, 051, 776	192, 364	100. 0	84. 5	15. 5
Dec. 1, 1943.....	3, 833, 652	2, 194, 424	1, 639, 228	100. 0	57. 2	42. 8
Dec. 1, 1944.....	5, 765, 926	4, 257, 639	1, 508, 287	100. 0	73. 8	26. 2
Aug. 1, 1945.....	4, 709, 326	3, 444, 229	1, 265, 097	100. 0	73. 1	26. 9

<sup>1</sup> Source: Selective Service Monogr. 7 (4).

<sup>2</sup> Classes II-A and II-B.

<sup>3</sup> Classes II-C and III-C.

<sup>4</sup> This period included men aged 18-44; all other periods refer to men aged 18-37.

to maintain the necessary military and civilian balance in manpower; (2) no blanket deferments should be granted and no deferment should of necessity be permanent; (3) in general, deferments should be granted before and not after physical examination, so that the count of men in physically examined classes at any time would serve as an inventory of potential military manpower available (1).

*Occupation.* The need for men to produce the equipment and supplies for modern warfare was perhaps as great as the need for men in the armed forces. A fairly liberal occupational deferment policy was in effect, therefore, particularly in regard to men in agriculture, until 1944. At this time the demands for younger men by the armed forces compelled Selective Service to review and reclassify all registrants under 26 years of age deferred in industry, and later, in agriculture.

Table 1 gives some idea of the number of men deferred in industry and agriculture at various periods of the war.<sup>3</sup> On August 1, 1945, total occupational deferments in relation to total men registered in Selective Service at that time were: white, 22.3 percent; Negro, 13.0 percent.<sup>4</sup>

The age factor in occupational deferments is of special significance in regard to rejection rates. During the period when occupational deferments reached a numerical peak in December 1944, more than 90 percent of the men deferred on account of occupation at this time were 26 or over, and almost three-fourths were 30-37 years old (table 2). Noteworthy is the relatively large number of men 18-25 years old deferred in agriculture at this time, in contrast to about 3 percent of men of this age deferred in industry.

According to Selective Service data, therefore, most of the occupationally deferred men, in agriculture as well as in industry, were 30 years and over and, as will be seen subsequently, rejection rates were

<sup>3</sup> A relatively high proportion of the occupational deferments among Negro registrants was in agriculture: December 1942, 32.9 percent; December 1943, 69.4 percent; December 1944, 46.2 percent; August 1945, 47.0 percent.

<sup>4</sup> In all, 2,438,831 Negro men aged 18-37 were registered by Selective Service on August 1, 1945, (5, p. 41). Another Selective Service publication gives the total number of registrants (all races) at this time as 22,170,021 (6, p. 67). Hence, the number of white registrants was taken to be the difference between these figures, each of which formed the base for the percentage of occupationally deferred men in white and Negro groups.

highest in this age category. In other words, addition of the occupationally deferred group to the number physically examined under Selective Service probably would not have decreased the over-all rejection rate.

Table 2. *Occupational deferments by Selective Service as of Dec. 1, 1944, all races, by age*<sup>1</sup>

Age of registrant	Number of registrants			Percent of registrants		
	Total	Industry	Agriculture	Total	Industry	Agriculture
Total.....	5,765,926	4,257,639	1,508,287	100.0	100.0	100.0
18-25.....	470,964	107,261	363,703	8.2	2.5	24.1
26-29.....	1,168,094	864,469	303,625	20.3	20.3	20.1
30-37.....	4,126,868	3,285,909	840,959	71.5	77.2	55.8

<sup>1</sup> Source: Selective Service Monogr. 7 (4).

*Dependency.* During 1940-41 when a relatively small number of men was needed by the Army, the deferment policy was, in general, liberally applied to men with dependents. By April 1942, dependency alone was not considered an important consideration in deferment and, beginning in October 1943, fathers were inducted on a Nation-wide basis. It should be noted that even when relatively large numbers of men were deferred on account of dependency, most of them were 30 and over. Many of these men sooner or later went into essential industries or agriculture. Examples of the number of men deferred for dependency (class III-A) in relation to the total number registered are given below:

Date	Men deferred on account of dependency (class III-A) <sup>1</sup>		
	Age group	Number	Percent
Mar. 31, 1941.....	21-25	3,706,379	68.4
Dec. 31, 1942.....	18-44	12,650,268	48.6
Dec. 1, 1943.....	18-37	4,545,028	20.6
Dec. 1, 1944.....	18-37	26,759	0.1

<sup>1</sup> Source: Selective Service Monogr. 8 (7).

*Age.* The age limits acceptable for induction varied from time to time although they never went above 44 years nor under 18 years, except that the Navy accepted enlistments of qualified 17-year-olds throughout the war.

### *Composition of Examined Group*

On August 1, 1945, an estimated 17,954,500 men aged 18-44 at the time of examination had been physically examined through Selective Service.<sup>5</sup>

<sup>5</sup> This figure represents the estimated total number of men examined and not the number of examinations.

The men examined for induction during 1940-41, the peacetime period, constituted about 22 percent of the total registration at that time. Those examined were chiefly unmarried men aged 21-35 years (median 24.9 years). More than 3,000,000 men were examined during the first 12 months of Selective Service.

During 1942, the men examined were 20-44 years old, and during 1943 they were 18-37. At the end of these two war years, the examined group comprised about 57 percent of all the registrants. In December 1942, a ban on voluntary enlistment of men 18-37 years old made the examined group more representative of all men of these ages than formerly, but a policy of liberal occupational deferments reduced the representativeness in certain occupation groups, particularly agriculture. An estimated 10,000,000 men were physically examined during these 2 years.

Some 4,855,000 men aged 18-37 received their first examinations between January 1944 and August 1945, the last 20 months of hostilities. Many men aged 18-19 at this time, who had enlisted when 17 years old, were, of course, lost to the Selective Service pool; deferments for occupation and dependency, however, became more stringent, increasing the representativeness of the group relative to occupation. By August 1, 1945, the registrants aged 18-37 who had been physically examined through Selective Service comprised about 79 percent of the total living registrants in that age group.

### *Statistics*

Statistical information concerning the physical examination of registrants was obtained from three sources by Selective Service. First, data on classifications were compiled from the records of all the local boards, representing the total registrants on the first day of the specified month. Second, beginning in August 1944, monthly reports on physical examinations of registrants were summarized by the War Department; the principal causes for rejection constituted the only defect data in these reports. Third, two sample studies of physical examination reports were made, selected to represent first examinations only, since the results of reexamination greatly influenced the information gathered by Selective Service. The records of 981,290 men, or 7.5 percent, of an estimated 13,000,000 examined during the period November 1940 to December 1943 formed the first research sample. The other research sample represented approximately 10 percent of first examinations among men inducted or rejected during 1944.

The data used in the present report are mainly from the first and third sources, the latter referring to the research sample for 1940-43. According to Selective Service (*1*), the research sample for 1944 is of limited usefulness because the physical examination reports of a large

number of men examined in early 1944 were not available to Selective Service statisticians at the time. These men had been found acceptable on preinduction examinations but, for administrative or other reasons, had not been called up for induction.

The statistics published by Selective Service on results of the physical examinations of registrants are subject to a number of limitations pointed out by Selective Service and others (1, 8). These limitations and their probable effect on the conclusions stemming from the data are noted subsequently.

## Rejection of Registrants

### Rejection Rates

By August 1, 1945, the number of 18-37-year-old registrants rejected because of physical or mental defects in the continental United States was 5,249,200, or 30.2 percent <sup>6</sup> of the estimated total number examined (3, p. 360).<sup>7</sup> In no State was the rate of rejection lower than one in five men examined within this age range (fig. 1). The proportion of men rejected was generally higher in the southern States, probably

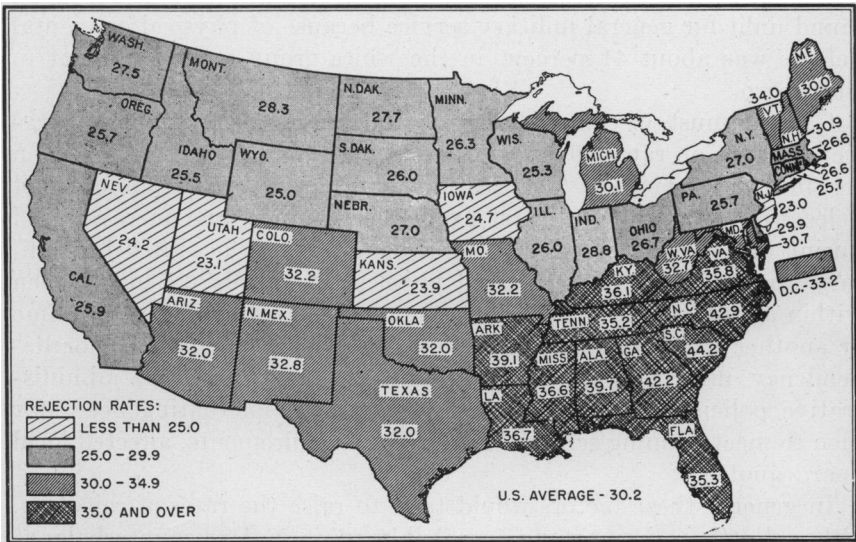


Figure 1. Percent of Selective Service registrants 18-37 years old rejected for physical or mental defects as of August 1, 1945, by State (3, p. 360).

<sup>6</sup> Including the approximately 2,267,000 registrants aged 38-44 examined before induction, with 51.6 percent of them rejected for physical or mental defects, the total rejection rate would rise to about 32.7 percent.

<sup>7</sup> The estimated total number of examined men includes registrant enlistees and inductees, and non registrant enlistees aged 18-37 on August 1, 1945, who had been discharged by that date. Excluded are 300,000 men who enlisted at 17 and would have been 18 years old as of August 1, 1945, for whom apportionment by State was not available to Selective Service (3). The rejected registrants include men considered acceptable only for limited military service.

