

# PHYSICAL STATUS OF YOUNG MEN, 1918 AND 1941<sup>1</sup>

GEORGE ST. J. PERROTT

WHILE death rates among young men aged 20-34 years have declined nearly 30 per cent since the World War (Figure 1 shows comparisons for selected causes), results of Selective Service examinations do not indicate a similar improvement in the physical status of living young men. About 43 per cent of all men examined for military service are being declared unfit for general military service (as of March, 1941) either by local draft boards or at army induction centers. This compares with a figure of about 30 per cent rejections in 1917-1918.

Of the 43 per cent of men declared unfit for general military service, 32 per cent are so classified by the 6,450 local boards and an additional 11 per cent at the army induction centers. This means that out of every hundred men declared physically fit by the local boards, an average of sixteen are rejected later in the thorough reexamination at the army induction centers.

While draft board and army physicians rejected 43 per cent of men for full military service, only 28 per cent were considered unfit for any service (Figure 2). The remaining 15 per cent were classed as fit for limited service, and many of these undoubtedly had defects which were remediable.

The local board figures represent an estimate based on a review of a large proportion of the examination records received by the National Headquarters of the Selective Service System, and cover the period from the beginning of examinations under the Act to about the end of March. The induction center data are based on complete figures for the period up to February 1 (18,971 men returned to local boards out of 120,689 men examined at induction centers).

<sup>1</sup>Presented at the Nineteenth Annual Meeting of the Milbank Memorial Fund. Published by permission of the Surgeon General, United States Public Health Service.

