Public Health and Medical Problems in Disasters*

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The American Red Cross is a disaster relief agency chartered as such by the federal government. The Congressional Charter, under which it operates, charges it, among other things, with the duty—"to continue and carry on a system of national and international relief in time of peace and to apply the same in mitigating the sufferings caused by pestilence, famine, fire, floods and other national calamities, and to devise and carry on measures for preventing the same."

Funds for maintaining the Red Cross organization are, however, not obtained through governmental sources, but entirely through voluntary subscriptions. It is therefore a semi-official agency. Its duties in disasters are official, but the financial support for all its activities is voluntary.

The Red Cross functions in the field principally through the medium of local chapters, of which there are about 3,500 in the continental United States, 10 in our insular possessions and neighboring islands. Where chapters are prepared for disaster duty, they generally assume the leadership in the emergency relief work. Chapter preparedness is one of the objectives of the national organization. Such communities, therefore, conduct their own relief work at least until it is determined that outside assistance is necessary. The national organization participates in the relief program only where communities are not able to cope with the situation, or where assistance is urgently needed or requested.

Red Cross relief in disasters is not based on the loss sustained by individuals or families, but on actual need only. Relief is intended primarily for the emergency needs of those who are in distress—to feed, clothe, and shelter them temporarily; to safeguard their health; to provide medical, nursing and hospital care; to assist them in rebuilding their homes and to help restore normal living conditions. Those individuals and families who are able to cope with the situation without material assistance are expected to do so.

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There is, however, an emergency period during which it is difficult and often impossible to distinguish the one from the other. The situation is often so very critical that assistance must be given to every one who appears to be in need. That applies to medical as well as to other forms of relief. The necessities with which to sustain life and health must be provided promptly for all, and must be continued until the critical period has passed. There is no time to investigate.

Every effort is made to organize the relief work as early as possible on the basis of actual need. All families and individuals who are receiving help, or may need it, are registered; their circumstances are carefully investigated; and relief continued only for those who deserve it. Rebuilding the homes and other rehabilitation problems are matters that require careful investigation and study before awards are granted for that purpose. In Red Cross language, this phase of relief work is designated as the rehabilitation period.

The emergency period may last only a few days, or continue for several weeks. Refugee camps are generally necessary in large disasters. They are hurriedly set up in buildings or in army tents. Food must be provided through community kitchens and canteen service. Those seriously ill and injured are taken to hospitals in the community, or in neighboring cities. Medical and nursing service, emergency medical stations and increased hospital accommodations must frequently be provided, and measures instituted for the protection of the public health. These are emergency needs and must be provided promptly.

The public health and medical problems are not limited to the emergency period. Many of them extend over considerable time and new ones may develop several weeks after the disaster. There may be a sudden increase in illness among the disaster population. Pneumonia and other respiratory infections are not uncommon. Typhoid fever caused by contaminated water, scarlet fever, measles, and smallpox resulting from overcrowding, may occur in epidemic form. Dysentery, particularly in tropical climates, and malaria may increase. Special maternity service must sometimes be provided particularly where the disaster involves a large number of families as in the Mississippi flood. These problems frequently hinder the progress of the rehabilitation program and must be solved before normal living conditions can be restored.

There are two major health problems in nearly every large disaster—safeguarding the health of the disaster area, and providing medical care for the sick and injured. From an administrative point of view these are distinctly separate problems and must be so regarded in
organizing the relief work. The first is the duty of the constituted health authorities; the second is the function of the local medical profession and hospitals.

The Red Cross does not sponsor or direct the health activities in a disaster area; neither does it assume the responsibility for the care of disaster patients. These are clearly the duty and function of local agencies. If, however, communities have not adequate health service, or if the medical, nursing and hospital facilities are inadequate, it is the duty of the relief agency to assist them. There is no attempt to supersede local agencies. The Red Cross can render the best public health and medical service in disasters, we believe, not by sponsoring these duties, but by providing for the local health authorities and medical profession the supplies, facilities and personnel which they lack and need for the emergency.

It is important that every sound and practical public health measure which will contribute to the immediate health and welfare of the people in the stricken area is utilized to the fullest extent. The sudden change from normal life in the home to crowded and often unsanitary conditions in refugee camps and other places of shelter; the contamination of water supplies, particularly in floods; the increased area of stagnant water in districts already infested with malaria; diarrheal diseases, especially in tropical climates; and other problems demand serious effort on the part of public health officials. Much unnecessary illness can be prevented if prompt action is taken and if the public health work is organized and conducted on the basis of sound public health policy and procedure. Incidentally, a disaster affords an excellent opportunity to educate the public to the advantages of adequate public health protection.

The Red Cross endeavors to coöperate in every way possible with the local medical profession and to assist them in the difficult problems which confront them. It aims to provide for them what they lack and need for the emergency. In organizing the medical relief work, every effort is made to maintain and restore a normal relationship between physicians and patients. Preference is always given to local physicians when it is necessary to employ them for duty at emergency stations, refugee centers, or to assist health departments at immunization clinics.

Where disasters cover a large territory, additional medical and public health personnel are frequently required, to assist in the administrative duties, and to help make a survey of the critical needs of the area. Representatives of the U. S. Public Health Service, the Medical Service of the Army, and physicians with previous disaster
experience often assist in these duties. It should be understood, however, that they are used primarily for the purposes indicated and not for giving medical care to disaster patients, or for local public health duty.

