
Preface

Environmental health is defined as the control of those factors in the environment that may have deleterious effects on people's physical, mental, or social well-being. Because natural disasters expose people to danger by disrupting or threatening to disrupt their immediate environment, effective management of environmental health after a natural disaster is of primary importance.

Natural disasters often increase morbidity and mortality rates. Taking appropriate measures to maintain environmental health helps to reduce or eliminate the risks of preventable disease and death. Such measures contribute not only to the health of individuals in and near disaster-stricken areas, but they also contribute to decreasing the high costs of providing emergency health services in the aftermath of disaster.

The environmental health measures that must be considered after a natural disaster include the provision of appropriate shelter for individuals or groups of people left homeless; the distribution of safe and accessible water, first in sufficient quantities for drinking purposes and then for other domestic uses; and the protection and distribution of safe food products. Other measures that must be considered for the control of environmental hazards associated with disaster are sanitary evacuation of excreta, liquid wastes, and refuse; protecting populations from common vectors of disease in stricken areas; and promoting healthful living—particularly sanitary housing and basic personal hygiene.

To effectively manage environmental health during and after a disaster, it is crucial that a state of preparedness was in effect before the event actually occurred. During an emergency, success largely depends on exercising good, rapid judgment about appropriate re-

response measures. High-level decision makers therefore must be familiar with sound measures beforehand and should be given an accurate assessment of the disaster's specific effects as quickly as possible.

This document is intended to serve as a guide for those who may be called upon to make emergency decisions after natural disaster strikes. The recommended environmental health measures have been listed in the order of priority in which they should be taken during an emergency. However, each natural disaster is unique in the degree or type of emergency it poses. In response to any given disaster, decision makers may find it necessary to change the priority assigned to any particular measure.

The proper reordering of priorities will be greatly simplified if the principal objective of environmental health measures during times of emergency is kept in mind. The object is to protect the health of individuals who live in or near disaster-stricken areas by keeping the deterioration of environmental health conditions and services to a minimum. Implied is that the *specific objective of emergency measures is to restore environmental health conditions and services to whatever levels existed before disaster occurred, regardless of judgments about predisaster quality*. If predisaster quality was less than desirable, the risk of disease will increase only if environmental health conditions change for the worse, all other things being equal. Measures to improve preexisting conditions should be scheduled for the rehabilitation phase, not the recovery phase.

This document is divided into several parts. The first section primarily addresses the effects of natural disasters on environmental health conditions and services. In the second section, environmental health measures are described that should be undertaken in each of three time frames: the predisaster, disaster, and postdisaster periods.
