



Approach to Hypothermic Resuscitation

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Core temp $\leq 32^{\circ}\text{C}$

Cold and Alive

Cold and Dead

Stable(ish) Hypothermia

Unstable Hypothermia

Salvageable

Unsalvageable

Signs of Stability
(likely won't need ECMO)

1. Temp $> 28^{\circ}\text{C}$
2. Stable cardiac features: bradycardia, normotension, atrial fibrillation

Treatment:

- Active internal/external warming: warm IV fluids, Bair Hugger, bladder lavage
- Limit movement
- Obtain EKG

Signs of Instability
(may benefit from ECMO)

1. Temp $\leq 28^{\circ}\text{C}$
2. Unstable cardiac features: ventricular arrhythmias, severe hypotension

****High risk of cardiac arrest****

Treatment:

- Airway management, active internal/external rewarming, vasopressors as needed
- Limit movement
- Consider transfer to ECMO center

Patient may be salvageable if hypothermia preceded death (i.e., hypothermia was the likely cause of arrest)

- Start high quality CPR
- Start ECMO if available
- Arrange transfer to ECMO center if ECMO not available, continue CPR/rewarming
- If ROSC achieved, still transfer (may develop pulmonary edema and need ECMO)

Electricity/Epi?

- Reasonable to attempt shocks (1 or more)
- Mixed data on Epi use, AHA says to consider administration of vasopressors
- Resuscitate until temp $> 32\text{-}35^{\circ}\text{C}$

-Hypothermia not cause of initial arrest
-K > 12
-Chest frozen solid

If patient likely died prior to cooling, there is very little chance of survival