

Cold Hand Luke

TOPIC/SUBJECT: Dangers of cold water

TARGET AUDIENCE/AGE LEVEL: 3rd-6th Grades

TIME: 10 minutes

THEME: Cold water can kill you faster than you may realize

GOAL/PURPOSE: To make the students aware of the dangers of cold water.

OBJECTIVE(S):

- A. To teach the audience what to do if they find themselves in a cold water situation.
- B. Create an awareness of just how important it is to wear a life jacket or personal flotation device (PFD) when around cold water, but that alone will not save your life.
- C. The audience will be able to name two methods of conserving body heat when in a cold water situation.

DESCRIPTION:

- A. Fill a large bucket or cooler with water and ice. Place the bucket or cooler on a table.
- B. Remind the audience that cold water conducts heat away from the body 25-30 times faster than air at the same temperature.
- C. Stearns Manufacturing Company “rule of fifty” states that “in water of 50 degrees Fahrenheit, you have a 50-50 chance of surviving beyond 50 minutes without a protective life jacket or PFD.
- D. Remind the audience that movement, such as swimming, will cause their body to cool down faster. The movement is causing the victim’s heart to work faster in order to pump blood into the extremities. This causes the internal organs to cool down, which speeds up the effects of hypothermia. It is best to stay with the boat.
- E. Tell the audience about the H.E.L.P. (Heat Escape Lessening Posture) and huddle positions that can be used to conserve body heat.
- F. Drop loose change or washers into the bucket of water.
- G. Select a volunteer from the audience to participate in the activity. This activity is not recommended for people with heart problems.
- H. Ask the volunteer to remove any jewelry he or she is wearing on their hands or wrists. The volunteer will then place either one of their hand(s) in the water. Explain to the volunteer that they have to pick up one coin at a time and place it on the table. They should try and get out as many coins as they can in one minute. Ask them what their hand feels like at 15, 30, 45, and 60 seconds. Explain to them that they can stop at any time they choose to before the minute is up.
- I. You can point out the decreased dexterity, skin color, numbness, and weak pulse of the exposed hand and arm caused by only a short time the in cold water. Ask the volunteer what they think it would feel like if their entire body was emerged in the cold water.
- J. Point out how difficult it would be to try to put on a life jacket if your entire body was immersed in water this cold. It would be nearly impossible due to the loss of dexterity, among other things.
- K. If you have time have other volunteers try this activity.

- L. While the volunteers are participating in the activity explain what hypothermia is and what the early warning signs are. Explain that if a person doesn't notice the early warning signs and doesn't get help it could lead to unconsciousness and even death.

SUGGESTED MATERIALS & EQUIPMENT: Bucket or cooler, ice, coins, towel, and table.

Program Modifications:

Use grapes or marbles instead of coins. Groups compete to see how many grapes or marbles they can pick up with their toes.

Hypothermia Peg Board

Use large washers and place a letter on each one of them using a black permanent marker that spells out HYPOTHERMIA. Make two sets of washers and use them instead of coins. The participants remove the washers from the ice water one at a time. Have a peg board with eleven nails on it so the participants can place the washers on it to spell out HYPOTHERMIA. Underneath the nails on the peg board you can place the phrase "The Chill That Kills."