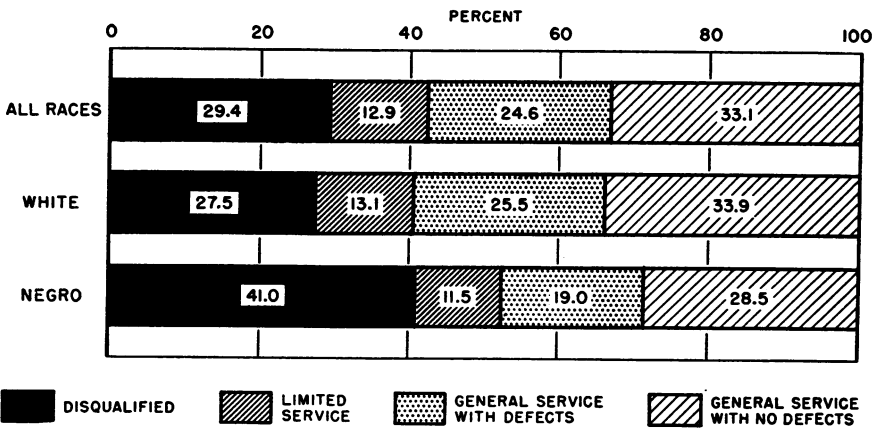


Figure 2. Percent of registrants with physical defects by race and result of physical examination, November 1940–December 1943, continental United States (3, p. 68).

due in large part to the relatively higher rates of rejection among Negroes than in the white population (fig. 2).<sup>8</sup>

As observed in figure 2, a substantial proportion of the registrants examined in 1940–43 was placed in the limited-service category. Combining these men with those completely disqualified, the total found unfit for general military service because of physical or mental defects was about 41 percent in the white group and 53 percent in the Negro.<sup>9</sup>

Caution must, of course, be used in interpreting the Selective Service statistics on rates of rejection as an index of physical fitness, even for military services. The reasons are: (1) the research data of Selective Service refer to first examinations only, and men rejected during one period may have been reexamined and accepted for military service later under changed physical standards; (2) many men within ages acceptable to the armed forces were withheld at one time or another from the examined group because of occupational or dependency deferment or direct voluntary enlistment; (3) administrative policies of the armed forces, based on fluctuating needs for men to meet training schedules or combat requirements, affected local board quotas.

In general, these factors would tend to raise the rates of rejection, although other circumstances probably more or less counterbalance this tendency. Thus, more older men (30 and over) than younger

<sup>8</sup> The data in fig. 2 are not entirely comparable with those shown in fig. 1. Fig. 2 represents all examined registrants aged 18–44, based on a 10-percent sample of first examinations recorded on DSS Form 200, Reports of Physical Examination, for November 1940–September 1941, and approximately 7 percent of those recorded on DSS Form 221, Reports of Physical Examination and Induction, for April 1942–December 1943. Reports for registrants examined and later deferred for other than physical or mental reasons are excluded from the sample. All subsequent tables or charts based on Selective Service data for 1940–43 are from this sample study.

<sup>9</sup> In the Selective Service statistics “white” includes all groups other than Negro.



were deferred on account of occupation and, as will be noted, the rate of rejection for physical defects was considerably higher in the older-age brackets. The hard fact remains that, on the basis of standards considered by the military services as minimal, millions of men could not be used for general military services because of physical or mental disabilities. This same situation of large numbers of men found unfit for general military services on account of physical defects occurred during the first World War, with a rejection rate of 31.2 percent at that time (9).

### *Causes for Rejection*

The principal causes for rejection of men examined through Selective Service and the relative frequency of these causes are shown in figure 3.<sup>10</sup> More than 1 in every 10 of the examined registrants were rejected for manifestly disqualifying defects (total blindness or deafness, both arms or legs missing, chronic or severe physical or mental disorders). The five chief specific causes for rejection were, in descending order, mental disease, mental and educational deficiency, musculoskeletal defects, cardiovascular defects, and hernia. Together these five accounted for more than one in every two rejections.

### *Voluntary Enlistments*

Until April 1941 men of any age acceptable for service were permitted to enlist in the armed forces. Beginning in January 1943, however, enlistments in age groups currently acceptable (18–37 years) were prohibited unless processed through Selective Service, although the Navy continued to accept 17-year-old volunteers throughout the war. The rate of rejection among men seeking enlistment for the first time and examined at recruiting stations of the Navy ranged from 49 percent in 1940 to nearly 22 percent in 1945, averaging 35.3 percent during 1940–45 (table 3). Information on the age of these men is not available, although the bulk of the recruits examined in 1943–45 probably comprised the 17-year-olds previously mentioned. Considering only the period 1943–45, the rejection rate averaged one in every four applicants.

The principal causes for rejection of the recruits during 1940–45, in the terms used by the Navy, were:

<i>Cause</i>	<i>Percent rejected</i>	<i>Cause</i>	<i>Percent rejected</i>
Eye.....	29. 5	Genitourinary.....	6. 3
Dental.....	19. 4	Skin, hair, and nails.....	1. 9
Circulatory system.....	8. 5	Nervous system.....	1. 9
Motor system (mainly flat feet).....	8. 3	Hernia.....	1. 8
Ear, nose, and throat.....	6. 3		

<sup>10</sup> The data relate to men completely disqualified for military service.

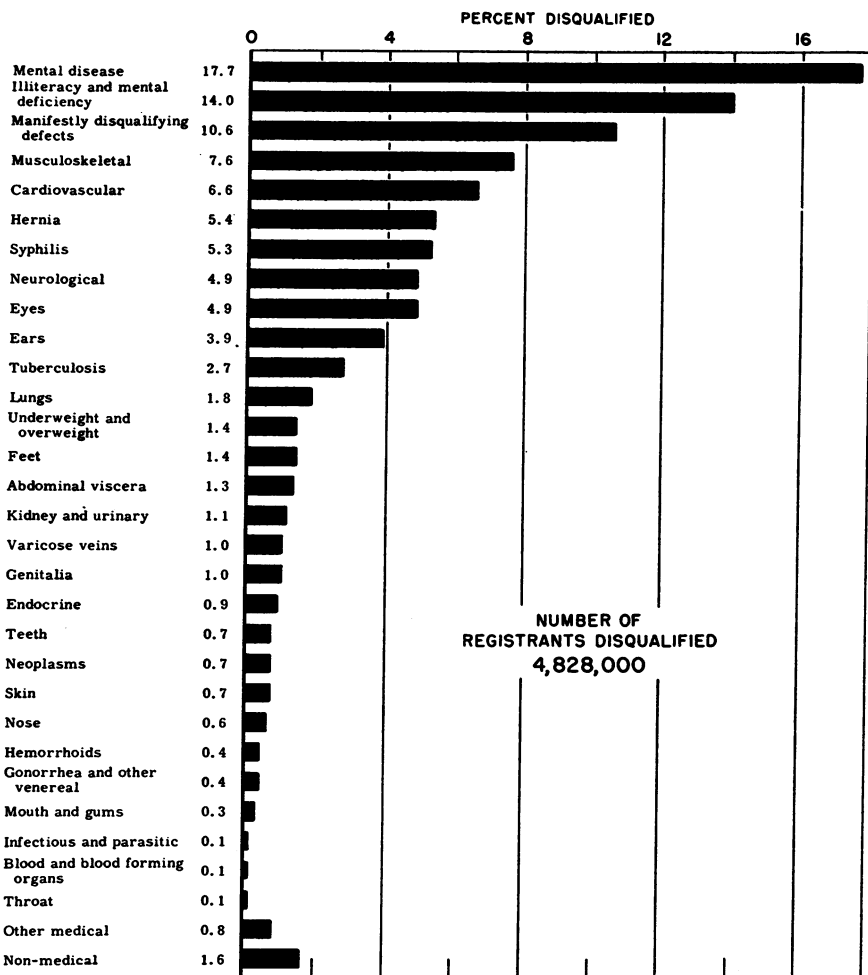


Figure 3. Estimated principal causes for rejection of registrants aged 18-37, examined through Selective Service, August 1, 1945 (*I*, p. 157).

Most of these defects, it will be recalled, were among the leading causes for rejection among the registrants examined through Selective Service.

The physical standards of the Navy, especially before 1943, were higher than those of the Army, yet the men seeking enlistment were probably a select group, as a rule younger than the population examined through Selective Service and, because they sought military service, presumably were generally more physically fit than registrants of comparable age brackets.

### Prevalence of Defects

Probably a better criterion of physical status than mere rejection rates is the prevalence of defects, and especially of specific defects

**Table 3. Men examined at Navy recruiting stations and number rejected for physical or mental defects<sup>1</sup>**

Year	Original Navy and Marine Corps enlistments <sup>2</sup>		
	Number examined	Rejected	
		Number	Percent
Total 1940-45.....	1, 184, 773	418, 109	35. 3
1940.....	205, 616	101, 284	49. 3
1941.....	247, 064	99, 974	40. 5
1942.....	342, 568	118, 570	34. 6
1943.....	116, 734	39, 394	33. 8
1944.....	86, 360	18, 462	21. 4
1945.....	186, 431	40, 425	21. 7

<sup>1</sup> Source: Reports of the Surgeon General. Medical Statistics of the U. S. Navy, Bureau of Medicine and Surgery, Navy Department (10, 11): 1940, p. 240; 1941, p. 297; 1942, p. 411; 1943, p. 277; 1944, p. 382; 1945, p. 436.

<sup>2</sup> Excludes persons examined at armed forces induction centers.

