

Preparedness for Biological Disasters in Japan and the United States

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Objective: To assess Japanese and U.S. approaches for meeting challenges posed by biological disasters.

Methods: Interviews of emergency personnel, government officials, and military officers, as well as published materials.

Results: The U.S. takes seriously the possibility of bioterrorists causing mass casualties, so it provides funding to enhance local and federal capabilities to prevent biological disasters and to manage their consequences. The public health system is being strengthened, to better detect and monitor infectious diseases. Nevertheless, exercises demonstrate the low ability of U.S. emergency medical departments, hospitals, and agencies to manage a biological mass casualty event.

Despite Aum Shinrikyo's biological attacks, Japan considered biological threats as negligible. However, in 1999, North Korea's acts demonstrated the reality of these threats. Then, Japan initiated a low-level effort to strengthen its capabilities for biological defense. Yet, no exercises involving biological events have been carried out, so the ability of Japanese emergency departments, hospitals, military, and government agencies to deal with such events is not known.

Conclusion: Japanese and U.S. military, health agencies, and local governments must cooperate to strengthen the ability of all to respond to biological emergencies. Initially, U.S. military bases and local Japanese health and government officials should collaborate because if a biological event would occur, the actions of each would affect the others.

Keywords: biological emergency; biological mass-casualty event; biological warfare; biological weapons; terrorism
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Community Based Disaster Preparedness in Bangladesh Coastal Area

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Objective: Bangladesh is located in a disaster-prone, delta area consisting of major international rivers of the Indian subcontinent. Cyclonic storms sometimes hit its coastal area, causing heavy loss of human lives and property before and after monsoon season. In addition, river erosions severely affect the economy during the entire year. The efforts by the Japanese Red Cross Society (JRCS) in coping with disaster were reported.

Method: Since 1986, the JRCS supported the Bangladesh Red Crescent Society (BDRCS) for the construction of 29 cyclone shelters in Hatiya and Monpura Islands that mostly

are utilized as community development centers (e.g., children literacy educational centers, primary schools, etc.) during ordinary situation (five of the shelters were eroded by the rivers by 1999). Assisting the local participation to Shelter Management Committees (SMC), BDRCS has extended the Community Based Disaster Preparedness (CBDP) with a development cooperation of JRCS since 1997.

Results: After the construction of the facilities and with community development activities in mid-1990s, the CBDP has focused on SMC and awareness programs, and BDRCS has extended its target groups to 45 communities in six Sub-Districts. The CBDP is an integral part of disaster preparedness programs of the BDRCS in the coastal areas, where community people have potential initiatives.

Conclusion: The BDRCS implemented various efforts for community development. At present, the BDRCS needs to strengthen its network and disaster preparedness programs, encouraging potentiality in the community with the experience of field activities.

Keywords: cyclone; Bangladesh; disaster preparedness; river erosion; shelters
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Drastic Reforms of the Emergency Medical Response System to Radiological Emergencies in Japan

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Three workers were exposed to high-dose radiation at the Tokaimura accident on 30 September 1999. Since the event, the medical response system to radiological emergencies has been reformed. The only goal of the past emergency medical system in anti-nuclear disaster measures was only to deal with neighboring residents. Based upon the experience of the Tokaimura accident, drastic reforms have been made at various levels in order to develop an effective medical response system to radiological emergencies.

The Working Group of the Nuclear Safety Commission proposed the following concrete measures in their report, "On the future status of our medical response system to radiological emergencies". The fundamental viewpoint of this Report is the prioritization of human life so that effective medical care may be offered in a systematic manner. It aims at the integration with the current emergency and disaster medical system, and at the formation of a network of the primary, secondary and tertiary medical facilities within each locality of the nuclear facility. For deployment of the effective emergency medical responses, various measures, seminars, forums, and drills are being undertaken by the National Institutes of Radiological Sciences and the Nuclear Safety Research Association, entrusted by the Ministry of Education and Science.

Keywords: disaster; education; emergency medical response; medical care; planning; radiological emergencies; Tokaimura accident
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