HYPOTHERMIA Fast Facts

Anatomy and Physiology

Our bodies react to cold by contracting the blood vessels that are near the skin, moving warm blood to the centre of the body. Heat then escapes through the skin, and the core of the body stays warm. If this is not enough to keep the body warm then the individual begins to shiver and this produces heat through muscle action.

Hypothermia occurs as the entire body cools and its warming systems have failed. This condition can be life threatening. The body temperature drops below 35 degrees c (95 degrees f). As the body cools down the heart begins to beat irregularly and will eventually stop. Death then occurs.

Causes

Hypothermia is caused by exposure to cold, and the inability of the body to maintain warmth. Many factors contribute to an individual becoming hypothermic, such as, air temperature, wind, humidity, wet skin, is it windy and length of exposure to these conditions.

Elderly people, young children, people with health problems, those who suffer from heart disease or poor circulation and those who spend a lot of time outside in cold conditions are all at a higher risk for hypothermia under the right conditions.

Prevention

Hypothermia can usually be prevented by common sense and following some simple guidelines:

- If it is really cold outside then stay inside, avoid the coldest part of the day
- Layer your clothing, use clothes made of fabric that is tightly woven, trapping the heat next to the skin. Protect and cover areas such as fingers, toes, ears, nose
- Drink warm liquids (but not alcohol or caffeine, as they do no help you stay warm) drink water if there is nothing else
- When you start to shiver, get inside and warm up, if you are near cold water take extra care not to fall in
- Change out of wet clothing into dry

Signs and Symptoms

- Shivering
- Numbness
- Lack of coordination
- Confused or unusual behavior
- Body temperature below 35 degrees c (95 f)

Treatment
1. Remove wet clothing and dry the casualty
2. Provide warmth by wrapping him or her in blankets, changing to dry clothes or moving to a warm dry place. DO NOT rewarm too quickly by immersing in warm water. Rewarming too fast can cause heart problems. Be very gentle in handling the casualty
3. Warm, using hot water bottles or heating pads (if the person is dry) keeping a towel or blanket between the skin and the heat
4. Give warm fluids if casualty is alert

If the hypothermia has progressed to the severe stage, the casualty may become unconscious. Call EMS. Breathing may be very slow or stopped. Circulation may be slow and irregular. Check for circulation for 45 seconds, it is often difficult to feel a pulse when the body is so cold as the heart rate is very slow. The body may feel stiff due to cold. Monitor ABCs, give rescue breathing if necessary and be ready to do CPR while waiting for the ambulance.

BOATING SURVIVAL
For dealing with cold water

When you go out in a boat respect the water! If you fall in the water.... stay with the boat, hang on. Keep clothes on for insulation, curl up to reduce body surface to the water, keep movement down unless rescue or self-rescue is easily possible. Keep your hat on to trap the heat. Get as much of your body out of the water as possible. Do not swim, it will only speed hypothermia up.

Use the H.E.L.P. and HUDDLE positions when possible.

When alone: H.E.L.P (Heat Escape Lessening Position)
  Head out of water
  Arms against sides, chest and PFD
  Cross legs, knees raised

Two or more People: HUDDLE: so that sides of bodies are held closely together
  Heads out of water
  Arms hugging each other over PFDs