

**HEALTH INSURANCE: ITS  
RELATION TO THE PUBLIC  
HEALTH, PUBLIC HEALTH  
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by B. S. Warren & Edgar Sydenstricker

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**B. S. WARREN & EDGAR SYDENSTRICKER**

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TREASURY DEPARTMENT  
UNITED STATES PUBLIC HEALTH SERVICE

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MARCH, 1916

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**HEALTH INSURANCE**  
ITS RELATION TO THE PUBLIC HEALTH

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[SECOND EDITION]

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## CONTENTS.

	Page
Introduction.....	5
I. Prevalence and cost of sickness among wageworkers.....	6
II. Conditions causing sickness among wageworkers.....	7
Occupational disease hazards.....	8
Harmful substances: Metals, dusts, gases, vapors, and fumes.....	8
Harmful conditions in places of employment.....	9
Working conditions which cause excessive fatigue.....	10
Morbidity according to occupation.....	12
Mortality according to occupation.....	14
Irregularity of employment.....	16
Effects of irregular employment upon health.....	16
Unemployment as a factor in the public health problem.....	17
Unhealthful conditions of living.....	18
Inadequate diet.....	19
Extent of inadequate diet.....	19
Effects of increased prices of food.....	20
Housing conditions.....	21
Congestion.....	21
Overcrowding and disease.....	22
Lodging-house conditions.....	23
Community environment.....	24
Effects of unfavorable community environment upon health.....	25
Infant mortality as an indicator of the healthfulness of environment.....	26
The employment of women.....	28
Effects of industrial occupation upon the health of women wageworkers.....	28
Causes of a greater health hazard to women wage earners.....	33
Effects of employment of mothers upon viability and health of children.....	33
Economic status of wage earners.....	34
Wages.....	35
Loss in working time.....	35
Annual earnings.....	35
Family income.....	35
Adequacy of wages and income.....	36
Poverty and disease.....	36
Partnership of poverty and disease.....	37
Poverty a result as well as a cause of disease.....	37
III. Responsibility for conditions causing disease.....	38
Causes of sickness from the standpoint of responsibility for their removal.....	38
Conditions for which employer and industry are primarily responsible.....	39
Conditions for which public is primarily responsible.....	40
Limitations upon responsibilities of employer and public.....	41
Conditions for which the individual worker is responsible.....	42

	Page.
III. Responsibility for conditions causing disease—Continued.	
Inability of wageworker to meet his responsibility for maintaining health.....	43
Adequacy of the wage earner's family income to maintain health.....	43
Handicaps of medical profession.....	46
Need for more effective method of dealing with problem of wage earner's health.....	47
IV. Cooperative action needed for relief and prevention of sickness....	47
Cooperation among employers, employees, and public.....	48
Insurance a method of collective or cooperative action.....	48
Insurance as a preventive measure.....	49
Growth of social insurance.....	49
Growth of health insurance in Europe.....	50
Growth of health insurance in the United States.....	51
V. Health insurance: a health measure.....	53
Benefits.....	53
Extension of health insurance to all wage earners.....	54
Distribution of cost among employees, employers, and public....	55
The employees' share.....	56
The employers' share.....	56
The public's share.....	57
Health insurance as a health measure.....	57
Financial incentive for lessening ill health.....	57
Correlation of all health agencies.....	58
Medical staff detailed from Federal or State health departments.....	59
Cooperation with medical profession.....	59
Cooperation with local health agencies.....	60
Health insurance a health-promoting agency in foreign countries.....	61
Malingering.....	62
Incorrect principles employed in sick-benefit plans.....	63
Health insurance in relation to relief and charity work.....	64
Health insurance not a charity measure.....	64
A preventive of the need for charity.....	64
"Ethical character of insurance".....	65
Governmental system best.....	65
Basic principles of health insurance already established in the United States.....	67
A health insurance system feasible for the United States.....	68
Summary and conclusions.....	68
Appendix I. British and German health insurance systems.....	71
Appendix II. Typical sick-benefit funds in the United States.....	74
Appendix III. Health insurance standards recommended by the committee on social insurance of the American Association for Labor Legislation.....	76
Appendix IV. Recommendations as to health insurance from the staff report to the United States Commission on Industrial Relations.....	78



## HEALTH INSURANCE: ITS RELATION TO THE PUBLIC HEALTH.

By B. S. WARREN and EDGAR SYDENSTRICKER.

### INTRODUCTION.

The growing realization of the fact that the health of the wage-working population depends in large measure upon economic conditions is leading to the conviction that there is need for more comprehensive measures for the relief and prevention of disease. The presence of a wage-working population in almost every community renders this problem a national as well as a local one. As the industrial population of the United States increases, the need for an adequate solution of the problem becomes more pressing.

Health insurance has been adopted in many European countries as the remedy for similar conditions and has become an efficient measure for the relief of sickness and an important agency in the prevention of disease. Recent discussions and proposals of health-insurance measures are beginning to focus public attention upon this subject and to suggest that a governmental system of health insurance is the solution of the problem in America. Its success in foreign countries at least demands a careful consideration of its possibilities as a health measure in this country.