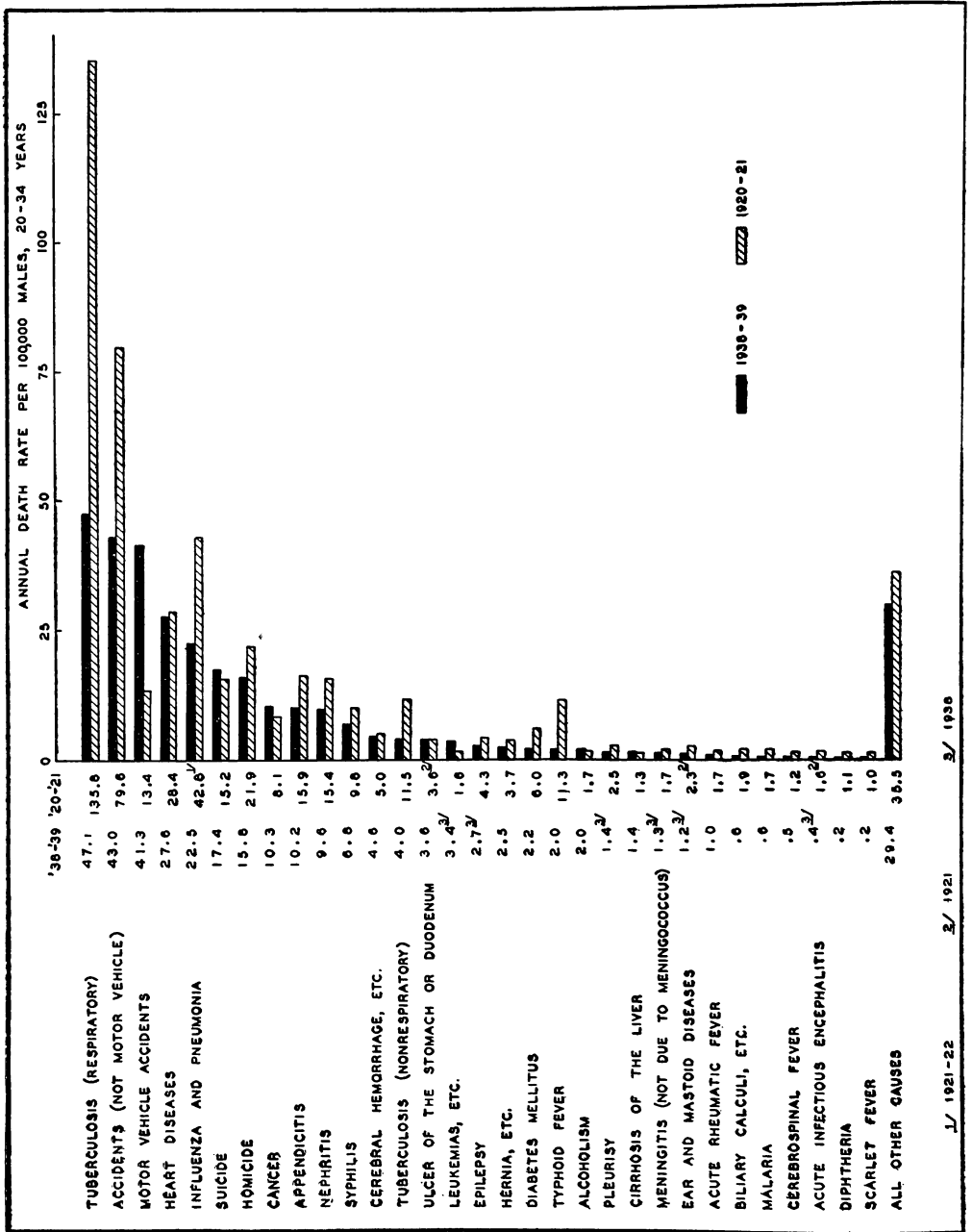


Fig. 1. Mortality from selected causes among males, 20-34 years, 1938-1939 and 1920-1921, for Registration States of 1920.

1/ 1921-22      2/ 1921      3/ 1936

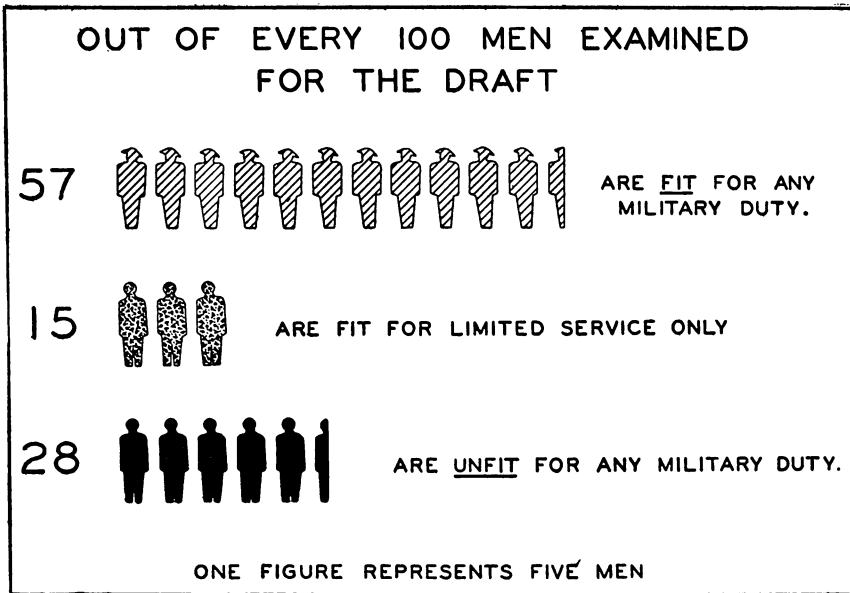


Fig. 2. Classification of men examined at Selective Service local boards through March, 1941, and army induction centers through January, 1941.

In interpreting these findings, the question of age is of importance. The Selective Service ages are 21 to 35. However, the effect of deferments for other than physical reasons is to concentrate the group examined in the ages 21 to 25, the period when physical health should be at its best.

Of interest is the relative importance of various causes of disqualification today and during the World War, as shown in Figure 3. The data for the World War draft are based on local board and "second million" examinations.<sup>2</sup> The causes have been classified according to the diagnosis groups being used for preliminary studies of examinations under the Selective Service Act of 1940. Since the World War data included a second impairment, if present, an arbitrary correction was necessary to make comparisons possible.<sup>3</sup>

<sup>2</sup> Perrott, George St. J. and Britten, Rollo H.: Summary of Physical Findings on Men Drafted in the World War. *Public Health Reports*, January 10, 1941, 56, No. 2, pp. 41-62, Reprint No. 2223.

