



ELECTRICAL INJURIES



Escambia County, Florida – 1st Responder Medical Protocol

A wide range of injuries can be caused from a lightning strike or contact with electricity.

Electrical injury can occur from direct contact, an arc, or a flash of the electricity and a direct hit or a splash from lightning.

The movement of electrical current through the body can cause violent muscle contractions that can lead to fractures, and therefore, the C-spine should be protected.

The thermal energy can cause external burns, but in many cases the majority of thermal damage is internal, with few external signs of injury.

The rescuer should be sure that the patient is no longer in contact with the electrical current before initiating treatment.

A. Assessment

1. Severe burns - look for entrance/exit - type wounds.
2. Explosive injuries: fractures, internal injuries, etc. may be present.
3. Confusion and changes in level of consciousness.

B. Treatment

1. **Remove from exposure to further lightning injury.** Remember to maintain c-spine precautions.
2. “Treat the dead first”. This is one exception to traditional triage. There are numerous reports of lightning strike victims who were thought to be dead initially, but who responded well to resuscitation.
3. ABC’s: Assist respirations as indicated in [General Supportive Care Protocol](#); provide CPR if indicated.
4. Follow [AED Protocol](#).
5. Treat for shock if indicated. (See [Shock Protocol](#)).



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Page 1 of 2

Approved by:

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Charles Neal, D.O. Medical Director



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C. Report

To crew as indicated in [*General Supportive Care Protocol*](#).



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Page 2 of 2

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