(1, 12). It was pointed out in an earlier paper: (1) that the prevalence rates based on Selective Service data were likely to be affected by differences in examining techniques of physicians and changes in coding procedure (e. g., all defects of registrants noted in 1940-41 were recorded, whereas in 1942-43 only the three most significant defects were coded); and (2) that the given prevalence rates were very likely understatements of actual conditions, particularly for certain defects (13).

The prevalence of defects, according to Selective Service statistics on physical examinations of registrants in 1940-43, was one defect

**Table 4. Prevalence of physical or mental defects per 1,000 Selective Service registrants receiving physical examinations, November 1940-December 1943<sup>1</sup>**

Region <sup>2</sup>	Number of defects per 1,000 registrants			
	Total	Disqualified	Limited service <sup>3</sup>	Acceptable for general military service
Continental United States.....	1, 105. 7	1, 639. 1	1, 814. 4	676. 2
East.....	1, 318. 3	2, 007. 0	2, 052. 7	1, 087. 5
South.....	1, 048. 3	1, 530. 4	1, 801. 4	612. 0
Far West.....	998. 1	1, 557. 0	1, 715. 3	529. 9
Midwest.....	990. 2	1, 562. 1	1, 731. 4	702. 9

<sup>1</sup> Source: Selective Service Monogr. 15, vol. III (3): rates for continental United States, p. 116; for total registrants by region, pp. 40-42. All other rates given are the unweighted means of the several States within each region; adapted from the same source, pp. 117-162.

<sup>2</sup> East: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New Jersey, Delaware, Maryland, Pennsylvania, New York City, New York excluding New York City, District of Columbia.

South: Texas, Oklahoma, Arkansas, Louisiana, Mississippi, Alabama, Georgia, Florida, Tennessee, Kentucky, Virginia, North Carolina, South Carolina.

Far West: Washington, Oregon, California, Nevada, Idaho, Utah, Arizona, Montana, Wyoming, Colorado, New Mexico.

Midwest: North Dakota, South Dakota, Nebraska, Kansas, Minnesota, Iowa, Missouri, Illinois, Wisconsin, Michigan, Ohio, West Virginia, Indiana.

<sup>3</sup> Includes class I-A remediable.

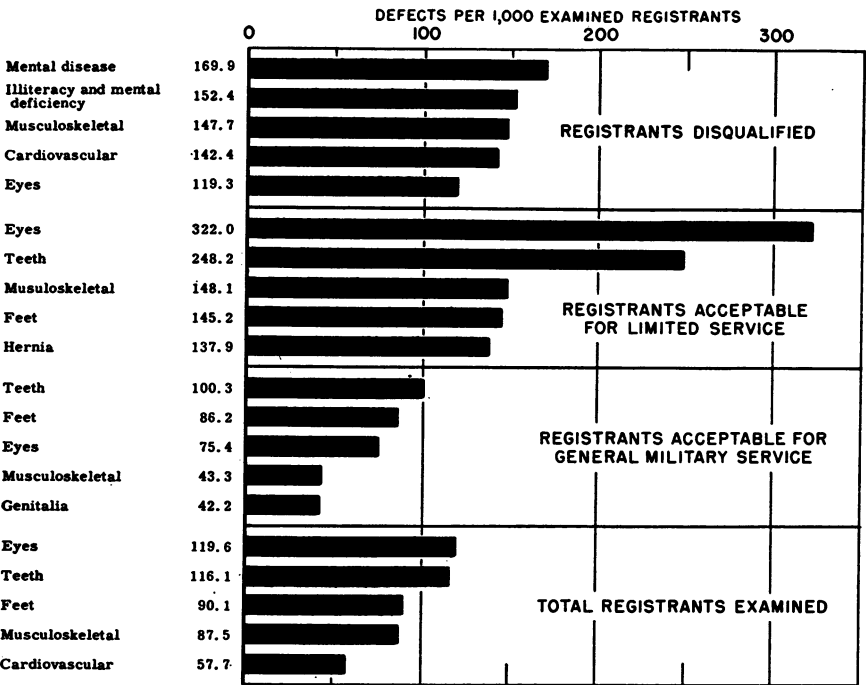


Figure 4. Five leading defects per 1,000 registrants physically examined through Selective Service, November 1940–December 1943, by disposition of men (3, p. 116).

per man for all registrants, more than one and a half defects per man among those disqualified for military service, and almost two defects per registrant among the men in the limited-service category (table 4). The East, comprising the New England and Middle Atlantic States, had higher prevalence rates than those of any of the other regions of the country; why, is not clear.

The 5 most prevalent defects per 1,000 registrants examined, by disposition of the men as a result of their physical examination, are shown in figure 4. Outstanding among the disqualified group was the high prevalence of mental disease and educational and mental deficiency;<sup>11</sup> defects of the eyes and teeth were most common in the limited-service group. By far the most prevalent forms of mental disease among the disqualified men were psychoneurotic disorders and psychopathic personality; 80 percent of the total number of men with mental disease had one or the other.

### Age

Rejection rates sharply increased with the age of the examined registrants (table 5). If the class I-A remediable and limited-service

<sup>11</sup> The major portion of the category "educational and mental deficiency" comprised men with educational deficiency.

**Table 5. Effect of age of registrants on rate of rejection for physical or mental defects November 1940–December 1943<sup>1</sup>**

Age of examined registrants	Number of registrants			Percent of registrants	
	Total	Disqualified	I-A remediable and limited service	Disqualified	I-A remediable and limited service
All ages .....	981, 290	289, 125	126, 289	29. 5	12. 9
18–20 .....	170, 665	41, 495	8, 497	24. 3	5. 0
21–25 .....	359, 109	76, 713	48, 661	21. 4	13. 5
26–29 .....	156, 618	44, 201	25, 472	28. 2	16. 3
30–37 .....	206, 361	82, 762	30, 490	40. 1	14. 8
38 and over .....	84, 494	42, 051	12, 628	49. 8	14. 9

<sup>1</sup> Source: Selective Service Monogr. 15, appendix F, p. 10 (9). Age was unknown for a total of 4,043 examined registrants. The data refer to the sample study mentioned in footnote 8.

men are included with the disqualified group, since most of the former were also deferred, the total percentage of rejected men aged 18–20 was 29.3, and of men aged 38–44, 64.7.

The relationship between the prevalence of specific defects and age depends largely on type of defect (table 6). For example, educational and mental deficiency, and defects of the eyes and ears were more prevalent among men aged 18–25 than in the older age groups, whereas the prevalence of mental disease, cardiovascular and musculoskeletal defects, syphilis, hernia, tuberculosis, and dental defects tended to increase with age. The high rate of mental disease among the 18 to 20-year-olds reflects the frequent cases of emotional disturbances related to immaturity.

**Table 6. Prevalence rate of chief defects per 1,000 disqualified registrants physically examined through Selective Service, November 1940–December 1943, by age of registrants<sup>1</sup>**

Defect	Age of examined registrants					
	All ages	18–20	21–25	26–29	30–37	38+
Total .....	1, 639. 1	1, 439. 5	1, 629. 2	1, 733. 9	1, 732. 6	1, 574. 8
Mental disease .....	169. 9	196. 6	136. 1	150. 2	181. 7	202. 4
Educational and mental deficiency .....	152. 4	216. 9	168. 5	145. 4	134. 8	93. 5
Musculoskeletal .....	147. 7	114. 3	139. 7	157. 3	162. 3	157. 6
Cardiovascular .....	142. 4	95. 7	158. 4	153. 8	141. 1	153. 0
Eyes .....	119. 3	132. 6	122. 4	123. 4	114. 7	106. 5
Teeth .....	91. 3	54. 3	76. 9	106. 6	109. 8	102. 7
Neurological .....	77. 1	76. 8	82. 4	76. 2	70. 7	80. 7
Ears .....	74. 9	77. 9	93. 5	77. 7	64. 3	56. 9
Feet .....	73. 9	56. 8	83. 7	95. 3	81. 5	36. 2
Hernia .....	68. 5	54. 9	58. 4	71. 4	80. 2	74. 9
Syphilis .....	67. 7	28. 5	48. 6	61. 6	85. 3	112. 5
Tuberculosis .....	44. 4	32. 1	37. 8	39. 9	47. 1	68. 4

<sup>1</sup> Source: Selective Service Monogr. 15, appendix F, pp. 164–168 (9).

## Race

The results of the physical examinations of registrants through Selective Service are available by race, that is, for the Negro and

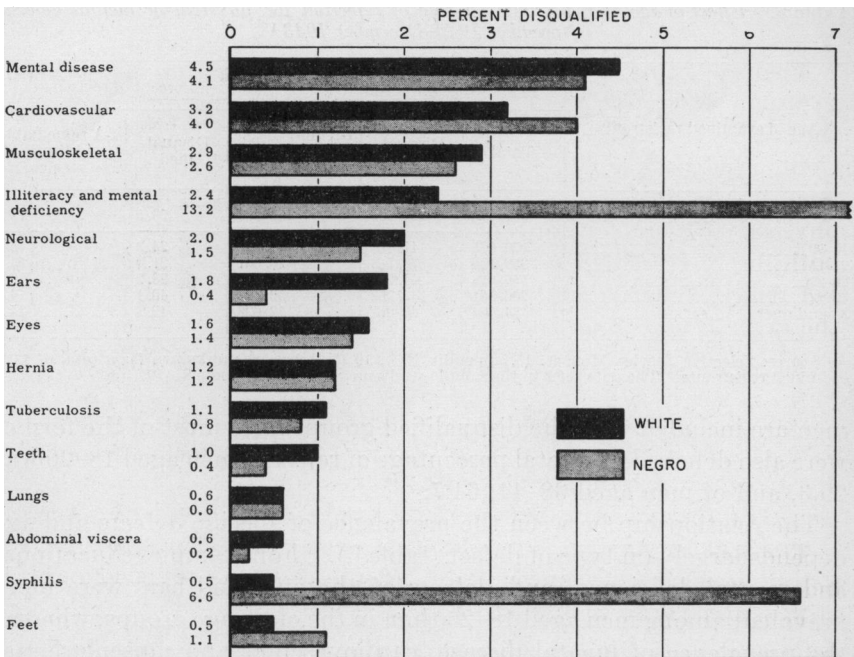


Figure 5. Principal defects per 100 disqualified registrants examined through Selective Service, November 1940–December 1943, by race (3, p. 68).

whites, the latter referring to all others beside the Negro. Information on the health status of different groups of Americans undoubtedly can serve a useful purpose by indicating the special needs of particular groups, thereby affording an opportunity for more intelligent efforts at prevention and rehabilitation. It should be noted, however, that other factors than the genetic one may play an important if not preponderant role in the prevalence of certain diseases or defects. It is well known, for example, that socioeconomic circumstances among both groups considerably influence the occurrence of illiteracy, syphilis, and tuberculosis (14, 15).

