Complications of Spinal Cord Injury: Changes in Body Temperature

Why does this happen?
Changes in body temperature happen in people with cervical (levels C1-8) and high thoracic injuries (levels T 1-6). Without injury, the body is able to sense the temperature and send signals to the brain. The brain then sends commands back to the body – to “sweat” when the temperature is high, or to “shiver” or cover up when cold.

But with a high level of spinal cord injury, the body cannot sense the changes in temperature and signal the brain to respond. So your temperature will change with the environment. In cold places your temperature will drop (hypothermia) and in warm places your temperature will rise (hyperthermia).

What to do if your body temperature changes
If your temperature is high:
• Get out of the heat if possible. Sponge your skin with cool water and drink plenty of fluids. Go to an air-conditioned room or use fans.
• One of the best ways to cool down is to have a cold wet towel wrapped around the back of your neck. The skin should also be damp to allow the water to evaporate from the skin and cool the body down.

If your temperature is low:
• Cover yourself with blankets
• In extreme cold have someone lie as close to you as possible under blankets. Their body temperature will help raise yours.

How to recognize changes in body temperature
In hot weather, as your temperature rises, you may have one or more of these symptoms:
• Skin feels hot and dry and appears flushed
• Feelings of weakness
• Dizziness
• Visual disturbances
• Headache
• Nausea
• Elevated temperature
• Rapid pulse (may also be irregular or weak)

In cold weather, as your temperature falls, you may have one of these symptoms:
• Early signs – cold, pale skin and intense shivering
• As body temperature continues to fall, speech becomes slurred, muscles go rigid, and you may become disoriented and have eyesight problems. Other harmful results can include dehydration as well as liver and kidney failure.

How to prevent major changes in your body temperature
• Most important – avoid extreme temperatures.
• If you are out in cold weather:
  – Wear a lot of layers of warm clothing
  – Keep your hands and feet dry and well covered to avoid frostbite
• Don’t stay out too long in hot weather
  – Keep out of direct sunlight
  – Drink plenty of fluids

The information presented is intended for general information and educational purposes. It is not intended to replace the advice of your health care provider. Contact your health care provider if you believe you have a health problem.