<sup>3</sup> The duplication was eliminated by multiplying by a factor obtained by dividing the  
(Continued on page 340)

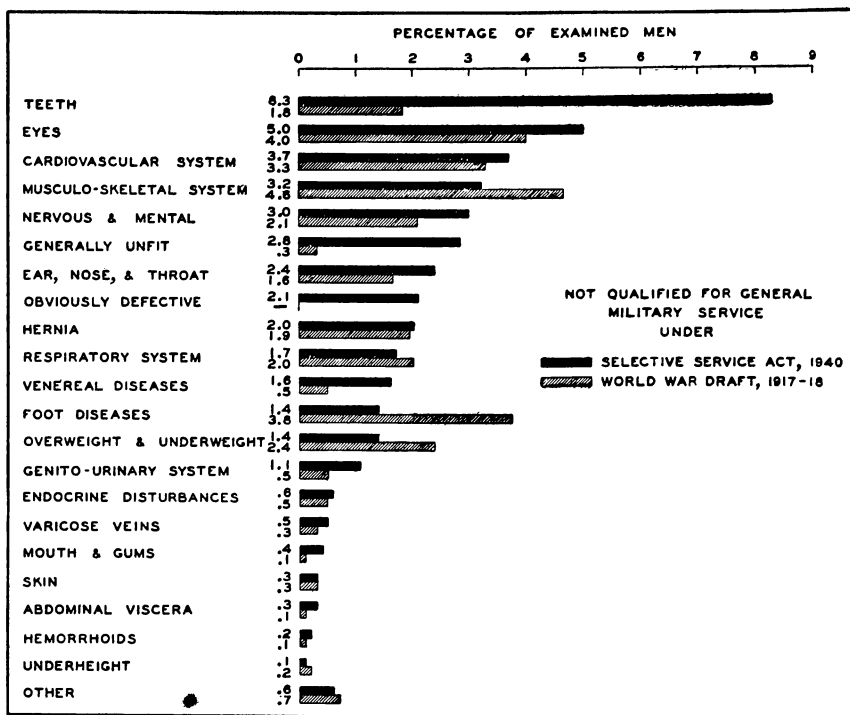


Fig. 3. Proportion of men classed as not qualified for general military service for specified causes in 1940 and in 1917-1918.

The most striking difference between the results of 1917-1918 and today is the present high percentage of rejections because of defective teeth, which are over four times as high as in the World War draft. It should not be concluded that this necessarily indicates an increase in the prevalence of dental disease since 1918. It may indicate that young men today have had less dental care during childhood and adolescence than those of 1918, due perhaps to the effect of the depression. Furthermore, while army standards have not changed since the last war, it is possible that they are being more rigidly enforced today. Other factors may play a part, such as the fact that deferments because of dependents or essential occupation tend to concentrate young men of low economic status who have had inadequate dental care. The percentage of men classified as not qualified for general military service by the rate of defects per 100 persons recorded among such men. These percentages were, respectively, 31.2 and 41.4, giving a factor of 0.7536.

