



## Wilderness First Aid Scenario

# HYPOTHERMIA

**Victim 1 – Adult With Hypothermia and Hypertension**

**Victim 2 – Adult With Hypothermia**

### SUMMARY

Your troop is taking a canoe trip down the New River in West Virginia. It is a sunny but windy day in late March. You suddenly encounter an area of rough water (Class II rapids), and the canoe containing the two adult leaders capsizes. Both of them are able to get back into the canoe, but they are soaked through their clothing. As the troop continues down the river, the two begin to shiver uncontrollably and complain about being wet, cold, and uncomfortable. They are also complaining about the day in general.

### SCENARIO DETAIL

There are eight youth members (aged 11–17) and the two adult leaders—Mickey, 58, and Tom, 72. It is about 1 p.m. when their canoe capsizes, with a temperature of 48 degrees F. Both men have dressed appropriately for the weather, but the wind in combination with the cold, wet clothing is beginning to have a serious physical impact. They both show signs of hypothermia, and the condition is progressing. They have traveled 8 miles downriver that day and are about two hours away from the next ranger station. Four participants in the trip are trained in WFA: Mickey, Tom, and two of the older youth. There is no cell phone service.

### STUDENT RESPONSE

1. Scene safety:

Being on the river in a canoe with signs of hypothermia isn't safe for anyone. However, the troop will need to find a place to get their canoes out of the water before the two adult leaders can receive care.

2. Primary assessment:

By the time the troop is out of the water, both Mickey and Tom are beginning to show signs that their hypothermia has advanced.

3. Secondary assessment:

**Mickey**

a. Vital signs: A&Ox4, heart rate 76, respirations 12, skin color is pink.

b. **SAMPLE:**

**S** – Shivering uncontrollably; complaining about being wet and cold and about the day's events; skin cool to the touch

**A** – No known allergies

**M** – Losartan

**P** – Hypertension, weight at the top of the height/weight chart

**L** – Sandwich and an apple for lunch about one hour ago

**E** – Canoe trip in late March, windy conditions, cold water temperature

**Tom**

a. Vital signs: A&Ox4, heart rate 62, respirations 10, skin taking on a bluish color.

b. **SAMPLE:**

**S** – Shivering has almost stopped; no longer complaining about being wet and cold; skin cool to the touch with a bluish color; speech becoming unclear

**A** – Penicillin

**M** – None

**P** – None

**L** – Sandwich and a banana for lunch about one hour ago

**E** – Canoe trip in late March, windy conditions, cold water temperature



## **+** Wilderness First Aid Scenario **Hypothermia**

### POST-SCENARIO DEBRIEF

- Did the troop check the scene for safety issues?

*If yes, what issues were found?*

- What signs and symptoms did you find?

**Mickey: Shivering uncontrollably; complaining about being wet, cold, and uncomfortable; skin cool to the touch.**

**Tom: Shivering has almost stopped; no longer complaining about being wet and cold; speech is becoming unclear; skin cool to the touch with a bluish color; heart rate and respirations could be slowing down (unable to determine earlier vital signs because the victims were on the river in a canoe). All of Tom's symptoms indicate advancing hypothermia.**

- What is the individual's problem?

**Mickey: Mild to moderate hypothermia**

**Tom: Severe hypothermia**

- How would you provide care?

**Get both victims off the water, out of their wet clothes, and into dry clothes. Create a hypothermia wrap for each victim. Provide warm fluids to Mickey. Provide warm fluids to Tom only if he is alert enough to drink on his own—this will avoid the risk of choking or aspiration. Get them out of the wind. Provide a windbreak with a tent, tarp, etc.**

Key Point: **The fluids should not contain caffeine or alcohol. Apply hot water bottles to the chest, armpits, neck, and back—if possible.** What might be used to make hot water bottles? **Ziplock bags, leak-proof containers, non-insulated plastic water bottles. Remember to protect the skin from the hot packs with a thin layer of cloth such as a T-shirt.**

- What items do you need?

**Dry clothing for both victims; warm fluids; two sleeping bags and two tarps for hypothermia wraps; quart- or gallon-size ziplock bags; leak-proof containers; non-insulated water bottles; tent for windbreak; camping pads or other material to minimize heat loss from the ground.**

- What would happen if the hypothermia victims were left untreated?

**Mickey's condition would progress to severe hypothermia and then to a life-threatening situation. Tom's hypothermia would progress to a more life-threatening situation. Both of them could eventually require CPR.**

- Does this situation require an evacuation?

**Yes. Care should be used in handling someone with severe hypothermia. Slowly warm the victims. Handle each victim gently and slowly to prevent cardiac arrhythmias.**

- Tell how the troop accessed emergency care. Did they carry a satellite phone?

**If yes, did they know how to use this phone? Was it protected from water?**

**If no, how did the troop decide how many youth members would go for help and who to send?**

- Could this situation have been prevented?

**Possibly not. The potential for a canoe capsizing and how to deal with cold, wet participants if it happens should always be a consideration when planning for such a trip. Planning for this trip should have taken into account the weather forecast, environmental conditions such as the water temperature and river flow rate, the experience level of all group members, and emergency procedures.**