
Chapter 5

The Control of Communicable Disease after Disaster

The activities of communicable disease control which are effective in normal times are usually also appropriate and effective in postdisaster periods. The twelfth and thirteenth editions of *Control of Communicable Diseases in Man* (2, 27) are very useful compendia in which these procedures are summarized disease by disease. Situations precipitated by disaster are often characterized by unique features, however, which warrant discussion in this final chapter. Comments will be divided for purposes of simplicity into sections on environmental health management, immunization, chemotherapy, and quarantine and isolation.

Environmental Health Management

The management of environmental health after disaster consists of activities related to basic sanitation—the disposal of excreta, the maintenance of water supply, personal hygiene, food supply and vector control, the burial of the dead, and the provision of shelter. Disaster relief administrators appreciate that limitations of time, manpower and resources demand establishing priorities. The factors brought into consideration for this purpose include the nature of preexisting conditions, cultural acceptability, creature comfort and risk to public health such as the occurrence of epidemics of communicable disease.

In general, the amount of disaster relief activity that is devoted to environmental health management is proportional to the sufficiency of sanitation facilities which existed beforehand. The limited duration of disaster relief activity renders it impractical to try to establish permanent sanitary facilities and safe sources of water and food if these were

severely damaged by the disaster or were previously nonexistent. Populations in which there were low levels of personal hygiene and which lacked these amenities will not, in a short time period, be educated about the proper use of latrines, wells or bathing facilities. Previous exposure and the development of immunity to disease frequently means that rural populations without sanitary facilities are at lower risk than affected urban dwellers and relief workers of acquiring communicable diseases. In contrast, the interruption of water or electrical service in an industrialized community can cause severe disruption of social and sanitary services and thus facilitate the transmission of disease. Encamped populations in both poor and less poor nations always require that meticulous attention be paid to environmental health management.

It is important for epidemiologists to realize that the environmental measures to which relief administrators give priority are frequently not those most associated with the risk of communicable disease trans-



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The availability of sufficient quantities of safe water is a critical health need at any time. Natural disasters may disrupt supply systems and cause contamination of water sources. Special measures should be taken to protect vulnerable installations and keep alternate water sources clean.