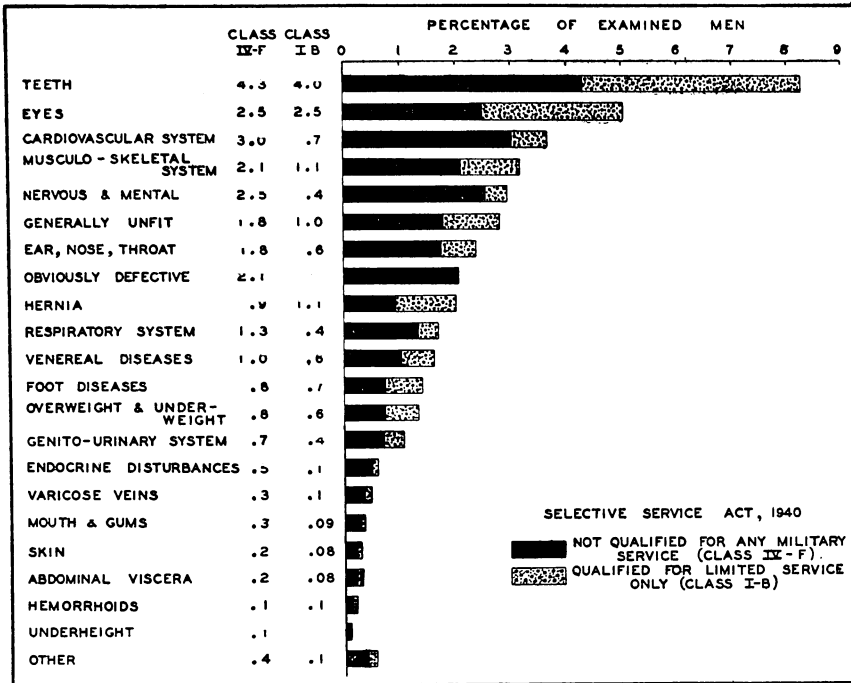


Fig. 4. Proportion of men classed as IV-F and as I-B for specified causes under Selective Service Act, 1940, by Selective Service local boards and army induction centers.

quate dental care in the group who are certified for physical examinations.

Rejections for respiratory disease (largely tuberculosis) are only a little lower than in the World War (1.7 per cent as compared with 2.0 per cent). Since mortality from tuberculosis has been cut in half in that time, it would appear that a better case-finding job is being done in the present examinations.

Rejections for venereal disease constitute 1.6 per cent of men in the present examinations as compared with 0.5 per cent in the last draft. This higher percentage need not indicate an increase in the prevalence of venereal disease since 1918 but is probably due to more rigid standards today, which exclude men with venereal disease, and to the use of better diagnostic methods.

In Figure 4, the percentage rejections for various causes in 1940

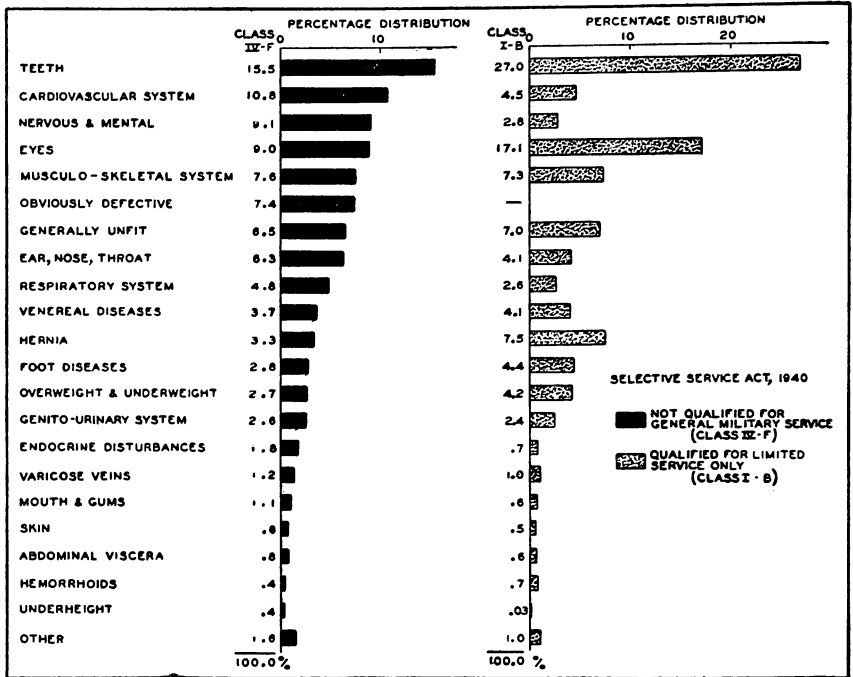


Fig. 5. Proportion of men in Class IV-F and in Class I-B rejected for specified causes by local boards and induction centers.

have been divided into two parts—the percentage classified as not qualified for any military service for a particular cause (Class IV-F) and the percentage classed as qualified for limited service only (Class I-B). It will be seen that about equal proportions were put in each class for such causes as defective teeth, eyes, hernia, and foot diseases while such defects as nervous and mental disorders, cardiovascular defects, and respiratory diseases (largely tuberculosis) were considered more serious by the medical examiners and placed largely in Class IV-F.

