# Sickness as Recorded in Family Surveys 

There are many ways to express the extent of deviation from normal health in an observed population, such as the incidence of new cases of illness, the days of illness during a given period, the days of illness per case, and the prevalence of illness at a given time. These and other measures can be expressed in terms of rates or ratios for all cases and for cases of different severities, such as nondisabling, disabling, confined to bed, and admitted to a hospital, together with days per 1,000 population and days per case for cases of each severity. Thus, morbidity from all causes can be expressed in many ways, aside from similar rates and ratios for specific diagnoses.

Detailed data on illness have been collected in six surveys by periodic visits at intervals of 1 to 3 months to households in the general population, covering nearly 100,000 full-time personyears of observation. These surveys made over the past generation by, or in cooperation with, the Public Health Service afford considerable data on 103 diagnoses for all recorded cases, and only about half a dozen less for cases disabling or confining to bed for 1 day or longer. This study represents a detailed analysis of these records of illness in the general population, supplemented by records of hospitalization, particularly of mental diseases, tuberculosis, and a few other chronic diseases.

In the study it was not feasible to follow chronic cases throughout their total duration, so cases and their durations were expressed as "episodes" of illness. This procedure made it feasible to get some idea of seasonal variation by a tabulation by months of onset of such cases or episodes as had their onset during the study period.

No detailed discussion is needed here, but a few summary statements should be made regarding important findings:

1. These studies indicate total annual cases of illness of 1,060 per 1,000 population, or about one illness per person per year. Of these cases, roughly half ( 565 per 1,000 ) were disabling for 1 day or longer, and the other half were not dis-


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Readers wishing the data in full may purchase copies of the monograph from the Superintendent of Documents, United States Government Printing Office, Washington 25, D. C. A limited number of free copies are available to official agencies and others directly concerned on specific request to the Public Inquiries Branch of the Public Health Service. Copies will be found also in the libraries of professional schools and the major universities, and in selected public libraries.

Collins, Selwyn D., Trantham, Katharine S., and Lehmann, Josephine L.: Sickness experience in selected areas of the United States. Public Health Monograph No. 25 (Public Health Service Publication No. 390). 96 pages. lllustrations. U. S. Government Printing Office, Washington, 1955. Price 50 cents.
abling. Disabling is here used in the sense of causing the patient to be unable to perform his usual duties, such as work, housework, attending school, or other activities for 1 day or longer. Of these disabling cases, 405 per 1,000 population spent 1 or more days in bed because of the illness, and of the bed patients 56.4 per 1,000 population spent 1 or more nights in a hospital. These hospital patients constituted 10 percent of all disabling cases and 13.9 percent of all bed patients.
2. Of all disabling cases or episodes of illness, 13.4 percent were chronic; similar percentages of bed and hospital episodes of illness were 13.8 and 22.6 , respectively. The mean duration of disability per acute illness or episode was 10.3 days, as compared with 63.6 days for chronic episodes; however, the annual days of disability per 1,000 population of the 5 surveys was 5,007 and 5,101 for acute and chronic illnesses, respectively, with a total for all cases of 10,108 annual days of disability per 1,000 population, or 10.1 days per person observed.
3. Of the acute disabling attacks, 96 percent were disabling for 30 days or less, as compared with 72 percent for chronics; to reverse the statement, only 4 percent of acute cases were disabled for more than 30 days, but 28 percent of the chronic cases were disabled that long. On the other hand, 24 percent of the acute cases were disabled for only 1 or 2 days, and 18 percent of the chronic episodes were disabled for only that long. Finally, 86 percent of acute cases were disabled for less than 18 days, and 47 percent of the chronic episodes involved less than 18 days of disability.
4. Variation with age and variation with season are shown for total cases of each specific diagnosis, and variation with age is shown for hospitalized cases for as many diagnoses as the smaller numbers justify. Variation with age and sex is shown for bed cases; for a few diseases the rates for women are exceptionally higher than for men, such as those of the thyroid gland, of the gallbladder and liver, appendicitis, neuritis, headache, nervousness, psychoneurosis, arthritis, diabetes, and injury by fall. On the other hand, some diseases had definitely higher rates for men, such as peptic ulcer, hernia, and traumatic lacerations.
5. The respiratory diseases show consistently greater seasonal variation, with peaks in January or February, with ear and mastoid diseases showing peaks also in February. The acute communicable diseases, hay fever, and the acute stomach and intestinal upsets also show large seasonal variation, but episodes of chronic diseases generally show much less seasonal variability.
6. Admissions to short-term general and allied special hospitals have increased rapidly since 1935 , hospital days per 1,000 population less rapidly, but hospital days per hospital case have generally declined since 1935 , and particularly since 1945. However, increases in hospital admissions and days of care per 1,000 population do not necessarily mean an increase in illness; higher incomes, the budgeting of hospital costs by insurance, and the increase in the general level of living have probably been large factors in the increase of hospital care even without any increase in day-to-day illness in the United States.

