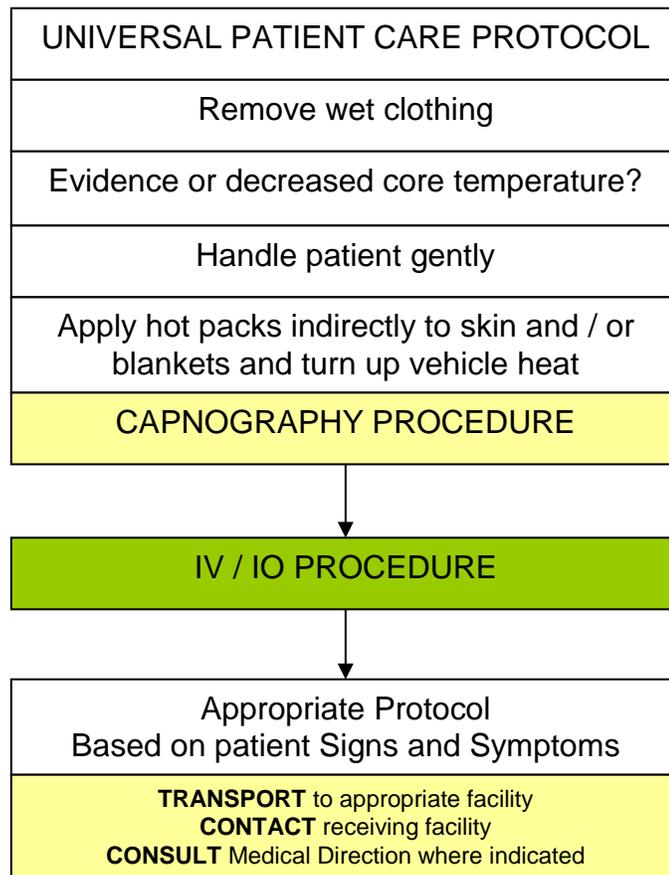




Section 10: Pediatric Medical Emergencies Protocols

PEDS MEDICAL EMERGENCIES: HYPOTHERMIA / FROSTBITE

E	EMT	E
A	AEMT	A
P	PARAMEDIC	P
M	MED CONTROL	M





Section 10: Pediatric Medical Emergencies Protocols

PEDS MEDICAL EMERGENCIES: HYPOTHERMIA / FROSTBITE-Cont.

PEARLS and KEY POINTS

HISTORY	SIGNS AND SYMPTOMS	DIFFERENTIAL DIAGNOSIS
<ul style="list-style-type: none"> • Past medical history • Medications • Exposure to environment even in normal temperatures • Exposure to extreme cold • Extremes of age • Drug use: Alcohol, barbiturates • Infections / sepsis • Length of exposure / wetness 	<ul style="list-style-type: none"> • Cold, clammy • Shivering • Mental status changes • Extremity pain or sensory abnormality • Bradycardia • Hypotension or shock 	<ul style="list-style-type: none"> • Sepsis • Environmental exposure • Hypoglycemia • CNS dysfunction • Stroke • Head injury • Spinal cord injury
KEY POINTS		
<ul style="list-style-type: none"> • Exam: Mental Status, Heart, Lungs, Abdomen, Extremities, Neuro • Hypothermic / drowning / near drowning patients that appear cold and dead are NOT dead until they are warm and dead, or have other signs of obvious death (putrification, traumatic injury unsustainable to life). • Defined as core temperature < 95° F (35° C). • Extremes of age are more susceptible (i.e. young and old). • Patients with low core temperatures will not respond to ALS drug interventions. Maintain warming procedure and supportive care. Warming procedures includes removing wet clothing, limiting exposure, and covering the patient with warm blankets if available. • Do not allow patients with frozen extremities to ambulate. • Superficial frostbite can be treated by using the patient's own body heat. • Do not attempt to rewarm deep frostbite unless there is an extreme delay in transport, and there is a no risk that the affected body part will be refrozen. Contact Medical Command prior to rewarming a deep frostbite injury. • With temperature less than 88° F (31° C) ventricular fibrillation is common cause of death. Handling patients gently may prevent this. (rarely responds to defibrillation). • If the temperature is unable to be measured, treat the patient based on the suspected temperature. • Hypothermia may produce severe bradycardia. • Shivering stops below 90° F (32° C). • Hot packs can be activated and placed in the armpit and groin area if available. • Care should be taken not to place the packs directly against the patient's skin. • Consider withholding CPR if patient has organized rhythm. Discuss with medical control. • All hypothermic patients should have resuscitation performed until care is transferred, or if there are other signs of obvious death (putrification, traumatic injury unsustainable to life). • Patients with low core temperatures will not respond to ALS drug interventions. Maintain warming procedure and supportive care. Warming procedures includes removing wet clothing, limiting exposure, and covering the patient with warm blankets if available. • The most common mechanism of death in hypothermia is ventricular fibrillation. If the hypothermia victim is in ventricular fibrillation, CPR should be initiated. If V fib is not present, then all treatment and transport decisions should be tempered by the fact that V fib can be caused by rough handling, noxious stimuli or even minor mechanical disturbances, this means that respiratory support with 100% oxygen should be done gently, including intubation, avoiding hyperventilation. • The heart is most likely to fibrillate between 85 - 88° F (29 - 31° C) Defibrillate VF / VT at 2 – 4 j / kg with effective CPR intervals. • Do not allow patients with frozen extremities to ambulate. • Superficial frostbite can be treated by using the patient's own body heat. • Do not attempt to rewarm deep frostbite unless there is an extreme delay in transport, and there is a no risk that the affected body part will be refrozen. Contact Medical Control prior to rewarming a deep frostbite injury. 		