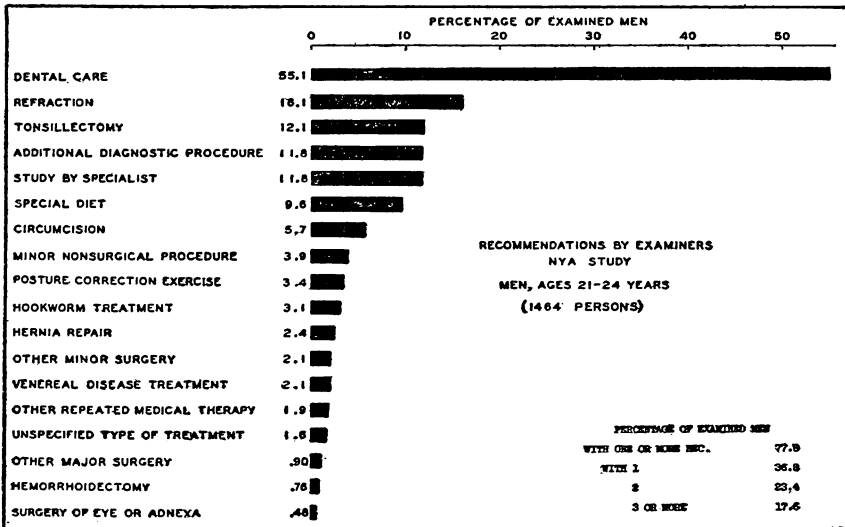
Figure 5 shows the data expressed in a different way, with the defect rate in each class considered as 100 per cent. This indicates that in the limited service group, supposedly comprising a large proportion of young men with remediable defects, over 50 per cent of the men were so classed because of three types of defects—teeth

(27.0 per cent), vision (17.1 per cent), and hernia (7.5 per cent).

In spite of the higher percentage of rejections reported today than in 1917-1918, it can not be said that the physical status of young men has deteriorated since the World War. Neither can it be said that the health of young men has improved. Differences in physical examination standards, in technique of examining physicians, and other factors make comparison difficult until the data can be analyzed in more detail. Rejections for defective teeth are obviously higher than in 1918; otherwise, the important causes of rejection today are the same as those in the World War draft.

Recent preliminary results of physical examinations in National Youth Administration projects confirm the results of Selective Service. Nearly 30 per cent of N. Y. A. male youths aged 21-24 were judged by examining physicians to have physical defects which handicapped them to a greater or less extent for work. To remedy these conditions, physicians recommended eye refractions (16 per cent of the youths examined), tonsillectomy (12 per cent), special diet (9.6 per cent), hernia repair (2.4 per cent), venereal disease

Fig. 6. Recommendations of medical examiners in National Youth Administration program, 1941, men, ages 21-24 years.



treatment (2.1 per cent), hookworm treatment (3.1 per cent), and other medical or surgical procedures in a large number of cases (Figure 6).

The correction of defects among our young men must be regarded as of importance not only from the point of view of military man power, but also from that of industrial man power and public health generally. Furthermore, while these figures point to the need for remedial care, they emphasize also the fact that many of the impairments could have been prevented by more extended public health programs during the period of growth of these individuals. The statistics of the last draft have provided material for papers by medical statisticians for over twenty years. It is to be hoped that the implications of the present figures will be apparent to others than statisticians and will promote the planning of future health services for children and adolescents to the end that future generations of young men may have the maximum possible health and vigor.

●