

Health and Natural Disaster Reduction

The International Decade for Natural Disaster Reduction (IDNDR) is a call to all governments and the international community to work together to reduce the effects of disasters, particularly in developing countries where the risk and the impact of natural disasters is greatest. Central to this effort is the critical role that the health sector plays in all aspects of disaster reduction.

The health sector's importance is clearly seen after sudden impact natural disasters such as a flood, earthquake or tropical storm strikes a community. In the immediate post-impact period, several hours or even days may pass before outside help arrives. During this time, people turn to their families, friends, neighbours and local services for immediate help. When community members have been trained in simple first aid, they can effectively reduce the numbers of serious casualties and deaths before outside help arrives.

In much the same way it is essential that health facilities and services continue to function after a disaster strikes. Therefore, it is important that health facilities are constructed to withstand the effects of a natural disaster and are equipped so that they can provide basic assistance following emergencies of all kinds.

The complete disruption of water and basic environmental sanitation services during disasters is another major concern of the health sector. In crowded conditions, such a disruption increases the risk of communicable disease transmission. These hazards can be minimized if public health officials work closely with municipal workers to set up a response system which reduces risk of water contamination, water- and insect-borne disease and safe disposal of solid waste as part of routine preparedness planning.

The Health Worker Network

It is also important to note that the network of health workers in any country represents an excellent channel through which disaster preparedness measures can be brought to the people. In all countries, health programmes extend from national to district and community levels. Moreover, health workers can be found working in hospitals, in environmental services and providing care to women and children. Their daily contact with such a wide audience provides an invaluable opportunity to encourage community-based disaster preparedness efforts in the context of the Decade.



A health worker in Mali explains health measures.

Disaster Preparedness in Health

Many poor communities still lack the basic communication, laboratory and other types of equipment which are as essential for daily health care as they are for a rapid emergency response. The lack of such basic needs represents a dangerous deficiency. Because health services have a responsibility to be prepared for likely disasters, it is important to strengthen front-line community health programmes so they are better equipped to provide better services routinely as well as during disasters.

Early Warning Systems

Just as early warning systems alert us to impending famine or tropical storms, health services need to have dependable detection and reporting systems, particularly for epidemics. In some countries, epidemic illnesses claim lives unnecessarily because health workers in outlying areas are not adequately trained to detect conditions, such as meningococcal meningitis, or lack the equipment, such as short-wave radios, to rapidly report suspected outbreaks to the national capital. When these diseases are not detected or reported quickly, they can account for thousands of avoidable deaths each year.

Vulnerability Assessment

A key tool for identifying populations who are at increased risk from disaster, vulnerability assessment, is as relevant for the health sector as for other services. The populations likely to be most severely affected are often the poorest groups. These groups usually have limited access to basic services of all types, including health facilities, and face the greatest risk of death and disease following a natural or other catastrophe.



A simulation exercise such as this helps in disaster preparedness planning.

Rescue Chains

In communities which face risks of sudden natural and technological disasters, an important aspect of health emergency preparedness is the setting up of "rescue chains" from neighbourhood to hospital, so that disaster victims can be transferred quickly for proper care.

Rescue teams should be trained in the safe transfer of injured victims to the appropriate health facility. After an earthquake, for example, injuries may range from cuts and abrasions to complicated fractures needing life-saving surgery. By knowing in advance which hospital to take someone suffering a particular injury, rescue teams can both improve the patient's chances as well as reduce the overwhelming number of casualties at a particular hospital.

The staff at the hospital should be trained to manage large numbers of casualties in short periods of time.

Disaster drills, involving the admittance of mass casualties, can test a hospital's ability to cope and refine its response planning.

The benefits of planning are clear. When training is not considered part of routine responsibilities, rescue team and health personnel are poorly prepared to deal with a disaster when it occurs.

Disaster-Resistant Buildings

When disasters strike, communities immediately turn to health facilities. Those facilities should be housed in buildings that are designed to withstand the impacts of tropical storms, earthquakes, floods and other sudden impact disasters. Back-up electrical and water systems and reserve supplies should be incorporated into the preparedness planning so that hospitals can be ready when their communities turn to them for help.