



# INDUCED HYPOTHERMIA PROGRAM

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# Program Purpose

- To provide the patients of Physicians Ambulance with the current standard of post resuscitation care
- To make available to Paramedics of Physicians Ambulance the special cooling processes to induce both passive and active cooling to post arrest patients who qualify for the treatment
- Required on every ALS Shift / truck

# Passive vs: Active Cooling

- Active cooling is facilitated by introducing chilled saline (less than 4 C) through standard vascular access routes (IV and IO) to the patient
- Passive cooling is done by placing activated cold packs on the patients neck, bilateral groin, and bilateral axilla
- Both will generally be done simultaneously, however passive can be initiated in the absence of chilled saline

# Passive Cooling Packs

- Pre-made passive cooling packs are stored in the locked drug cabinet
- Contents include 5 chemical cold packs



# Active Cooling Coolers

- Crew will assemble cooler at beginning of shift with special foam ice packs and already chilled saline
- Physicians Ambulance trials have shown this configuration to keep saline cool to +16 hours



# Cooler Assembly – Beginning of Shift

- Remove 1 already chilled 1000 ml saline from the refrigerator
- Remove 2 frozen solid ice packs from freezer



# Layers



- Place 1 frozen ice pack in bottom
- Place 1000 ml saline bag on top of bottom ice pack
- Place 1 frozen ice pack on top of saline bag

# Lock



- Secure silicone rubber latch to assure the cooler remains cold during the shift
- Do not open unless needed
- Contact supervisor for direction / replacement if inadvertently open for prolonged period of time

# Storage in Vehicle

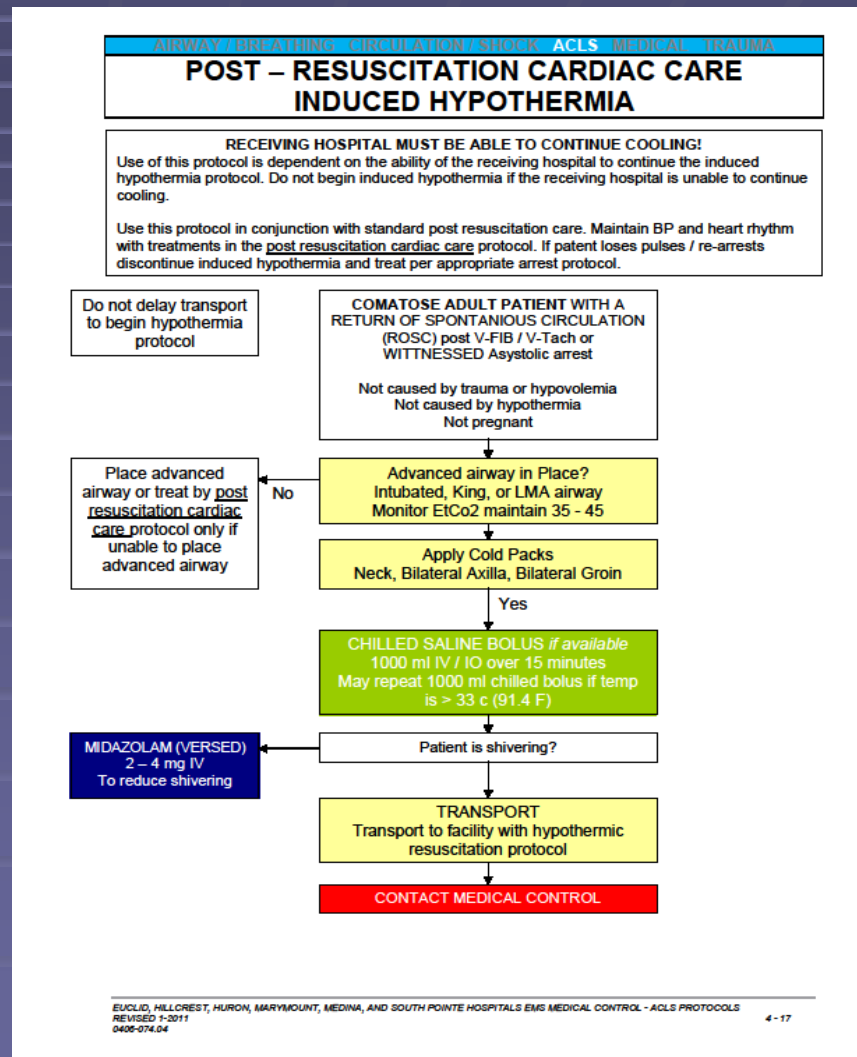
- Store throughout shift behind attendants seat in type II ambulances (van style)
- Store in locking drug compartment in type III ambulances (modular style)



# Protocol Use

## Patient MUST BE

- Post cardiac arrest from either V-FIB / V-TACH or WITNESSED ASYSTOLE (by you the provider)
- Comatose post return of circulation
- Not a trauma, hypovolemic, or pregnant patient



# Protocol Continued

## Advanced Airway Must Be Placed

- King airway (most likely will already be placed during resuscitation)
- Intubation
- LMA (Last resort)
- ETCO<sub>2</sub> Verification Required

## Initiate Passive Cooling

- Apply chemical cold packs to bilateral groin, axilla, and back of neck



# Protocol Continued

## Initiate Active Cooling

- Start IV or IO of chilled saline if not already in place
- Second standard IV / IO preferable but not required
- Switch or piggyback chilled saline on established line if available
- Bolus 1000 ml during transport to hospital
- Assure hospital can continue cooling process in radio report
- Consider facility with 24 hour cath lab

# Protocol Continued

## If Patient is Shivering

- Administer Midazolam (Versed) 2 – 4 mg IV / IO to combat shivering

## If Patient Re-arrests

- Discontinue cooling procedures and follow standard ACLS resuscitation procedures

# Other

## End of Shift

- Return cooler to equipment area
- Return ice packs to freezer
- Return saline to refrigerator

## Other

- Contact a supervisor if questions or problems
- Complete DCS identifying return of equipment
- Refrigerators, coolers, and freezers are for medical use only – store nothing else in them