

Blast Injuries: What Clinicians Need to Know

[Announcer] This podcast is presented by the Centers for Disease Control and Prevention. CDC – safer, healthier people.

Welcome to this podcast on blast injuries. I'm Dr. Richard Hunt, Director of the CDC's Division of Injury Response at the National Center for Injury Prevention and Control. Current trends in global terrorism really demand that public health and clinical care professionals be prepared to respond to a variety of threats. According to the Institute of Medicine's 2007 report on the future of emergency care in the United States, explosions are the most common cause of casualties associated with terrorism. Terrorist bombings can potentially affect public health systems and emergency medical response capability, and simultaneously inflict life-threatening injuries on many persons.

There are unique triage, diagnostic, and management challenges of injuries caused by explosions, and healthcare providers must be prepared to assess and treat the people injured by them. Terrorist bombings create predictable, extraordinary challenges for healthcare systems.

- Communication with bombing victims may be difficult because of tinnitus and sudden temporary or permanent deafness.
- An initial surge of noncritical patients should be expected at the closest available hospital within minutes of the event and this can overwhelm hospital and emergency care resources very quickly.
- Multiple simultaneous attacks should be anticipated; they will cause large numbers of casualties.
- Primary blast injury to the lungs may require complex ventilation, fluid management, and supportive care.
- It turns out that many injuries in a bombing are due to blunt or penetrating trauma from flying debris or shrapnel and are not really life threatening.
- Wounds can be grossly contaminated. Aggressive wound management and delayed primary closure should be considered and tetanus status should be assessed.
- Explosions in confined spaces, such as subways or buses, or in combination with structural collapse are associated with greater numbers of injuries and deaths.
- Triage and life-saving procedures should never be delayed because the victim might be contaminated with radiation; the risk of exposure to caregivers is small.

More information and resources related to the treatment of blast injuries, including fact sheets, training tools, and an interactive course for health care providers, are available at:

www.emergency.cdc.gov/BlastInjuries.

[Announcer] For the most accurate health information visit www.cdc.gov or call 1-800-CDC-INFO 24/7.