Heat Emergencies

Pre-Medical Control

MFR/EMT/SPECIALIST/PARAMEDIC

1. Follow **General Pre-hospital Care Protocol**.
2. Determine history/evidence of heat exposure.

EMT/SPECIALIST/PARAMEDIC

3. Check blood glucose and treat hypoglycemia per **Acute Altered Mental Status Protocol**.

Heat Cramps

MFR/EMT/SPECIALIST/PARAMEDIC

1. Move the patient to a cool environment and attempt oral liquids.
2. Contact Medical Control.

Heat Exhaustion

MFR/EMT/SPECIALIST/PARAMEDIC

1. Move the patient to a cool environment.
2. Remove Tight Clothing.
3. Cool patient, provide air conditioning/fanning. Avoid chilling/shivering.

SPECIALIST/PARAMEDIC

4. IV NS 250 ml fluid bolus.
    a. Patient may take oral fluid replacement rather than IV if no nausea. Allow oral intake of cool fluids or water (may use commercial sport/rehydration drinks if patient is alert. Do not permit patient to drink if altered mental status, abdominal pain or nausea. Avoid carbonated sodas, alcoholic beverages, and caffeinated beverages.

EMT/SPECIALIST/PARAMEDIC

5. Contact Medical Control.

Heat Stroke

MFR/EMT/SPECIALIST/PARAMEDIC

1. Move the patient to a cool environment.
2. Remove tight clothing.
3. Immediate cooling – provide air conditioning and fanning. Avoid chilling/shivering.
4. Place patient in semi-reclining position with head elevated.

SPECIALIST/PARAMEDIC

5. IV NS 250 ml fluid bolus, repeat as indicated.

EMT/SPECIALIST/PARAMEDIC

6. Contact Medical Control.

Definitions:

Heat Cramps – Painful muscle spasms of the skeletal muscles that occur following heavy work or strenuous exercise in hot environments. Thought to be caused by rapid changes in extracellular fluid osmolarity resulting from fluid and sodium loss. Signs and symptoms include:

- Alert
- Muscle cramps (normally in muscles most recently heavily exercised)
- Hot, diaphoretic skin
- Tachycardia
- Normotensive

Heat exhaustion – Patient presents with dizziness, nausea, headache, tachycardia, and possibly syncope. Usually from exposure to high ambient temperatures accompanied by dehydration due to poor fluid intake. Temperature is less than 103° F. Rapid recovery generally follows saline administration.

Heat Stroke – Patient should be treated as heat stroke if he/she has ALL of the following

- Exposure to hot environment, and
- Hot skin, and
- Altered mental status

Follow **General Pre-hospital Care Protocol**
Determine history/evidence of HEAT exposure
Check blood glucose and treat hypoglycemia **per Acute Altered Mental Status Protocol**

Heat Cramps

Move patient to cool environment and attempt oral fluids

Contact Medical Control

Heat Exhaustion

Move patient to cool environment

Remove tight clothing

Cool patient
Provide air conditioning and fanning
Avoid chilling/ shivering

IV NS 250 ml bolus

Patient may take oral fluid replacement rather than IV if no nausea. May use sport/rehydration drinks. Do not permit patient to drink if altered mental status or abdominal pain/nausea. Avoid carbonated & caffeinated beverages.

Contact Medical Control

Heat Stroke

Move patient to cool environment

Remove tight clothing

Immediate cooling
Provide air conditioning and fanning
Avoid chilling/shivering

Semi-reclining position head elevated

IV NS 250 ml bolus, repeat as indicated

Contact Medical Control

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A. Heat Cramps - Painful muscle spasms of the skeletal muscles that occur following heavy work or strenuous exercise in hot environments. Thought to be caused by rapid changes in extracellular fluid osmolarity resulting from fluid and sodium loss. Signs and symptoms include:

- Alert
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B. Heat exhaustion - Patient presents with dizziness, nausea, headache, tachycardia, and possibly syncope. Usually from exposure to high ambient temperatures accompanied by dehydration due to poor fluid intake. Temperature is less than 103° F. Rapid recovery generally follows saline administration.

C. Heat Stroke - Patient should be treated as heat stroke if he/she has ALL of the following

- Exposure to hot environment, and
- Hot skin, and
- Altered mental status