



3. Have a high index of suspicion for cyanide poisoning in a patient with depressed GCS, respiratory difficulty, and cardiovascular collapse in the setting of an enclosed-space fire. Give the antidote (hydroxocobalamin), if available, in this circumstance
4. Particularly in enclosed-space fires, carbon monoxide toxicity is a consideration and pulse oximetry may not be accurate [See [Carbon Monoxide/Smoke Inhalation Guideline](#)]
5. For specific chemical exposures (cyanide, hydrofluoric acid, other acids, and alkali) [See [Topical Chemical Burn Guideline](#)]
6. Consider decontamination and notification of receiving facility of potentially contaminated patient (e.g., methamphetamine (meth) lab incident)
7. Burns that involve significant sloughing or loss of skin can result in uncontrolled heat loss. These patients should be monitored closely for the development of hypothermia and appropriate preventative measures should be taken

Notes/Educational Pearls

1. Onset of stridor and change in voice are sentinel signs of potentially significant airway burns, which may rapidly lead to airway obstruction or respiratory failure.
2. If the patient is in shock within one hour of burn, it is not from the burn. Evaluate the patient carefully for associated trauma or cyanide toxicity.
3. If the patient is not in shock, the fluid rates recommended above will adequately maintain patient's fluid volume.
4. Pain management is critical in acute burns.
5. End-tidal capnography (EtCO₂) monitoring may be particularly useful to monitor respiratory status in patients receiving significant doses of narcotic pain medication.
6. Cardiac monitor is important in electrical burns and chemical inhalations.
7. TBSA is calculated only based on percent of second- and third-degree burns – First degree/superficial burns are not included in this calculation

Quality Improvement

Burn trauma is relatively uncommon. Clinicians should receive regular training on burn assessment and management.

Associated NEMSIS Protocol(s) (eProtocol.01) *(for additional information, go to www.nemsis.org)*

- 9914085 – Injury - Burns-Thermal

Key Documentation Elements

- Initial airway status
- Total volume of fluid administered
- Body surface area of second- and third-degree burns (TBSA)
- Pulse and capillary refill exam distally on any circumferentially burned extremity
- Pain scale documentation and pain management

Performance Measures

- Patient transported to most appropriate hospital, preferably a burn center
- Pain scale documented and pain appropriately managed
- Airway assessment and management appropriately documented