It has already been noted that relatively more Negro than white registrants were disqualified for physical and mental defects (fig. 2). A comparison of the principal defects in the two groups of disqualified men (fig. 5) shows that relatively many more Negroes than whites were rejected because of illiteracy and syphilis, each of which, it may be noted, is largely a remediable and preventable defect. Illiteracy and syphilis together accounted for almost half the total number rejected among Negro registrants examined through Selective Service.<sup>12</sup> Other data referring to Negro registrants are considered in later sections.

<sup>12</sup> The somewhat higher rate of tuberculosis in the white than Negro group must be read with caution. Probably one explanatory factor is the greater tuberculosis mortality rate among Negroes (23, p. 10; 24); another is the fact that men rejected because of illiteracy were not given a physical examination, and as shown in fig. 5 a higher proportion of Negroes than whites were rejected for illiteracy (25, p. 188; 26).

## Urban and Rural Registrants

There is apparently little difference in the rejection rates of men in urban and rural areas as such; for urban and rural communities the rates were 45.3 percent and 42.7 percent, respectively (1).<sup>13</sup> Comparing men engaged in agricultural and nonagricultural employment, however, the proportion of men disqualified on account of physical or mental defects is definitely higher in the farming group, both for Negroes and whites, and at all ages (table 7). If the class I-A remediable and limited-service men are added to the disqualified, the rates of total rejection are:

<i>Race</i>	<i>Percent rejected</i>	
	<i>Farmers</i>	<i>Nonfarmers</i>
Total.....	48.0	41.5
White.....	44.7	39.4
Negro.....	60.2	50.9

The prevalence of defects per 1,000 registrants examined through Selective Service was about the same among farmers and nonfarmers, although striking differences did occur in the prevalence of specific defects (figs. 6a, 6b).<sup>14</sup> Thus, among the whites the rates of illiteracy and mental deficiency, mental disease, and defects involving the mouth and gums and throat were considerably higher among the farmers, while defects of the eyes and teeth in particular were more prevalent among the men engaged in nonagricultural employment. In the Negro group substantial differences between farmers and nonfarmers occurred in the prevalence rates of illiteracy and mental

**Table 7. Percent of physically examined registrants disqualified from any military services, November 1940-December 1943: men engaged in agriculture versus non-agricultural employment, by race**<sup>1</sup>

Type of employment	Age of registrants examined					
	All ages	18-20	21-25	26-29	30-37	38+
Total registrants:						
Agricultural.....	36.9	39.9	27.6	35.4	48.0	56.5
Nonagricultural.....	28.3	22.1	20.2	27.3	39.2	48.8
White: <sup>2</sup>						
Agricultural.....	33.1	36.6	24.0	30.7	43.2	54.5
Nonagricultural.....	26.7	20.7	19.2	25.7	37.2	47.0
Negro:						
Agricultural.....	50.9	51.8	41.5	51.7	63.8	67.8
Nonagricultural.....	38.9	33.2	27.3	37.8	49.7	60.9

<sup>1</sup> Source: Selective Service Monogr. 7, pp. 258-261 (4).

<sup>2</sup> Includes all races other than the Negro.

<sup>13</sup> Acceptance rates for general military services, rather than rejection rates, are given in the source. The latter were obtained by simple subtraction. Urban refers to cities of 2,500 or more people; rural refers to communities of less than 2,500 population.

<sup>14</sup> Occupational variations in rates of rejection and in major defects among registrants examined through Selective Service are discussed by Smith (#7).

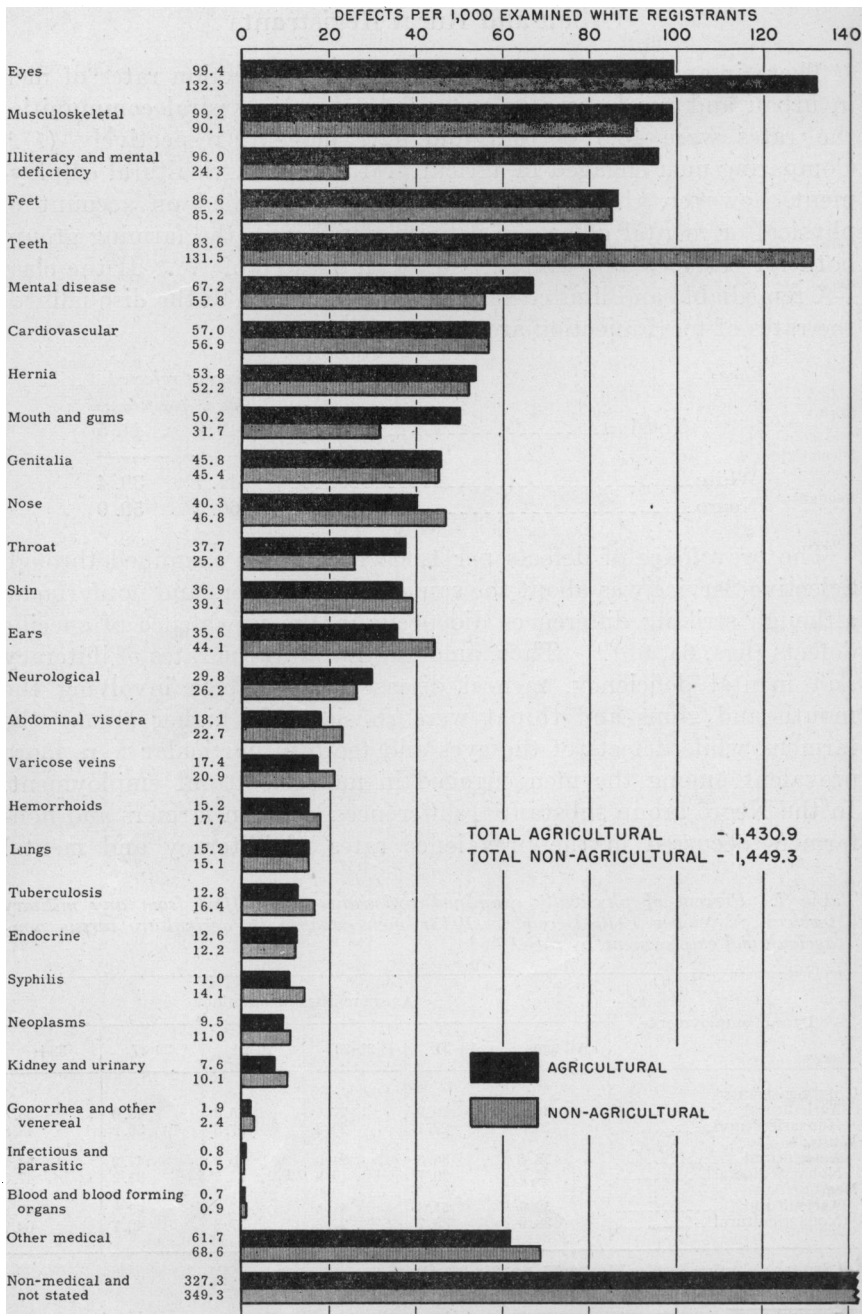


Figure 6a. Prevalence of defects per 1,000 white registrants in agricultural and non-agricultural employment examined through Selective Service, November 1940-December 1943 (4, p. 264).



