

# Hypothermia

## Hypothermia

- When the body cannot maintain a normal temperature of 37.5 C
- Core body temperature drops below 35 C
- Common with cold, wet and windy weather
- Can occur in warmer conditions
- Athletes susceptible if standing around sweating between drills

## Signs

Early signs include:

- Mild shivering
- Slow movement
- Poor coordination
- Poor judgment

Later signs lead to:

- Shivering stops and posture becomes stiff
- Slow breathing
- Slow heartbeat
- Blue skin
- Jerky, weak movements
- No pain response
- Possibly loss of consciousness

## Symptoms

- Weakness
- Difficulty performing tasks
- Cold and wet



## Frostbite

- Prolonged and constant exposure to cold
- Skin redness, swelling, tingling, and pain in toes and fingers
- Treat superficial frostbite by re-warming in warm water until redness is gone
- Deep frostbite requires hospitalization

## Management

- Prevent further heat loss by carefully moving athlete to a warm environment
- Replace wet or cold clothing
- Cover athlete's head
- Add heat at major arteries using heat pads—take care not to burn the athlete
- Provide warm fluids
- Activate EMS if signs and symptoms are severe or persist

## Prevention

- Dress warmly in layered clothing
- Try to avoid cotton which tends to draw moisture inward
- Keep your head covered
- Keep body and clothes dry
- Restore energy by consuming carbohydrates
- Drink plenty of fluids
- Avoid alcohol
- Listen to your bodies danger signals
- Be prepared for the worst



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## Hyperthermia

- An increase in the body's core temperature
- Occurs in 3 stages:
  - Heat Cramps
  - Heat Exhaustion
  - Heat Stroke

### 1. Heat Cramps

- Early sign of heat illness
- Muscle cramps (calf, abdominal)
- Fatigue and dizziness
- Very warm and thirsty

### 2. Heat Exhaustion

- Profuse sweating
- Cool, clammy, pale skin
- Slow, shallow breathing
- Rapid/weak pulse
- Chills or shivering
- Tingling in arms, legs or back

### 3. Heat Stroke

- The body's heat regulating mechanism fails
- Absence of sweat
- Hot, dry, red skin
- Fast/deep breathing
- Rapid/bounding pulse
- Bizarre behavior
- Convulsions and/or unconsciousness
- This is a life threatening condition if not treated quickly



## Management

- Remove athlete from the heat
- Loosen or remove clothing
- Fan body to increase heat loss
- Replace fluids in conscious athletes
- Apply ice packs to major arteries in neck, groin and armpits
- Place cold, water soaked towels over athlete
- Activate EMS if heat stroke suspected

## Prevention

- Drink cool water at regular intervals before, during and after activity
- Appropriate equipment and clothing that allows for evaporation of sweat
- Equipment should not cover heat loss areas (underarms, neck and inner thighs)
- Schedule practices and games so athletes are not exposed to peak daytime temperatures
- Gradually increase training in climates of high temperature and humidity