

Hypothermia

Introduction

1. Introduce yourself to the students; let them know your name, background, and anything else that may interest them and ties into the presentation.
2. Make the students aware that the information you will present to them is important and that they need to pay attention.
3. Inform the students that they will participate in an activity as time allows and they must be responsible during this activity. Stressing responsibility is especially important if you deal with a younger group of students.

Introduce the Hypothermia Topic

- Students all have their own stories and experiences to tell.
- Introduce the hypothermia topic, and ask the students if they know what it is or what they think it might be.
- Ask students what the weather is like in winter. When “cold” is pointed out, ask students if they like to be cold. Let them comment for a while on this; ask them if being cold for too long can be harmful to their bodies.

Ask the following questions:

When it becomes cold outside, what type of clothing do we wear? How does heavy clothing prevent injury to our bodies in cold weather?

- a. Wear warm, loose-fitting, layered clothing, preferably wool. Also wear water repellent outer garments.
- b. Mittens and gloves: wear mittens instead of gloves. Mittens allow your fingers to remain in contact with each other, enabling your hands to stay warmer.
- c. Hats, scarves, and ear coverings: the head, neck and ears lose heat faster than any other part of the body.
- d. Feel free to expand on these and discuss each one as time allows.

What other things can you do when it is cold out to prevent injury to your body?

- e. Stay dry.
- f. Do not drink alcoholic beverages. It is common to feel warm after drinking alcohol; however, alcohol causes the body to lose heat more rapidly.
- g. Watch for frostbite and other signs of hypothermia. If you suspect frostbite or hypothermia:

- i. Seek immediate shelter in a warm place if you can't stop shivering, notice numbness, or become disoriented.
- ii. Handle any frostbitten area gently. Do not rub it.
- iii. Remove cold, wet and restricting clothing and replace with dry items.
- iv. Warm the body gradually, not by a stove or fire.
- v. Contact your local emergency medical services for help with frostbite or hypothermia.

Activity

Materials needed:

- . Large coolers filled with ice and cold water. The more coolers you have, the more quickly the activity can be performed.
- . An instant-read infrared (non-contact) thermometer.
- . Paper towels for spills and wet arms.
- . An assistant if the group is large or made of young students.

Before starting the activity, walk through it with the students. If the group is older, you may ask for a volunteer and demonstrate the activity as you explain it.

Procedure:

1. Have the group roll up one sleeve of their shirt.
2. Place one arm into the ice water for 15-20 seconds. Immerse the arm past the elbow, if possible. Ask the students to “wiggle” their fingers to increase the heat loss in their arm.
3. Immediately after time has passed, measure the temperature of the hand that was immersed. Tell the student this temperature.
4. Measure the temperature of the hand that was not placed in the water and tell the student this temperature.

Depending on the student, how long the arm was immersed, and how cold the water is, the temperature may vary anywhere from a five degree difference to closer to a 20 degree difference.

Wrap up:

After the activity, discuss with the students what could happen if their entire body was immersed in cold water or what would happen if they were not wearing enough clothing on a very cold day. Re-discuss the warning signs of hypothermia.