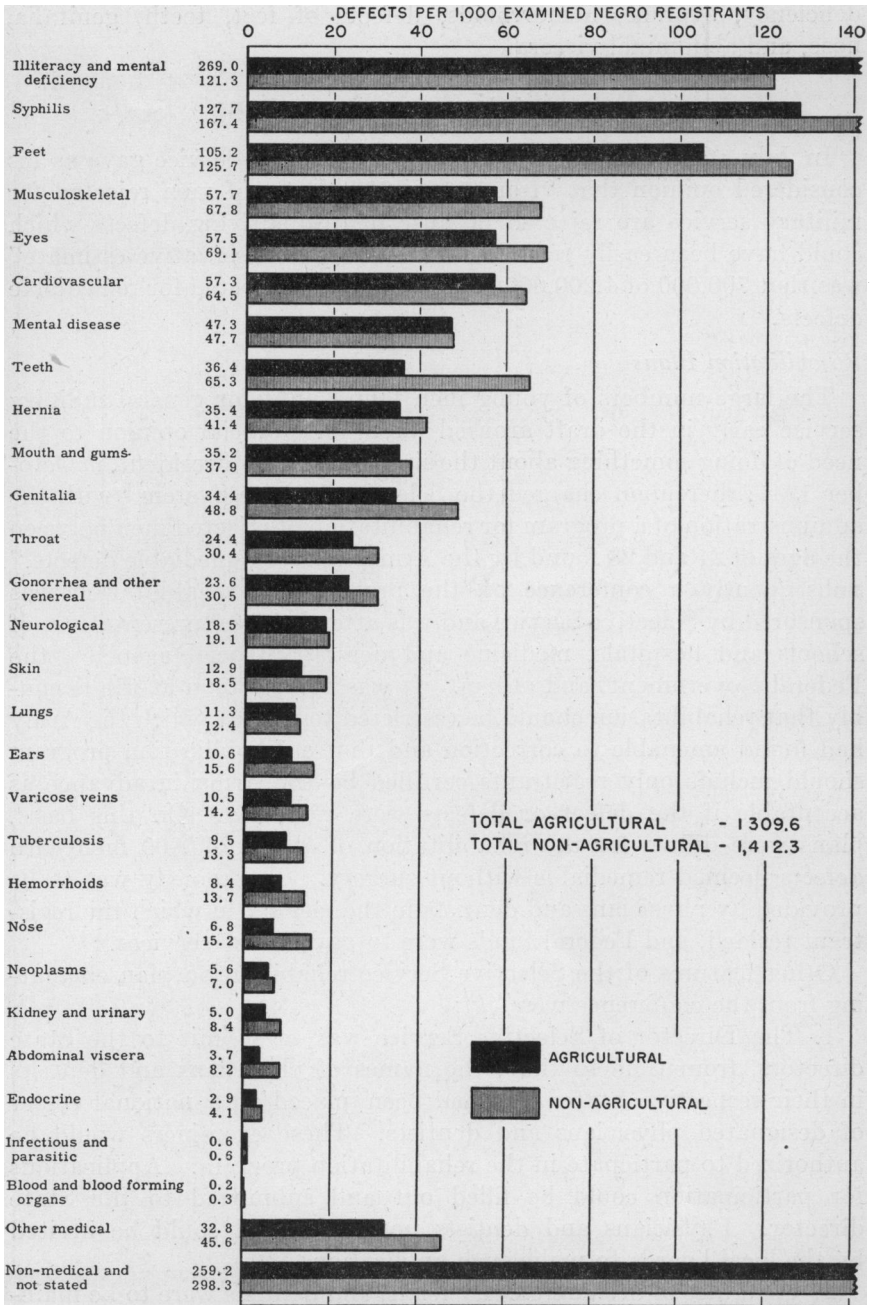


Figure 6b. Prevalence of defects per 1,000 Negro registrants in agricultural and nonagricultural employment examined through Selective Service, November 1940-December 1943 (4, p. 264).

deficiency, syphilis, hemorrhoids, defects of feet, teeth, genitalia, nose, and abdominal viscera.

## Rehabilitation and Prevention

In July 1944, the medical director of Selective Service gave as his considered opinion that "from 15 to 20 percent of men rejected for military service are rejected because of disqualifying defects which could have been easily remedied" (12). His "conservative estimate" was that 700,000 of 4,200,000 IV-F's had been rejected for remediable defects.

### *Rehabilitation Plans*

The large numbers of young men found unfit for general military service early in the draft aroused public and official opinion to the need of doing something about the situation. The President, in October 1941, thereupon charged the Selective Service System "with the administration of a program for rehabilitation of rejected men between the ages of 21 and 28 found by the Army to have remediable defects." Subsequently a conference on the problems of rehabilitation was sponsored by Selective Service and was attended by representatives of schools and hospitals, medicine and dentistry, social agencies, the Federal Government, and others. It was agreed upon at the assembly that rehabilitation should be restricted to defects which the Army had found amenable to correction and that a rehabilitation program should include only registrants certified by the Army in advance as acceptable if the defect or defects were remedied. On this basis, plans were drawn for the rehabilitation of about 200,000 men with defects deemed remediable without surgery. The remedy was to be provided by physicians and dentists in the locality in which the registrant resided, and Federal funds were to pay for the services.

Other features of the Selective Service rehabilitation plan emanating from the conference were (1):

1. The Director of Selective Service was to submit to the State directors, from time to time, the names of physicians and dentists in their respective States who had been placed on a national roster of designated physicians and dentists. These examiners would be authorized to participate in the rehabilitation program. Applications for participation could be filled out and submitted to the State director. Physicians and dentists not designated could be invited by the local boards to make such application.

2. Card files of designated physicians and dentists were to be maintained by the State headquarters and the local boards.

3. Registrants certified by induction-station examiners as acceptable for general military service after correction of specified remediable defects could choose one of the designated physicians, dentists, or

facilities in his community or name another of his choice. The physician, dentist, or facility named by the registrant would then be invited to make application for designation.

4. Any registrant certified as having a remediable defect or defects was advised that correction would be made at Government expense, and that if he refused treatment or correction his deferred status would be waived and he would be subject to induction. He was required to execute a rehabilitation statement indicating his desire for or refusal of rehabilitation.

5. A form, Inquiry for Undertaking of Service, was addressed to the designated individual or facility approved. This form stated maximum fees allowable for correction of the defects named and requested a statement as to willingness to undertake the rehabilitation. Upon approval of the project, the local board mailed to the registrant an Order to Registrant to Have Defects Remedied.

In January 1942, before the plans for a Nation-wide rehabilitation program were put into effect, pilot tests were initiated in Maryland and Virginia. The results of these tests were "not wholly satisfactory" despite general cooperation of all concerned, for the number of cases that could be remedied without surgical treatment was found to be small relative to the number needing surgery. In addition, a change in Army standards made many registrants acceptable who had been scheduled for rehabilitation. These circumstances, together with an increasingly critical shortage of civilian physicians during the early months of 1942, prompted Selective Service to request that it be relieved of the responsibility for the rehabilitation program.

A word may be said about non-Federal attempts at rehabilitation of rejectees. New Jersey, for example, opened five centers where disqualified men were interviewed at the time of rejection by a representative of its rehabilitation commission. Men wishing rehabilitation had this service made available to them by the State. In New York City hundreds of surgical cases received surgical treatment with cure and subsequent induction of the registrant.

### *Rehabilitation in the Army*

The urgent need for additional military manpower induced the Army, beginning in August 1942, to induct approximately 1½ million men with major defects and make them fit for duty (16). Some of the principal defects treated in the Army's rehabilitation program were:

*Dental defects.* Prior to Pearl Harbor dental defects led all other causes for rejection of men called up for examination by Selective Service (4.3 percent). Army regulations at this time called for 6 serviceable opposing posterior teeth out of a normal complement of 20 and 6 opposing anterior teeth out of a natural total of 12. Dental standards were subsequently lowered and some 1 million men with

major dental defects were inducted and treated in the service (e. g. 1,400,000 bridges and dentures were supplied and 31,000,000 cavities were filled).

*Eyes.* More than 250,000 men with impaired vision were inducted. The eye defects of these men were corrected chiefly by providing them with suitable glasses.

*Venereal diseases.* From October 1942 to April 1944, 138,723 men with venereal disease were inducted by the Army (syphilis, 96,626; gonorrhea, 39,455; other, 2,642). Special venereal hospitals were built at each of 34 reception centers, with a total of 6,510 beds. Individuals with gonorrhea, chancroid, and so forth, were cured and returned for processing and assignment; men with syphilis, after several treatments at the hospital, were also sent back for assignment, the treatment being completed in the field while on duty (12).

Published results of treatment of about 31,000 soldiers having early syphilis, by an identical penicillin schedule conducted from June 1944 to December 1945, show a total failure rate of 159.1 per 1,000 treated patients, or conversely, a "success" rate of about 84 percent of the cases treated (17).

*Illiteracy.* Between November 1940 and August 1, 1945, some 367,700 white and 308,600 Negro registrants had been rejected because of "educational and mental deficiency" (1). The educational factor was by far the greater. Thus, of registrants disqualified principally because of educational and mental deficiency in 1940-43, the educational factor accounted for 68.4 percent of the total among the whites and 89.4 percent of the total among the Negroes (1).

Beginning in the late spring of 1943, illiteracy was removed as a cause for rejection. Between June of that year and September of 1945, a total of 218,000 illiterates and 69,000 others who had not passed the Army general classification (mental) test were dispatched immediately after induction to one of the several special training units set up to rehabilitate these men. Four out of five of these men (83 percent) learned enough reading, arithmetic, and Army discipline in 3 to 4 months to enable them to satisfy the requirements of the Army for general military service (18). Negroes and whites did equally well in this "literacy" course organized by the Army (19).

### *Prehabilitation*

In an effort to provide for rehabilitation of men with remediable defects before actual examination by Selective Service or the Army, the former proposed: (1) an educational program concerning the physical standards of the Army; (2) examination by the family doctor or dentist of men who appeared to fall short of the requirements; (3) correction of defects at the registrant's expense and by the family physician or dentist; and (4) a certification of "prehabilitation" by

the doctor responsible for the correction of the defects. This prehabilitation plan was never officially carried out on a Nation-wide basis. So far as known, there are no published statistics on the effectiveness of this attempt at prehabilitation by Selective Service.

### *Cost of Rehabilitation*

Selective Service estimated that the average cost of rehabilitating 200,000 men for general military service might run as high as \$87 for one defect per registrant. It was further estimated that approximately three-fourths of the men would have a second defect which could be corrected at a possible cost of two-thirds as much as that for the first defect (1).

In the pilot test programs of rehabilitation by Selective Service in Maryland and Virginia, mentioned previously, dental rehabilitation largely consisted of extracting infected teeth and replacing them with prosthetic dentures. The average cost of dental rehabilitation was \$54.19, and the average time from certification to cure was 38.5 days (12).

### *Prevention*

A considerable body of published evidence strongly suggests that many of the defects of men rejected for general military services could have been prevented from becoming a serious impairment or from occurring at all. For example, of white children reared in five large North Carolina orphanages, only 1.4 percent were rejected by Selective Service in contrast to a white rejection rate of 44.6 percent for the State as a whole, a difference attributed largely to the better pediatric and surgical care received in the orphanage compared with that available to other children in the State (20). Studies of school health records of young men rejected in Hagerstown, Md., because of defective dentition and vision showed that the same defects had been noted 15 years earlier in school examinations of these same individuals (21). Various authorities might not agree on the exact proportions of preventable or remediable defects, or on all the defects amenable to prevention or remedy, but there seems to be general agreement that an effective health program should begin in early childhood as a basic preventive measure.

