

HEMS MCA
System Protocol
Urban Search and Rescue Medical Response Team
Blast Injury

Date: 10/1/2024

Section: 12-7

BLAST INJURY

Purpose: when a patient or provider is found within the blast zone and could have the following health effects:

- Ears – tympanic membrane hemorrhage or rupture
 - Eyes - 10% of all blast survivors have significant eye injuries, refer to **USAR Ocular Trauma Protocol**
 - Lungs – pulmonary contusions, pneumothorax, hemothorax, mediastinal air
 - Abdomen - bowel wall contusions, rupture, acceleration/deceleration injuries, liver, spleen
 - Circulatory – air embolism, cardiac contusion, MI from air embolism
 - Central Nervous System – concussion, brain injury, spinal cord, cerebral air embolism
 - Extremities – penetrating trauma from shrapnel, burns and fractures, crush, traumatic amputation
1. Follow the **General Pre-Hospital Protocol**
 2. Identify and treat life threats, per **General Trauma Protocol**
 3. Assess skin for signs of burns or hemorrhage and treat per **Burns Protocol and/or Hemorrhagic Shock Protocol**
 - a. If bleeding is uncontrolled and non-compressible, administer TXA
 - i. Draw up and mix 1 gram of TXA into a 100 mL bag of NS.
 - ii. Administer mixed medication via piggyback into IV/IO line over 10 minutes.
 4. Decontamination of skin per **General HAZMAT Treatment Protocol**, if necessary
 5. Irrigate the eyes if vision changes and foreign body sensation complaints, per **USAR Ocular Trauma Protocol**.
 - a. **DO NOT IRRIGATE** if there is concern for open/ruptured globe
 6. Establish large bore IV(s) and infuse fluid per **Vascular Access and IV Fluid Therapy Protocol**.
 7. Initiate cardiac monitoring.
 8. If presence of tension pneumothorax, consider needle decompression, per **Pleural Decompression Protocol**.
 9. Treat pain per **Pain Management Protocol**.
 10. Prevent hypothermia.
 11. Provide psychological support.