

Editorial

Global Challenges in Public Health: Terrorism and Disaster Preparedness

The growing importance of public health in terrorism and disaster preparedness has been recognized in recent years, particularly as a result of the recent terrorist attacks, such as those in the United States, Bali and Spain, and also the recent outbreaks of Severe Acute Respiratory Syndrome and Avian Flu. This is reflected in the need for emergency preparedness for disasters, whether they be emerging infectious diseases, terrorist attacks, or natural disasters. Indeed, it has been recently suggested that public health develops a national environmental tracking system that can improve overall public health capacity and emergency preparedness for future disasters (Marmagas et al., 2003). There is also a need to develop and maintain inter-agency co-operation for regional emergency response and disaster preparedness, which includes the ability to deploy government and volunteer services to potentially resource poor areas, including rural and remote areas, as disasters can occur any time and anywhere.

Examination of past disasters can provide some useful lessons for terrorism and disaster preparedness. Glass (2001) reported on an analysis of 10 events to gain a better understanding of the public response to disasters. Their principal findings were that:

- Disaster planning does not go as planned;
- Victims respond with collective resourcefulness;
- Panic is rare, but the public response to bioterrorism has not really been tested;
- The majority of lives will be saved by an informed public; and
- Social factors need to be considered in planning.

The implications for terrorism and disaster preparedness of Glass' (2001) study are that:

- Victims will most likely self-transfer and self-triage;
- There is a need to plan for what people are going to do rather than what they are supposed to do;
- Public health services, such as hospitals, will not be sufficient to deal with major disasters;
- Home care will be necessary in a massive event; and
- The public response will largely shape the outcome of the disaster through patterns of evacuation, help-seeking, collective action, rumoring, and volunteerism.

In the light of these findings, Parvis (2002) reminds public health agencies and the general public that, while there is an emphasis on overall public health preparedness, there is also a need for terrorism and disaster preparedness at an individual level, namely:

- Learning first aid, as most casualties in a disaster will respond to basic levels of primary health care, hence the need to integrate volunteer emergency assistance agencies, such as the State Emergency Service, St John Ambulance and the Red Cross, into disaster planning;
- Protection of basic food and water supplies, which are most vulnerable in the event of terrorist incidents or disasters;
- Education of health professionals and the general public on terrorism and disaster preparedness, and there are some useful website resources available from leading agencies in disaster preparedness (World Health Organization, 2004; Centers for Disease Control and Prevention, 2004; Emergency Management Australia, 2004);
- Know your neighbor, as terrorists can live in the community, and report anything suspicious; and
- Health professionals need to be able to undertake a risk assessment in their own sphere of practice as part of the counter-terrorism and disaster response.

One of the main tasks for public health agencies following a disaster is identifying the extent of adverse health impacts upon the affected population (Shoaf et al., 2000a). The development and use of rapid health assessment techniques, such as the use of surveys (Shoaf et al., 2000b), need to be fine tuned, as

these tools have been suggested to play a critical role in prioritization of resources and establishing the effectiveness of interventions (Shoaf et al, 2000a). Following the initial emergency response to the disaster, there is a need for public health agencies to:

- Reduce the impact of disasters on environmental health infrastructure, such as water, sanitation and adequate shelter (Wisner et al., 2002);
- Provide critical incident stress debriefing; and
- Grapple with the remaining health care priorities, such as replacement of prescription appliances and pharmaceuticals, which can be challenging in their own right (Shoaf et al, 2000a).

Disaster preparedness is just one of the contemporary topics being addressed by the *Journal of Rural and Remote Environmental Health*, as it continues to address important issues in environmental health, with a particular emphasis on rural and remote areas. The feature articles are written by health professionals, academics and scientists, who can identify with the special problems of working in rural and remote environmental health. The *Journal of Rural and Remote Environmental Health*, as an online journal, is continuing to make an important contribution to finding solutions to practical local concerns, which often have currency as global environmental health problems.

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