How Well-Prepared Are U.S. Hospitals for Chemical Emergencies, Disasters, and Terrorism?

Dr. Erik Auf der Heide, MD, MPH, FACEP
Agency for Toxic Substances and Disease Registry, U.S. Department of Health and Human Services, Washington, DC USA

The [U.S.] President's Commission on Critical Infrastructure Protection concluded that emergency responders are inadequately trained and equipped to deal with terrorism. A similar conclusion was reached in a National Academy of Sciences report by the Committee on Research and Development Needs for Improving Civilian Medical Response to Chemical and Biological Terrorism Incidents. However, little empirical data was presented to support these assertions.

This presentation reviews the empirical literature on hospital preparedness for casualties from hazardous substance incidents. Indices of preparedness included the availability of: 1) a hazmat plan; 2) hazmat training; 3) personal protective equipment; 4) decontamination facilities; and 5) antidotes. Overall, the evidence does not document an adequate level of preparedness by U.S. hospitals. Given the inability to handle even one casualty of a chemical emergency, one must conclude that readiness for disasters and terrorism also is inadequate. Studies also are needed to assess the readiness of health departments, fire departments, prehospital emergency medical services, disaster management offices, and law enforcement agencies.

Keywords: decontamination; emergency, chemical; hazardous materials (hazmat); hospitals; planning; preparedness; training; United States