

in the northeastern portion of the country.

The Center is under the direction of Dr. C. A. Sargent, Commissioner of Health of Syracuse. Training courses are conducted by a training officer assigned by Training Services of the Communicable Disease Center. The housing evaluation program of the city health department is being used as a teaching facility. In addition to conducting training courses, the training officer has been placed in charge of the health department housing activity as a means of promoting unity of policy and action between the training and operational programs.

Cooperation has also been extended to other agencies by the city health department and the Training Center. Special surveys for the Syracuse Housing Authority are in progress to furnish data for programs under the Housing Act of 1949. A standing agreement has also been reached for the health department to complete all housing evaluations for tenant selection or other purposes as needed by the Housing Authority. Close cooperation also exists with the State health department and Syracuse University.

Training in the appraisal method is provided for supervisory personnel of State or local health departments or other agencies concerned with housing, such as city planning commissions, housing

authorities, urban redevelopment agencies, or similar organizations, including nonofficial agencies.

Courses in the appraisal method are of 5 weeks duration and are scheduled at frequent intervals on a permanently continuing basis. Completion of such a course qualifies the trainee to establish the use of the appraisal method in his community and to train subordinate personnel for essential duties.

In addition, shorter courses of various types are also given. These range from 1-day seminars for orientation of selected groups to courses of 1 or 2 weeks or longer. The latter courses are designed for special purposes such as the review of the latest developments in legislation, administrative techniques in community housing improvement programs, or housing standards.

Courses to provide a basic general knowledge of housing to regional training officers and Public Health Service personnel in regional offices, and similar short courses for health officers and other local administrators, are also in preparation and are expected to be given shortly.

Information concerning available courses and training assistance may be obtained either through Training Services of the Communicable Disease Center, or directly from the Syracuse Housing Training Center, City Hall, Syracuse, N. Y.

Relationship of Housing to Public Health

ROSS W. BUCK, Sanitary Engineer*

The definition of the word "health" as given by the World Health Organization in its constitution (1) is: "Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."

Housing is essentially shelter, although few would accept this limited definition. The Committee on the Hygiene of Housing uses the term "adequate shelter." Dr. Leonard A. Scheele (2), Surgeon General of the Public Health Service, in testifying before the Subcommittee on Banking and Currency of the United States Senate, further delineates

housing in terms of "...safe, sanitary and decent homes."

If one were asked what is meant by "an adequate shelter" or by a "safe, sanitary and decent home," a list of 30 principles would probably be required to explain these words. These principles, clearly stated, were developed by the Committee on the Hygiene of Housing soon after it was formed. The Committee describes them as "Basic Principles of Healthful Housing" (3) and groups them into four sections. These 30 principles are grouped into sections designated as follows: Protection against

*Training Services, CDC.

Contagion, Protection against Accidents, Fundamental Physiological Needs, and Fundamental Psychological Needs. This grouping is essential so that the *modus operandi* of the principles can be more easily visualized.

If we were to define the word "safe" in terms of our basic principles, we would involve not only those sections dealing with protection against accidents and contagion, but also such psychological considerations as "provision of facilities which make possible the performance of the tasks of the household without undue physical and mental fatigue." It might also include the physiological needs, such as "maintenance of thermal environment which will avoid undue heat loss from the human body." These additional maxims are closely allied with safety.

The word "sanitary" not only brings to mind the "provision of a safe water supply" under the "Protection against Contagion" section, but also invades the section "Protection against Accidents" as delineated by the principle "control of conditions likely to cause fires or to promote their spread." Insanitary conditions, such as the accumulation of trash and waste products in the home, are among the major fire causes. Other examples can be cited such as provision for "adequate space for exercise and for the play of children," which is a physiological need greatly influenced by the sanitary conditions of the premises.

It is interesting to observe that Dr. Scheele uses the words "decent homes" in his testimony. The term "decent homes" involves many of the principles set forth under the section on "Fundamental Psychological Needs," such as "provision for maintenance of cleanliness of the dwelling and of the person." Another principle in this section is "provision of possibilities for esthetic satisfaction in the home and its surroundings," or "concordance with prevailing social standards of the local community." After exploring these principles which are basic to health and housing, it is interesting to note that the use of the word "decent" is as essential as the words "safe" and "sanitary," which everyone uses, when speaking of health and housing.

