Environmental Emergencies

Protocol

Douglas County KS EMS System **November 2022**

Referenced Procedures: None

Goals for patient care:

- Patient to be removed from environment of concern
- Appropriate care to be initiated prehospital to prevent further deterioration

Medications:

ADULT Medications:	PEDIATRIC Medications: Refer to HandTevy
• **Normal Saline:** 500mL, IV/IO for dehydration, hemodynamic instability	• **Normal Saline:** 20mL/kg, IV/IO for dehydration, hemodynamic instability

HEAT RELATED DISORDERS (Hyperthermia)

- Move to cool environment
- Secure Airway
- Administer oxygen and assist ventilations as required
- Established IV access
- Allow patient to drink if neurologically intact

Heat Exhaustion or Hyperthermia

- Remove clothing
- Fan and cool patient
- Avoid massaging extremities

Heat Stroke

(Elevated body temperature due to exposure with neurologic symptoms)

- Initiate rapid body cooling
  - Rinse with cold water
  - Apply ice packs to neck, groin and under arms
  - Wrap in wet sheet
  - Start cool IVF
- Stop the cooling process at 101 degrees

COLD WEATHER RELATED DISORDERS (Hypothermia):

Hypothermia has been sub-classified into three grades:

- mild (36.0°C – 36. 5°C),
- moderate (32.0°C – 35.9°C)
- severe (<32.0°C)

We typically think it is due to being in cold weather but primary hypothermia is caused by exposure to a cold environment, Secondary hypothermia is due to a condition that either disrupts the body's ability to properly regulate heat balance or decreases the body's capacity to generate or conserve heat. This can include conditions such as burns, endocrine disease, stroke, sepsis, alcoholism and medications like sedatives or antipsychotics.

Mild Hypothermia

- Treatment per general protocol

Moderate or Severe Hypothermia Treatment: (<36 C core/rectal)

- Move to warm environment
- Secure airway
- Administer oxygen and assist ventilation as required
- Establish IV access and administer warm IV fluids
- Monitor ECG and obtain rectal core temp with thermometer
- Prevent further heat loss
    - Insulate from ground
    - Protect from wind
    - Eliminate evaporative heat loss by removing wet clothing, wrap patient in dry blankets and cover with vapor barrier
- Apply external rewarming devices to truncal areas only
    - Towel wrapped warm packs to neck, armpits, and groin

Hypothermia Induced Cardiac Arrest:

- ☎ Contact medical control early in arrest

If V-Fib or Pulseless V-tach administer only one (1) shock per cardiac arrest protocol

Temp < 30°C (86°F) Continue CPR and transport

Temp > 30°C (86°F) Give IV meds as indicated, but at intervals 1.5-2x Normal