Health insurance, in its broad sense, has two definite objects: (1) To distribute the cost of sickness among those responsible for conditions causing sickness and thereby lighten the burden upon the individual; and (2) to give a financial incentive for the prevention of sickness to those who are responsible by dividing the premiums among the responsible groups. If such a method can be adapted to American conditions, and if in its administration the cooperation of all concerned in the relief and prevention of sickness can be brought about, there is reason to believe that it will prove to be a public-health measure of extraordinary value.

This bulletin is intended as a brief survey of the relation of health insurance to the health of the wage earner. Obviously, therefore, it is necessary (1) to outline the conditions causing sickness among wage earners; (2) to point out the responsibility of employers, employees, and the public for these conditions; (3) to show the necessity

for closer cooperation among the responsible groups; and (4) to discuss the adequacy of health insurance as a method for their cooperation in promoting the health of wage earners and their families. In discussing these subjects it should be noted that mortality and morbidity statistics have not been used to measure the relative importance of economic factors, but to indicate their trend and their effects.

As a basis for considering the relation of health insurance to the health of the wage-working population, a review of the situation which needs to be remedied is given first consideration.

### I. PREVALENCE AND COST OF SICKNESS AMONG WAGE-WORKERS.

The cost to the Nation of preventable diseases has frequently been the subject of estimates and discussions. These estimates include the entire population, and even if reduced by one-half are still appallingly great. As a basis, however, for a clearer understanding of the problem of health among wageworkers and their families, it is important to have some idea of its magnitude in more specific terms.

It has been tentatively stated that each of the 30,000,000 workers in the United States loses on the average about nine days every year on account of sickness alone. This does not take into consideration the effects of sickness upon his own vigor and efficiency, or upon the welfare of his family, or upon the efficiency of the industry in which he is engaged. The estimate of nine days is a preliminary one based upon an investigation made for the United States Commission on Industrial Relations of nearly a million workers in representative establishments and occupations in this country. While the more complete statistics that are now being compiled may cause some revision of this estimate, it is interesting to note that it very nearly coincides with the German and English figures for over 26,000,000 industrial workers, which show an average of eight to nine days of illness per year through a number of years. Estimating the daily wage at \$2 and the cost of medical attention at \$1 per day, the annual loss to the 30,000,000 wage earners on account of the nine days of sickness would be over \$800,000,000. This leaves out of consideration the losses due to death and to decrease in efficiency which follows illness. It also leaves out of consideration the effect upon the family when the breadwinner is disabled.

These figures, impressive as they are, but inadequately afford a true conception of the problem of sickness among wageworkers; they merely give an idea of its magnitude in terms of economic significance. To be properly appreciated, they must be interpreted in terms of human suffering. Several intensive physical examinations

of workers in recent years in the United States have afforded definite data on the prevalence of ill health, and especially tuberculosis, in certain occupations. Miller's examination of 200 printers in 1908 showed that 69 per cent were afflicted with one or more diseases and that 16.7 per cent had tuberculosis.<sup>1</sup> Similar examinations by Dr. George M. Price, Director of Investigation for the New York State Factory Investigating Commission, showed the following results.<sup>2</sup>

TABLE 1.—*Diseases among workers in New York State.*

Group of workers.	Total number examined.	Per cent having one or more diseases.	Per cent having tuberculosis.
Bakers.....	300	57.0	2.4
Tailors.....	300	52.7	1.6
Furriers.....	58	52.2	6.0
Tobacco workers.....	600	71.4	1.3

The results of physical examinations of about 2,000 male garment workers in New York City, conducted on a more intensive plan by Surg. J. W. Schereschewsky, of the United States Public Health Service, showed that 2.4 per cent of the operators, 3.4 per cent of the pressers, and 4.6 per cent of the finishers had tuberculosis.<sup>3</sup> The examination of over 7,000 employees of the Sears, Roebuck & Co., in Chicago, by Dr. H. E. Mock, during a period of five years, showed a tuberculosis rate of 4 per cent.<sup>4</sup> Mock's method of examination was similar to that of Schereschewsky. The examination of about 20,000 workers in various industries in Cincinnati by Surg. D. E. Robinson, of the United States Public Health Service, showed a tuberculosis rate of 1.1 per cent.<sup>5</sup>

## II. CONDITIONS CAUSING SICKNESS AMONG WAGE-WORKERS.

The problem of the wageworkers' health is made more complex on account of economic factors. The "human scrap heap of industry" is not an imagined thing, but represents a very real and constant loss of industrial efficiency and waste of health and life that ought to be prevented.

<sup>1</sup> These statistics were presented by Dr. James Alexander Miller at the International Congress on Tuberculosis in 1908. Quoted by Dr. George M. Price, M. D.: *Occupational Diseases and the Physical Examination of Workers*, Transactions of the Fifteenth International Congress on Hygiene and Demography, Washington, 1912, Vol. III, Part II, pp. 845, 847.

<sup>2</sup> *Supra cit.*, p. 847. The women tobacco workers were examined by Dr. Fanny Dembo.

<sup>3</sup> Public Health Bulletin No. 71, United States Public Health Service, p. 84. The workers included in Dr. Schereschewsky's examination were those who volunteered.

<sup>4</sup> H. E. Mock, M. D.: *An Efficient System of Medical Examination of Employees*, Transactions of the Tenth Annual Meeting of the National Association for the Study and Prevention of Tuberculosis, Washington, D. C., 1914, p. 44.

<sup>5</sup> Public Health Bulletin No. 73, United States Public Health Service, p. 58.