### *Physical Fitness*

A National Committee on Physical Fitness was created by the President in 1943 within the Federal Security Agency, charged with the responsibility of promoting an interest in physical fitness among the population at large. Brochures on the subject were published and programs for attaining physical fitness were encouraged through schools and colleges, institutional organizations, and so forth. Dr. Rowntree has commented on the program thus (22):

The National Committee on Physical Fitness specifically requested the cooperation of the American Medical Association (1) through a committee of five to act jointly with a similar group from the National Committee in the development and operation of a physical fitness special emphasis year; (2) the designation of a year beginning September 1, 1944, as the "Physical Fitness Year" during which the Physical Fitness Program would be put into effect on a Nationwide basis; (3) in the announcement by high authority (President or Congress) of the Physical Fitness Year; (4) to develop future planning during the Physical Fitness Year, which might include the consideration of a suitable organization to handle the problem in perpetuity and to forestall for the future a recurrence of the situation such as herein revealed [high rates of rejection for physical defects]; . . . and (5) a National Physical Fitness Foundation might well merit and receive liberal private and public support.

The American Medical Association appointed a committee of five which participated in the National Committee's efforts to encourage programs of physical fitness. So far as known, there are no published national statistics on the effectiveness of the National Committee's work. The committee was terminated June 30, 1945.

#### ACKNOWLEDGMENT

Grateful acknowledgment is made to George St. J. Perrott, Chief, Division of Public Health Methods, for helpful suggestions as to scope and content of the report; to Dr. Selwyn D. Collins, Division of Public Health Methods, and Dr. Bernard D. Karpinos, Medical Statistics Division, Department of the Army, for a critical perusal of the paper; and to Martha D. Ring for helpful editorial checking.

#### REFERENCES

- (1) Selective Service System: Physical Examination of Selective Service Registrants. Special Monogr. No. 15, Vol. I, Text and Appendices A-C (1947). U. S. Government Printing Office, Washington, 1948.
- (2) Selective Service System: Physical Examination of Selective Service Registrants. Special Monogr. No. 15, Vol. II, Appendices D-E (1947). U. S. Government Printing Office, Washington, 1948.
- (3) Selective Service System: Physical Examination of Selective Service Registrants: Special Monogr. No. 15, Vol. III, Appendix F (1947). U. S. Government Printing Office, Washington, 1948.
- (4) Selective Service System: Agricultural Deferment. Special Monogr. No. 7. U. S. Government Printing Office, Washington, 1947.
- (5) Selective Service System: Quotas, Calls, and Inductions. Special Monogr. No. 12, Vol. II, Appendices F-H (1948). U. S. Government Printing Office, Washington, 1948.
- (6) Selective Service System: Industrial Deferment. Special Monogr. No. 6, Vol. III, Appendices F-H (1947). U. S. Government Printing Office, Washington, 1948.
- (7) Selective Service System: Dependency Deferment. Special Monogr. No. 8 (1947). U. S. Government Printing Office, Washington, 1947.
- (8) Perrott, George St. J.: Selective Service rejection statistics and some of their implications. *Bull. New York Acad. Med.* 23: 420-435 (1947).
- (9) Britten, R. H., and Perrott, George St. J.: Summary of physical findings on men drafted in the World War. *Pub. Health Rep.* 56: 41-62 (1941).
- (10) Navy Department. Bureau of Medicine and Surgery: Statistics of Diseases and Injuries. Annual Reports of the Surgeon General. Calendar Years 1940, 1941. U. S. Government Printing Office, Washington, 1942, 1944.
- (11) Navy Department. Bureau of Medicine and Surgery: Reports of the Surgeon General, Medical Statistics. Calendar Years 1942, 1943, 1944, 1945. U. S. Government Printing Office, Washington, 1945, 1947, 1948, 1948.

- (12) Subcommittee on Wartime Health and Education. Sen. Res. 74, Hearings . . . 78th Congress, 1st Sess. July, 1944. Part 5. U. S. Government Printing Office, Washington, 1944.
- (13) Perrott, George St. J.: Selective Service rejection statistics. *Am. J. Pub. Health* **36**: 336-342 (April) 1946.
- (14) Britten, Rollo H., Collins, Selwyn D., and Fitzgerald, James S.: The National Health Survey. Some general findings as to disease, accidents, and impairments in urban areas. *Pub. Health Rep.* **55**: 444-470 (1940).
- (15) Bowdoin, C. D., Henderson, Clair A., Davis, Warren T., Jr., Morse, John W., and Remein, Quentin R.: Socioeconomic factors in syphilis prevalence, Savannah, Georgia. *J. Ven. Dis. Inform.* **30**: 131-139 (1949).
- (16) Subcommittee on Wartime Health and Education: S. Res. 74, 78th Congress, 2d Sess., Jan. 1945. U. S. Government Printing Office, Washington, 1945.
- (17) Altshuler, L., Karpinos, Bernard D., Leifer, William, and Ozog, J. J.: Efficacy of penicillin treatment of early syphilis in the Army. *Am. J. Syph., Gonor., and Ven. Dis.* **33**: 126-138 (1949).
- (18) Bingham, W. V.: Military psychology in war and peace. *Science* **106**: 155-160 (1947).
- (19) Trudeau, A. G.: Army experience and problems of Negro education. *Education For Victory* **3**: 13-16 (1945).
- (20) Davis, William H., and Arena, Jay M.: The importance of pediatric and surgical care in the prevention of Selective Service rejections. *J. Pediat.* **33**: 85-89 (1948).
- (21) Ciocco, Antonio, Klein, Henry, and Palmer, Carroll E.: Child health and the Selective Service physical standards. *Pub. Health Rep.* **56**: 2365-2375 (1941).
- (22) Rowntree, Leonard G.: National program for physical fitness. *J. A. M. A.* **125**: 821-826 (1944).
- (23) Edwards, Thomas I.: Causes of Rejection and Incidence of Defects. Local Board Examinations of Selective Service Registrants in Peacetime. *Medical Statistics Bulletin No. 2. Selective Service System, Washington, D. C., August 1, 1943.*
- (24) Guralnick, Lillian, and Glasser, Stanley: Tuberculosis mortality in the United States, 1948. *Pub. Health Rep.* **65**: 468-483 (1950).
- (25) Karpinos, Bernard D.: Prevalence of pulmonary tuberculosis among selectees. *Human Biol.* **16**: 181-189 (1944).
- (26) Smith, Mapheus; Reynolds, Lester T., and Hand, M. Ethel: Tuberculosis among Selective Service registrants. *Am. Rev. Tuberc.* **60**: 773-787 (1949).
- (27) Smith, Mapheus: Occupational differentials in physical status. *Am. Sociolog. Rev.* **13**: 72-82 (1948).

# **Incidence of Disease**

*No health department, State or local, can effectively prevent or control disease without knowledge of when, where, and under what conditions cases are occurring*

## **UNITED STATES**

### **Reports From States for Week Ending April 21, 1951**

#### *Influenza*

In collaboration with the Influenza Information Center, National Institutes of Health, the following report on influenza has been prepared.

The number of cases of influenza decreased in the current week to 3,499 compared with 5,898 for the previous week. For the same week last year, 4,789 cases were reported.

Dr. Morris Shaeffer, Director of the Regional Laboratory in Montgomery, Ala., reports that of eight paired sera recently submitted for influenza tests, three showed significant rises in titer: two against influenza A-prime (FM-1 strain) for patients in Phoenix, Ariz., and one against influenza A (PR-8 strain) from a patient in Chicago.

#### *Poliomyelitis*

The incidence of poliomyelitis since the seasonal low week has been approximately the same as that for last year. For the 3 weeks ended April 21, 1951, a total of 181 cases was reported as compared with 185 for the same period last year.

### **Epidemiological Reports**

#### *Anthrax*

Dr. James C. Hart, Director, Bureau of Preventive Medicine, Connecticut State Department of Health, reports a case of anthrax in an employee in a felt manufacturing plant. The diagnosis was confirmed by laboratory test. The patient is recovering.

#### *Infectious Hepatitis*

Dr. H. H. Cosman, Delaware Deputy State Health Officer, reports an outbreak of 17 cases of infectious hepatitis in Kent County. Eight of the cases were in children attending a 1-room school in Dover. In the instance of 2 brothers, the onset of the second case was 37 days after the first case. Three cases were ambulatory. The 9



cases in adults had no direct connection with each other. It was thought that certain of the cases had influenza which was endemic at the time, but laboratory examinations indicated subclinical jaundice.

### Hookworm

Dr. A. S. McCown, Virginia Department of Health, reports a high incidence of hookworm infection in a State hospital for the mentally defective. Of 100 stool specimens examined, 32 showed hookworm ova. Many had pinworm or whipworm. Many of these patients are incontinent and in warm months wander around barefooted because they will not wear shoes. Eosinophilia and anemia were common findings. Attendants did not show evidence of infestation.

### Ringworm

Dr. W. L. Halverson, California Director of Health, reports approximately 80 cases of ringworm in school children in one county. Some were proved to be due to *Microsporon canis*. The parents have been advised that ringworm exists in the school, that some of the cases are due to contact with infected dogs or cats, and that the animals should be sent to a veterinarian for examination as to ringworm infection. All veterinarians in the area offered free examination of pets.

