the health, vigor, economic productivity, and happiness of their fellow citizens. It is more than a treatise on public health. It is a discussion of the history and possibility of social well being with special reference to health.

Bailey B. Burritt

SURGEON GENERAL'S REPORT ON HEALTH AND DEPRESSION STUDY

In the Annual Report of the Surgeon General of the United States Public Health Service to Congress, for the fiscal year 1935, an account is given of various studies conducted by the Office of Statistical Investigations on health and the depression. Most of these studies were conducted in collaboration with the technical staff of the Milbank Memorial Fund and the results of these particular studies have already appeared in the Quarterly. That section of the Surgeon General's Report which deals with this subject was prepared by Senior Statistician Selwyn D. Collins and gives a succinct summary of the results of the various inquiries. It may be interesting to readers of the Quarterly to quote from the official report as follows:

"Studies of various phases of the relation of sickness to the depression have been continued throughout the year. Three papers in a series which is to constitute a final report on the subject were sub-

Incidence of disabling illness in the early spring of 1933 in 11,511 canvassed white wage-earning families classified according to employment status of the wage-earners during 1932, in ten localities.

<table>
<thead>
<tr>
<th>Employment Status of the Family's Wage Earners</th>
<th>Illnesses per 1,000 Persons for Three-Month Period (Adjusted for Age)</th>
<th>Number of Persons Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Onset Within Survey Period</td>
</tr>
<tr>
<td>Full-time workers (with or without part-time workers)</td>
<td>123</td>
<td>91</td>
</tr>
<tr>
<td>Part-time workers (1 or more; no full-time)</td>
<td>160</td>
<td>112</td>
</tr>
<tr>
<td>No employed workers</td>
<td>182</td>
<td>121</td>
</tr>
</tbody>
</table>
mitted for publication in the Public Health Reports, and the first one appeared in the issue of May 3, 1935. The accompanying table gives the sickness rates obtained in this study for families classified according to employment in 1932, the year immediately preceding the survey.

Considering all illnesses, the rate for persons in families with no employed workers (182 per 1,000) was 48 per cent above that in families with a full-time worker (123 per 1,000).

Persons of low income, and particularly those whose economic status changed from reasonable comfort to very poor during the depression, had high sickness rates. However, the greatest difference in sickness rates appears between persons on relief and those not on relief. The accompanying table gives the rates.

Considering all illnesses, the rate for persons in families which fell from relative comfort in 1929 to poor in 1932 (145 per 1,000) is 21 per cent above that for families who remained in the comfortable class; those who fell from relative comfort in 1929 to relief in 1932 had a still higher sickness rate, 208 per 1,000 persons, or 73 per cent above the rate in those families which remained comfortable throughout the period (120 per 1,000). (The word “comfortable” is here used in a relative sense only; the incomes of all of the surveyed families were very low.)

Since sickness of some member of the family, particularly of the

Incidence of disabling illness in the early spring of 1933 in canvassed white wage-earning families classified according to change in family income between 1929 and 1932 and relief status in 1932, in eight large cities.

<table>
<thead>
<tr>
<th>Economic and Relief Status1</th>
<th>Illnesses per 1,000 Persons for Three-Month Period (Adjusted for Age)</th>
<th>Number of Persons Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Onset Within Survey Period</td>
</tr>
<tr>
<td>Comfortable throughout the period 1929-1932</td>
<td>120</td>
<td>90</td>
</tr>
<tr>
<td>Comfortable in 1929 but poor in 1932</td>
<td>145</td>
<td>103</td>
</tr>
<tr>
<td>Comfortable in 1929 but on relief in 1932</td>
<td>108</td>
<td>142</td>
</tr>
</tbody>
</table>

1 In all cities except New York "poor" means an income of less than $150 per capita, and "comfortable" an income of $425 or more per capita. In New York (including Brooklyn), the corresponding figures are under $250 and $500 and over.
chief wage earner, is frequently the reason for the family being on relief, the high rate in the relief group suggests that selection is an important factor; that is, the relief population contains a disproportionately large number of persons who have chronic diseases or physical defects or who are susceptible to frequent attacks of acute illness.

As a further study of the health of the population on relief, an analysis of data on physical impairments and chronic diseases among the relief and the nonrelief population of a large city was undertaken in cooperation with the Federal Emergency Relief Administration, under whose auspices the information was collected. These data indicated that (a) a much higher proportion of persons on relief had serious physical defects or chronic diseases than those of the same occupational class who were not on relief; (b) in both the relief and nonrelief populations the proportion with impairments and diseases increases regularly from the lowest rate in professional, proprietary, and clerical classes to the highest among unskilled laborers; (c) that among the “white-collar” occupations illness and physical impairments are relatively a more frequent reason for getting on relief than among laborers, and particularly among colored laborers. Among unskilled laborers, where income is always low and adaptability to new conditions and suitability for new or changed employment is limited, reasons of a purely economic nature often put the family on relief, but among the more adaptable “white-collar” classes the family can more frequently meet new economic conditions unless handicapped by impairment or illness.

This Office also cooperated with the Federal Emergency Relief Administration in the analysis of data on physical defects and chronic diseases among relief families in a large group of cities; the data were collected as a part of an occupational census of the relief population of cities scattered throughout the country. A bulletin issued by the Federal Emergency Relief Administration gives the results (Federal Emergency Relief Administration Research Bulletin, Series I, No. 6).

The report also refers to a study undertaken in collaboration with the California State Health Department and the California Emergency Relief Administration to determine whether mortality in the families of the unemployed and others severely affected by the depression, increased, remained stationary, or decreased during the period 1929-1934. This study consisted of a house-to-house canvass of some 30,000 families, and will materially increase the total amount of data relating to mor-
tality in the same group of unemployed families before and during the depression. The first series of health and depression studies in ten cities showed a much higher mortality during the period 1929-1932 in the unemployed families than in the employed families but the number of deaths in the 12,000 families surveyed were not sufficient to permit of detailed statistical analysis. The California study is now in the process of tabulation.

EDGAR SYDENSTRICKER

THE SPREAD OF TUBERCULOSIS IN FAMILIES

From the Henry Phipps Institute in Philadelphia during the past ten years have come studies of the spread of tuberculosis in families which have made important contributions to knowledge of the epidemiology of the disease. In a recent issue of the American Journal of Hygiene a summation of certain phases of these studies has appeared in a series of three articles.1

In the first article dealing with the organization of an out-patient tuberculosis clinic for epidemiological investigation, the authors conclude that “an out-patient clinic or dispensary that limits its service to a district in which it maintains visiting nurses may be effectively organized for investigation of the character and mode of spread of tuberculosis, provided that observations be continued over a period of years corresponding in duration with the chronic course of the disease.” They point out also that investigation of the epidemiology of tuberculosis must include infection demonstrable by the tuberculin test and X-ray examination as well as clinically manifest disease and must determine the relation of one to the other.

In the second study dealing with the spread of tuberculosis in families, it was concluded that the spread of tuberculosis occurs in large part by long drawn out family or household epidemics in which the disease is slowly transmitted from one generation to the next. The study showed

1 Opie, Eugene L. and McPhedran, F. Maurice: The Organization of an Out-Patient Tuberculosis Clinic for Epidemiological Investigation.
Opie, Eugene L., McPhedran, F. Maurice, and Putnam, Persis: The Fate of Persons in Contact with Tuberculosis: The Exogenous Infection of Children and Adults.