The direction and supervision of the nurses employed by the Red Cross for disaster duty cannot be delegated to any other agency. Because of the large numbers frequently employed, and because of the nature of their work, it is necessary that they be directed by the Red Cross Nursing Service. Through direct contacts with the home, they are frequently able to obtain information most valuable in determining the real need of many families. It is therefore important that a very close liaison be maintained between the Nursing Service and other Red Cross divisions. This is not possible unless they are directed and supervised by the same agency.

The public health and medical activities in which the Red Cross is most frequently called upon to assist or participate may be summarized as follows:

1. Providing additional personnel—physicians, public health nurses, sanitary engineers and sanitary officers—to assist health departments and to staff emergency medical stations, emergency hospitals, and refugee centers. The nurses provided by the Red Cross generally serve the dual purpose of assisting in public health nursing and in bedside care of disaster patients in the homes and hospitals.

2. Sanitation of the disaster area—This includes examination of the public and private water supplies, the adoption of measures to insure safe drinking water and food supplies, the disposal of dead bodies and other sanitation problems.

3. The control of communicable diseases—This includes the usual measures such as isolation in the home, hospitalization and immunization. The immunization of susceptible individuals against typhoid and smallpox is generally an important public health activity in disasters.

4. Providing additional hospital facilities—This is accomplished either by expanding existing hospitals, or by establishing independent emergency hospitals in suitable quarters. The latter are set up only where there are no local hospitals or where expansion is not possible or desirable. Tent hospitals are used only as a last resort. Provision must sometimes be made for the care of maternity cases.

5. Establishing emergency medical stations and dispensaries at refugee centers and other convenient places where disaster patients may apply for medical care.

6. Providing public health and medical supplies for use by the health agencies, physicians and nurses. Smallpox and typhoid vaccines, tetanus and diphtheria antitoxin, bandages, surgical dressings and a variety of medical and surgical supplies are generally necessary.

7. Medical and nursing supervision of refugee centers—The care of individuals temporarily housed in refugee centers is a definite responsibility of the Red Cross.

Refugee camps, emergency stations, and emergency hospitals directed by the Red Cross are, for all intents and purposes, Red Cross families or centers. That is especially true of refugee camps. The
Red Cross is responsible for the administration of the affairs of these centers. It provides the necessities with which to sustain life and health and—what is more—it pays the bills. It must also accept certain responsibilities for the health supervision of these camps, and for directing the medical and nursing services.

This should not be interpreted to mean that local physicians and official health agencies do not have access to these centers and have no responsibility toward individuals temporarily under Red Cross care and supervision. Physicians are expected to maintain the same relationship with disaster patients in camp and in emergency hospitals as with those outside. The public health officials must exercise the same authority and relation toward Red Cross centers of this character that they do, in normal times, toward other institutions or families where a large number of people are housed. The enforcement of laws and regulations governing the control of communicable diseases, the immunization of individuals in camp as well as those outside, and similar duties must be assumed by the official health agencies.

The Red Cross must, however, assume certain definite responsibilities for the health supervision of these centers and for certain
medical and nursing duties. The communicable diseases must be promptly identified and isolated; isolation facilities must be provided; kitchens, buildings and grounds must be kept clean and the food supply protected against contamination; adequate toilet, bathing and laundry facilities must be provided; and the general sanitary standards and regulations of the local and state health departments carefully observed. These are definite responsibilities of the Red Cross health and medical service.

The accompanying chart attempts to show the administrative set-up of Red Cross public health and medical activities in disasters, and how each division functions in relation to local health departments, the medical profession and the nursing and hospital services. The chart does not attempt to outline the activities of health departments or other local groups, but outlines only Red Cross duties and indicates how they are correlated to the activities of local agencies.

It is of prime importance that health department and Red Cross public health activities in disasters are carefully coordinated. There should be no overlapping or duplication of services, or misunderstanding of purpose. This necessitates bringing these agencies together to study the problem; to formulate policies and working agreements; to define the function and duties of each; and to prepare routine interrelating procedures. Unless this is done we cannot hope to have one public health program in disasters.

Mexico Child Health Work

The Division of Infant Hygiene, Service de Higiene Infantil, was established by the Federal Department of Public Health of Mexico early in 1929. In recent years this department also established prenatal clinics in the capital and in the states. Child health centers have been in existence since 1921, and since the organization of the Division of Infant Hygiene, 5 new child health centers have been established where prenatal advice is also given. The centers, situated in the poorer districts, all have modern equipment and are staffed with physicians and nurses. Treatment in case of illness is also given to mothers and children, although the main purpose is the prevention of illness. The Division of Infant Hygiene also maintains a staff of visiting nurses who visit the mothers to see whether they comply with the physicians' directions and to persuade them to attend the centers regularly. A school of child care (Escuela de Puericultura) is maintained, in which courses are given for physicians, nurses, school teachers, and housewives.

The Division of Infant Hygiene is also cooperating with the Asociación Nacional de Protección a la Infancia, a recently organized private society, which maintains a maternity home and several nurseries and is planning to establish new child health centers. This association has established child health agencies in various states.—El Niño, Revista Mensual, Mexico City, Jan., 1930, p. 64.