

## **Cold Water Simulation Activity**

## **Purpose:**

This simulation will demonstrate how difficult it would be to put on a lifejacket or perform other simple tasks after an unexpected fall into cold water.

## What you need:

- Large buckets
- Cold Water (from the lake is just fine!)
- Ice (skating arenas have lots outside)
- A nut & bolt, a padlock & key, or other simple device



- Fill buckets half full of cold water
- 2. Add ice
- 3. Put the device at the bottom of each bucket (i.e. nut & bolt or padlock & key)
- 4. Ask patrons to put their hands in the cold water and try manipulate the device (screw the nut and bolt together/apart, lock or unlock the padlock)
- 5. Then ask the same patrons to leave their hands in the water for no more than 5 minutes and try the device again
- 6. Talk about the effects of cold water on motor skills; for example,

Can you imagine....

trying to zipper/latch up a lifejacket while submerged in cold water, or lifting your hands above your head to put a lifejacket on, or how difficult it may be to swim, or even how your thought processes might be affected, etc.

## What happens when you fall into cold water?

- Cold Shock will occur an initial deep and sudden gasp followed by hyperventilation that can be as much as 600 – 1,000% greater than normal breathing. If you don't keep your airway clear of the water, you run the risk of drowning. Wearing a lifejacket during this phase is critically important to keep you afloat and breathing.
- Within approximately 10 minutes you will lose the effective use of your fingers, arms and legs for any meaningful movement.
- Even in ice water it could take approximately 1 hour before becoming unconscious due to Hypothermia.

