# Induced Mild Therapeutic Hypothermia After Cardiac Arrest

# **Algorithm 1: Cooling Method**

#### Provide for Continuous Sedation

 Maintain continuous sedation as ordered for patient's comfort and safety.



# **Prevent Shivering**

- Sedate and paralyze the patient during cooling phase per "Physician's Orders for Induced Mild Hypothermia"
- Discontinue paralytic infusion when goal temperature of 33°C has been reached
- If shivering occurs resume paralytic as ordered
- Complete and document the Bedside Shivering Assessment Scale (BSAS) with vital signs during the induction phase and maintenance phase (See Below for specific instructions)



### Infuse Chilled Fluids

- Infuse 30ml/kg of 4°C (39.2°F) normal saline over 30 minutes (2 L for normal-sized adult)
- Administer into peripheral or femoral IV line only
- DO NOT give cold fluids via jugular or central line
- Cold saline will be kept in pharmacy



# Provide External Cooling

- Ice bags at neck, axilla, and groin to aid in cooling
- Obtain cooling system from Central Sterile
- Apply external defibrillator pads to torso
- If using blankets lay a single layer sheet between each cooling blanket and the patient and sandwich patient between blankets (sheet side to patient), one under and one over patient
- If using chest and leg wraps place in direct contact with skin
- In "Manual" mode, set the point temperature on the cooling unit to 5°C (41°F)
- Notify physician if patient's temperature >34°C (93.2°F) at 3 hours after initial cooling
- Once patient temperature of 33°C (91.4°F) is achieved, select "Auto" mode on cooling unit and set target temperature to 33°C (91.4°F)
- Remove ice bags at this time
- Check skin every hour for burns during cooling and every 2 hours during maintenance
- Document skin condition on flow sheet and notify physician of abnormalities



#### Monitor Arterial Pressure

 Place a femoral arterial line once patient in ICU. Do not delay cooling for line placement

### Bedside Shivering Assessment Scale (BSAS)

# Complete with vital signs during induction phase and maintenance phase

- 0 No Shivering
- 1 Mild shivering localized to neck and/or chest
- 2 Shivering involving neck and/or chest and < / = 2 extremities
- 3 Intermittent generalized shivering involving more than two extremities
  - \*\* Palpate masseter, pectoralis, deltoids and quadriceps muscles\*\*

See Algorithm 2 for Supportive Therapy and Controlled Re-warming