Many writers on public health, reflecting their scientific training, place great credence on cause and effect in proving their case. Yet in housing we have relatively little, at this time, with which to pin point a specific disease to a home which failed in being "safe, sanitary or decent."

Rollo H. Britten (4) probably best expresses this

situation in an article "New Light on the Relation of Housing and Health," in which he says, "Bad housing is a symptom of low economic status; poor health, to a degree, is another symptom. And, to make matters more confusing, any element of bad housing which we choose to employ as a basis for comparison stands not by itself but is an index of bad housing in general." He continues in his article to say, "Thus, when I show, as I shall, higher rates of pneumonia or tuberculosis in crowded than in uncrowded households, it is not going to be possible to say that the crowding itself has produced all the excess."

For those who seek evidence of cause and effect, it is recommended that they turn to a recent study on "The Relation of Housing to the Incidence of Meningococcic Disease in an Outbreak in Oak Ridge, Tenn.," reported by Bernard M. Blum and William F. Elkin (5). Among the important facts presented are these statements, "Wide differences in rates (incidence of meningococcic disease) among several housing groups were demonstrated." They continue to report: "The rate in the white slum group was significantly higher than the rate in the white standard group. In one slum area, the rate in the colored dwelling group was shown to be significantly higher than the rate in the white group having comparable housing."

It is heartening to be able to see the new emphasis placed on research on the problems of health and housing. The work by Blum and Elkin, that of Kennedy and Hobbs (6) in St. Thomas, Ontario, and others, is a healthy sign of this new research.

It is refreshing to know that the epidemiologist continues to explore, with added emphasis, the effects of the environment by the individual. Dr. Scheele (7), in an article on "Arthritis as a Public Health Problem" says, "What, for example, is the status of diagnosis? What scientific data have we on the psychic components in arthritis and rheumatism? What are the relationships between rheumatism and occupation, age, climate, and other environmental and social factors?"

We may be able to obtain answers to these many and perplexing questions through the opportunities presented at this time due to our immediate national defense program. New communities will spring to life to provide services for the production of the H-bomb. Might not these cities provide the opportunities for "control" so necessary in scientific studies? Air raid shelters, hospitals, and other services which involve shelter should be thoroughly



Trash and sheds in this yard not only constitute fire hazards but also leave little space for children to play.

explored for the possibility of adding to our knowledge of healthful housing.

The effect of housing upon health is, to many, confusing and for good reason. Upon re-examination of what we know and what we are looking for, we are sure that adequate housing is one of the roads we can travel and reach our objective, good health - a state of complete mental and social well-being and not merely the absence of disease or infirmity.

REFERENCES

- (1) Constitution: World Health Organization (1946).
- (2) Scheele, Leonard A.: Hearings before Subcommittee of Committee on Banking and Currency, U.S. Senate, Eighty-first Congress (February 11, 1949).
- (3) "Basic Principles of Healthful Housing." Committee on Hygiene of Housing. American Public Health Association. Second Edition (1939), reprinted (1946).
- (4) Britten, Rollo H.: New light on the relation of housing to health. *Am. J. Pub. Health* 32(2): 193-199 (1942).
- (5) Blum, Bernard M., and Elkin, William F.: The relation of housing to the incidence of meningococcic disease in an outbreak in Oak Ridge, Tenn. *Am. J. Pub. Health* 39(12): 1571-1577 (1949).
- (6) Kennedy, R.A., and Hobbs, G.E.: Housing and health survey 1949 St. Thomas, Ontario. Mimeographed form (1949).
- (7) Scheele, Leonard A.: Arthritis as a public health problem. *Pub. Health Rep.* 65(42): 1351-1358 (1950).

Reported Brucellosis in the United States

L. OTIS EMIK, Scientist (R)*

Brucellosis in both domestic animals and man has been reported annually from each State, with few exceptions, for more than a decade. The attacks in man reported by the National Office of

Vital Statistics and the percentage of reactors found in cattle by the Bureau of Animal Industry followed a markedly parallel course from 1938 through 1949, as seen in figure 1, with about an

*Epidemiologic Services, CDC.