



## To Hell and Back EMS Instructor Outline

Name: \_\_\_\_\_ Rank: \_\_\_\_\_

Employer: \_\_\_\_\_ Years on the Job: \_\_\_\_\_

EMT / EMT-A / Paramedic / Fire Fighter / Volunteer Fire Fighter / Career Fire Fighter *(Circle all that apply.)*

- Anatomy and physiology of the skin as it relates to thermal, chemical and electrical burns
- Effects of heat and smoke on respiratory system
  - Pulmonary edema secondary to heat
  - Oxygenation (dry vs. humidified?)
- Initial Scene Safety & Control
  - Good situational awareness is key
  - Understand the dynamics of the scene before you commit
  - Don't become a victim yourself (chemical/electrical burns)
  - Remove patient from the heat and/or remove the heat from the patient
- Assess need for aggressive airway management
- C-spine management (burns frequently include trauma)
- Circulatory support
  - Aseptic techniques with IV's
  - Fluid shifting
  - Large bore IVs / Fluid resuscitation
- Importance of Sterile approach
  - Stop the burn process (do's and don'ts)
  - What can we do better in the field to increase the chance of survival?
  - Wet vs. dry dressings
  - Removal of burning clothing
  - Address constrictive items proximal to burns: jewelry, rings, necklaces, belts, elastic, etc.
- Rapid initial and focused assessment
  - Identify source of burn (thermal, chemical, electrical, et al)
  - Areas of body effected (and body systems associated)
  - Burn depth and extent estimation
    - Rule of nines
    - Palmar method
    - Other
  - Patients age and underlining medical condition
- Pre-hospital care **Don'ts**
  - Burn myths (patient's initial therapy with oil, butter, ice, etc.) Can/should we undo what they have already done?



- Smoke inhalation as it relates to burn injuries
  - Toxic byproducts of combustion
  - The effects of CO/HCN on the unconscious unresponsive smoke inhalation victim
  - Smoke inhalation in the presence of burns increases the mortality rate
- Making appropriate transport destination decisions
  - Burn center vs. basic receiving hospital?
  - Pediatric burn patients
  - Unstable/unmanageable airway
  - Early notification of the receiving hospital
  - Burns with significant trauma – which takes precedence?
- Local Considerations
  - Aeromedical
  - Access to burn and trauma centers
  - Pediatric hospitals
  - Extended transport times
  - Local treatment protocols

### Interview Candidates:

#### 1. To Hell and Back Survivors:

Questions should be designed to elicit their emotional and physical responses to the incident, treatments etc. How did this incident change their lives? How did it impact upon their families? How did the demeanor of the responder impact upon the victim?

#### 2. Responders:

These questions should be designed to highlight their impressions. What were their initial reactions as they pulled up to the scene? What do they think they did well, what would they change? How did the interaction of the bystanders affect scene control? What were their long term reactions?

#### 3. Fire Fighter Burn Survivors & Their Families:

How did the experience impact their life? What were the emotional and financial impacts? How did the family respond? What were the marital implications?