Overview
Explosions can produce unique patterns of injury seldom seen outside combat. When they do occur, they have the potential to inflict multi-system life-threatening injuries on many persons simultaneously. The injury patterns following such events are a product of the composition and amount of the materials involved, the surrounding environment, delivery method, the distance between the victim and the blast, and any intervening protective barriers or environmental hazards. Because explosions are relatively infrequent, blast-related injuries can present unique triage, diagnostic, and management challenges to providers of emergency care.

Few U.S. health professionals have experience with explosive-related injuries. Vietnam era physicians are retiring, other armed conflicts have been short-lived, and until this past decade, the U.S. was largely spared of the scourge of mega-terrorist attacks. As the risk of terrorist attacks increases in the U.S., disaster response personnel must understand the unique pathophysiology of injuries associated with explosions and must be prepared to assess and treat the people injured by them. This course, adapted from materials on the CDC’s website, introduces information relevant to the care of casualties from explosives and blast injuries.

Target Audience
This course is intended for pre-hospital care providers and first receivers who may be called on to respond to a mass casualty incident and/or treat victims of an explosion (e.g., EMA, EMS, firefighters, law enforcement, hospital-based physicians and nurses, social services, rural clinicians).

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Learning Objectives
After completing the course, participants will be able to:

- Describe important historical events involving explosions;
- Discuss clinical aspects of blast injuries;
- Identify the unique patterns of injury caused by bombs and explosions;
- Recognize and treat the most common post-explosion injuries (primary, secondary, and tertiary injuries);
- Describe public health and personal threats that arise due to explosions;
- Describe triage considerations associated with explosions;
- Understand mental health issues associated with triage;
- Walk through the necessary steps for response to victims of an explosion; and
- Better predict demand for care and resource needs after a bomb or explosion.