## Comparative Data for Cases of Specified Reportable Diseases: United States

[Numbers after diseases are International List numbers, 1948 revision]

Disease	Total for week ended—		5-year median 1946-50	Seasonal low week	Cumulative total since seasonal low week		5-year median 1945-46 thru 1949-50	Cumulative total for calendar year—		5-year median 1946-50
	Apr. 21, 1951	Apr. 22, 1950			1950-51	1949-50		1951	1950	
Anthrax (062).....	1	-----	1	(1)	(1)	(1)	24	9	16	
Diphtheria (055).....	65	110	180	27th	4,307	6,614	9,517	1,400	2,343	3,159
Encephalitis, acute infectious (082).....	19	16	10	(1)	(1)	(1)	241	215	131	
Influenza (480-483).....	3,499	4,789	1,357	30th	*121,340	137,371	137,371	*106,798	126,787	123,417
Measles (085).....	22,566	13,539	27,438	35th	*271,690	152,231	313,117	*242,989	133,101	278,171
Meningitis, meningococcal (057.0).....	95	91	91	37th	2,692	2,447	2,397	1,731	1,533	1,425
Pneumonia (490-493).....	1,603	2,216	(*)	(1)	(1)	(1)	*31,985	40,854	(*)	
Polioymyelitis, acute (080).....	52	60	39	11th	268	309	158	1,480	1,440	754
Rocky Mountain spotted fever (104).....	1	-----	3	(1)	(1)	(1)	5	16	16	
Scarlet fever (050) <sup>1</sup> .....	2,112	1,425	2,055	32d	52,015	44,259	66,270	36,324	27,820	42,880
Smallpox (084).....	-----	2	5	35th	13	41	61	5	20	40
Tularemia (059).....	10	18	16	(1)	(1)	(1)	220	334	334	
Typhoid and paratyphoid fever (040,041) <sup>2</sup> .....	48	37	52	11th	204	208	228	639	718	718
Whooping cough (056).....	1,382	2,750	1,952	39th	*46,204	63,062	63,062	*24,602	41,435	34,858

<sup>1</sup> Not computed.

<sup>2</sup> Deductions—Arizona, week ended Apr. 14: Influenza, 50 cases; measles, 30; whooping cough, 11.

<sup>3</sup> Data not available.

<sup>4</sup> Addition: Tennessee, week ended Apr. 7, 49 cases.

<sup>5</sup> Including cases reported as streptococcal sore throat.

<sup>6</sup> Including cases reported as salmonellosis.

### *Psittacosis*

In a follow-up investigation of a case of psittacosis in Chicago, Ill., it was determined that infection was presumably a result of contact with parrots purchased from a peddler in California. This peddler is known to authorities in California since he has been arrested twice for smuggling cages of birds across the California-Mexican border. Two cases of psittacosis have been reported from Chicago since January 1.

### *Rabies in Animals*

The Nebraska Department of Health reports that rabies has been proved or suspected in domestic and wild animals in Greeley County. Game wardens have reported clinical symptoms similar to rabies in several coons. Cats with symptoms of rabies were found in one area. A positive diagnosis of rabies in a calf was made April 11 at the State Health Department laboratory.

**Reported Cases of Selected Communicable Diseases: United States,  
Week Ended Apr. 21, 1951**

[Numbers under diseases are International List numbers, 1948 revision]

Area	Diph- theria (055)	Enceph- alitis, in- fectious (082)	Influ- enza (480-483)	Measles (085)	Menin- gitis, menin- gococcal (057.0)	Pneu- monia (490-493)	Polio- myelitis (080)
<b>United States.....</b>	<b>65</b>	<b>19</b>	<b>3,499</b>	<b>22,566</b>	<b>95</b>	<b>1,603</b>	<b>52</b>
<b>New England.....</b>	<b>2</b>	<b>1</b>	<b>35</b>	<b>661</b>	<b>3</b>	<b>41</b>	
Maine.....			19	5		7	
New Hampshire.....			1	27			
Vermont.....				142			
Massachusetts.....	2	1		368	2		
Rhode Island.....			1	7			
Connecticut.....			14	112	1	34	
<b>Middle Atlantic.....</b>	<b>8</b>	<b>6</b>	<b>202</b>	<b>3,029</b>	<b>17</b>	<b>218</b>	<b>4</b>
New York.....	1	2	159	1,110	9	60	3
New Jersey.....	1	4	43	561	4	92	
Pennsylvania.....	6			1,358	4	66	1
<b>East North Central.....</b>	<b>6</b>	<b>5</b>	<b>32</b>	<b>3,323</b>	<b>16</b>	<b>112</b>	<b>3</b>
Ohio.....	5			949	6		1
Indiana.....			5	127		8	
Illinois.....	1	3	14	556	7	67	2
Michigan.....		1	13	433	1	37	
Wisconsin.....		1		1,228	2		
<b>West North Central.....</b>	<b>2</b>	<b>1</b>	<b>72</b>	<b>1,396</b>	<b>7</b>	<b>71</b>	<b>7</b>
Minnesota.....		1	11	86	2	10	2
Iowa.....				110	1	2	
Missouri.....	2		11	309	1	1	
North Dakota.....			50	112	1	44	
South Dakota.....				12			4
Nebraska.....				36	1		
Kansas.....				731	1	14	1
<b>South Atlantic.....</b>	<b>12</b>		<b>1,672</b>	<b>1,678</b>	<b>18</b>	<b>233</b>	<b>6</b>
Delaware.....				21	1		1
Maryland.....	1		3	183	2	29	
District of Columbia.....				99	1	17	
Virginia.....	2		615	825	1	99	
West Virginia.....			558	108	4	32	2
North Carolina.....	5			93	2	2	1
South Carolina.....			139	27	3	30	
Georgia.....	4		357	231	1	26	2
Florida.....				100	3		
<b>East South Central.....</b>	<b>5</b>	<b>2</b>	<b>139</b>	<b>575</b>	<b>6</b>	<b>145</b>	<b>3</b>
Kentucky.....			8	326	3	20	
Tennessee.....		1	111	88	1		2
Alabama.....	4			115	1	90	
Mississippi.....	1	1	20	51	1	35	1
<b>West South Central.....</b>	<b>20</b>	<b>1</b>	<b>898</b>	<b>5,069</b>	<b>18</b>	<b>599</b>	<b>15</b>
Arkansas.....	3		799	493		92	
Louisiana.....	1		10	54	5	78	4
Oklahoma.....	2		89	192		26	
Texas.....	14	1		4,350	13	403	11
<b>Mountain.....</b>	<b>3</b>	<b>1</b>	<b>315</b>	<b>1,585</b>	<b>3</b>	<b>72</b>	<b>1</b>
Montana.....	1	1	23	36	1		
Idaho.....				187			
Wyoming.....				53		5	
Colorado.....	2		17	445		13	
New Mexico.....			2	86	1	18	
Arizona.....			273	631		36	
Utah.....				102			1
Nevada.....				45	1		
<b>Pacific.....</b>	<b>7</b>	<b>2</b>	<b>134</b>	<b>5,230</b>	<b>7</b>	<b>112</b>	<b>13</b>
Washington.....			39	946			
Oregon.....	2		60	828	1	27	
California.....	5	2	35	3,456	6	85	13
Alaska.....			3				
Hawaii.....				2			1

<sup>1</sup> New York City only.

*Anthrax:* Pennsylvania, 1 case.

**Reported Cases of Selected Communicable Diseases: United States, Week  
Ended Apr. 21, 1951—Continued**

[Numbers under diseases are International List numbers, 1948 revision]

Area	Rocky Mountain spotted fever (104)	Scarlet fever (050)	Small-pox (084)	Tularemia (059)	Typhoid and paratyphoid fever <sup>1</sup> (040,041)	Whooping cough (056)	Rabies in animals
<b>United States.....</b>	<b>1</b>	<b>2, 112</b>		<b>10</b>	<b>48</b>	<b>1, 382</b>	<b>208</b>
<b>New England.....</b>	<b>202</b>				<b>1</b>	<b>78</b>	
Maine.....	15					33	
New Hampshire.....	18					1	
Vermont.....	4					6	
Massachusetts.....	144				1	27	
Rhode Island.....	6					6	
Connecticut.....	25					5	
<b>Middle Atlantic.....</b>	<b>405</b>			<b>5</b>	<b>5</b>	<b>164</b>	<b>8</b>
New York.....	217			3	1	55	7
New Jersey.....	53			2		66	
Pennsylvania.....	135				4	43	1
<b>East North Central.....</b>	<b>614</b>			<b>1</b>	<b>4</b>	<b>185</b>	<b>18</b>
Ohio.....	136				3	29	4
Indiana.....	45					13	9
Illinois.....	90					27	1
Michigan.....	274					55	4
Wisconsin.....	69			1	1	61	
<b>West North Central.....</b>	<b>115</b>				<b>2</b>	<b>38</b>	<b>78</b>
Minnesota.....	26				1		
Iowa.....	17					3	14
Missouri.....	26				1	6	63
North Dakota.....						6	
South Dakota.....	5						
Nebraska.....	8						1
Kansas.....	33					23	
<b>South Atlantic.....</b>	<b>1</b>	<b>203</b>			<b>4</b>	<b>200</b>	<b>14</b>
Delaware.....		2				7	
Maryland.....		34				7	
District of Columbia.....		30				15	
Virginia.....		28			1	24	4
West Virginia.....		32			1	33	2
North Carolina.....		38				54	
South Carolina.....		2			1	4	
Georgia.....		18			1	35	8
Florida.....	1	19				37	
<b>East South Central.....</b>		<b>100</b>			<b>5</b>	<b>150</b>	<b>25</b>
Kentucky.....		53			1	30	7
Tennessee.....		37			1	24	11
Alabama.....		9			1	60	5
Mississippi.....		1			2	36	2
<b>West South Central.....</b>		<b>66</b>		<b>4</b>	<b>17</b>	<b>365</b>	<b>58</b>
Arkansas.....		1		1		30	1
Louisiana.....		8		1	2	3	23
Oklahoma.....		1			1	10	4
Texas.....		56		3	14	322	30
<b>Mountain.....</b>		<b>158</b>			<b>1</b>	<b>138</b>	<b>3</b>
Montana.....		9				16	3
Idaho.....		31				3	
Wyoming.....						8	
Colorado.....		15			1	27	
New Mexico.....		8				16	
Arizona.....		3				62	
Utah.....		92				5	
Nevada.....						1	
<b>Pacific.....</b>		<b>249</b>			<b>9</b>	<b>55</b>	<b>4</b>
Washington.....		35				14	3
Oregon.....		8			1	4	
California.....		206			8	37	1
Alaska.....			1				
Hawaii.....						2	

<sup>1</sup> Including cases reported as salmonellosis.

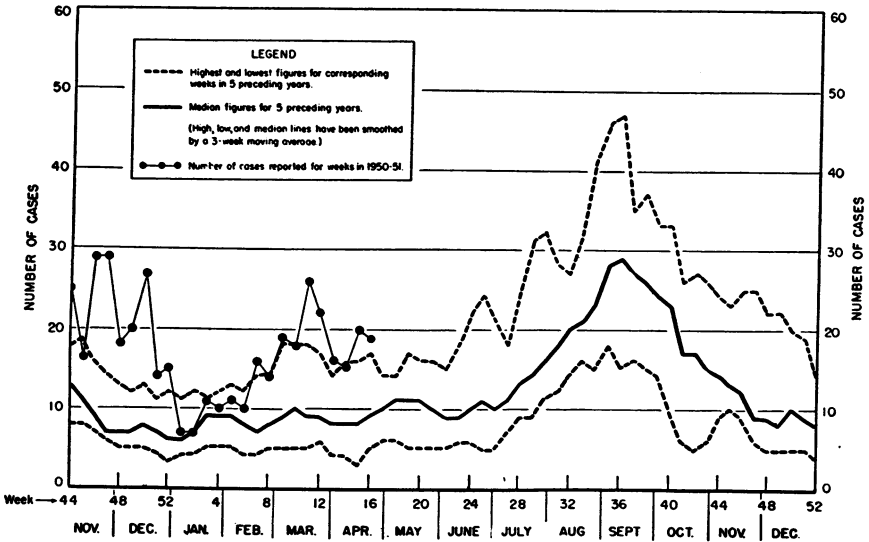
<sup>2</sup> Report for February.

<sup>3</sup> Including cases reported as streptococcal sore throat.

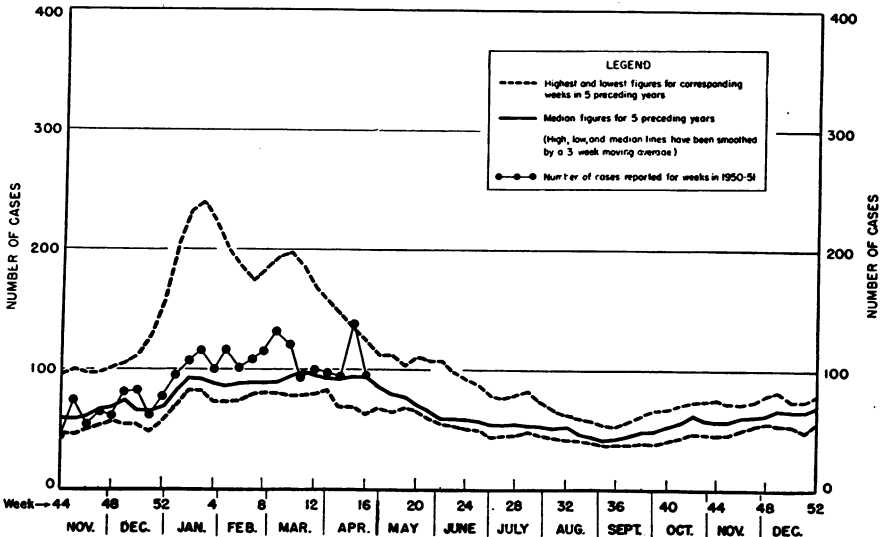
# Communicable Disease Charts

All reporting States, November 1950 through April 21, 1951

## ENCEPHALITIS, ACUTE INFECTIOUS



## MENINGOCOCCAL MENINGITIS



The upper and lower broken lines represent the highest and lowest figures recorded for the corresponding weeks in the preceding 5 years. The solid line is a median figure for the preceding 5 years. All three lines have been smoothed by a 3-week moving average. The dots represent numbers of cases reported weekly, 1950-51.

# FOREIGN REPORTS

## CANADA

*Reported Cases of Certain Diseases—Week Ended Apr. 7, 1951*

Disease	Total	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Brucellosis.....	4					1	3				
Chickenpox.....	937			27		173	499	19	19	47	153
Diphtheria.....	3					3					
Dysentery, bacillary.....	8										
Encephalitis, infectious.....	1				1						
German measles.....	421	3		64		60	207		6	43	38
Influenza.....	666			50	14	9		31	6		556
Measles.....	1,613	4		22		237	1,067	134	12	78	59
Meningitis, meningococcal.....	8			1	1	1	1	1	1		2
Mumps.....	1,045	6		7		266	389	54	53	120	150
Poliomyelitis.....	1					1					
Scarlet fever.....	264					102	54	16	7	40	45
Tuberculosis (all forms).....	251	11		5	13	107	19	16	7	22	51
Typhoid and paratyphoid fever.....	11					8	1				2
Venereal diseases:											
Gonorrhoea.....	263	4		18	2	60	51	25	13	42	48
Syphilis.....	92	5		12	3	23	25	3	7	3	11
Primary.....	6	1				1	3		1		
Secondary.....	4					1	2		1		
Other.....	82	4		12	3	21	20	3	5	3	11
Other forms.....	1										1
Whooping cough.....	103	1			1	30	35	7	5	3	21

## JAMAICA

*Reported Cases of Certain Diseases—5 Weeks Ended Mar. 31, 1951*

Disease	Total	Kingston	Other localities
Chickenpox.....	175	16	159
Diphtheria.....	5	2	3
Leprosy.....	1		1
Meningitis, meningococcal.....	1	1	
Ophthalmia neonatorum.....	2	1	1
Puerperal sepsis.....	3	1	2
Scarlet fever.....	1		1
Tuberculosis, pulmonary.....	70	31	39
Typhoid fever.....	76	8	68
Typhus fever (murine).....	1	1	

## REPORTS OF CHOLERA, PLAGUE, SMALLPOX, TYPHUS FEVER, AND YELLOW FEVER RECEIVED DURING THE CURRENT WEEK

The following reports include only items of unusual incidence or of special interest and the occurrence of these diseases, except yellow fever, in localities which had not recently reported cases. All reports of yellow fever are published currently. A table showing the accumulated figures for these diseases for the year to date is published in the PUBLIC HEALTH REPORTS for the last Friday in each month.

### Cholera

*Burma.* During the week ended April 14, 1951, 12 cases of cholera were reported in Bassein. This represents an increase from the five and eight cases reported, respectively, for the weeks ended March 31 and April 7. For the corresponding weeks Moulmein reported a decrease—from 38 cases for the week ended March 31 to 28 cases for the week ended April 14. Rangoon reported six cases of cholera for the week ended April 14—more cases than Rangoon has reported in any week this year.

### Plague

*Burma.* One imported case of plague was reported in Rangoon for the week ended April 14, 1951.

### Smallpox

*Belgian Congo.* For the week ended March 31, 1951, 121 cases of smallpox were reported in Belgian Congo.

*Ecuador.* During the period February 16–28, 1951, 47 cases of smallpox were reported in Ecuador as compared with 10 for the first half of the month.

*French West Africa.* The incidence of smallpox increased for the period March 21–31, 1951—from 118 cases in the previous 10-day period to 219. For the period March 21–31 smallpox was reported as follows: Dahomey, 13; Guinea, 2; Ivory Coast, 44; Niger Territory, 55; Senegal, 1; Upper Volta, 27; and Sudan, 77.

*Indochina.* During the week ended April 14, 1951, smallpox was reported in ports of Viet Nam as follows: Haiphong, 39 cases; Hanoi, 6; and Saigon, 2.

*Turkey.* During the period March 25–April 14, 32 cases of smallpox were reported in Ozalp, Province of Van.

### Typhus Fever

*Egypt.* For the week ended April 7, 1951, one case of typhus fever was reported in Cairo.

*Iraq.* One case of typhus fever was reported in Bagdad during the week ended April 14, 1951.

### Yellow Fever

*Ecuador.* One fatal case of jungle yellow fever was reported in Quinde, Esmeraldas Province, on March 21, 1951. The locality is outside the yellow fever endemic area as delineated by the World Health Organization.

---

## **Examination for Sanitary Engineers**

Competitive examinations for the appointment of officers as sanitary engineers in the Regular Commissioned Corps of the Public Health Service will be held in various cities throughout the country August 6, 7, and 8, 1951. The examination will include professional written tests, an oral interview, and a physical examination. Completed applications must be in the Washington office by July 9, 1951.

Appointments are permanent and provide opportunities for career service in research and public health activities. Appointments will be made in the grades of assistant and senior assistant, equivalent to Navy ranks of lieutenant (j. g.) and lieutenant, respectively. Entrance pay for an officer with dependents is \$4,486 in the assistant grade and \$5,346 in the senior assistant grade, including rental and subsistence allowance. Applicants must have a bachelor's degree in engineering, preferably in civil, sanitary, or chemical engineering, and must complete by May 1952, a total of at least three additional years of professional training and experience. At least 2 years of the required experience must have been in public health or an acceptable related field.

For application forms and additional information write to: Surgeon General, Public Health Service, Federal Security Agency, Washington 25, D. C., Attention: Division of Commissioned Officers, Desk A.

---