

## TOOLBOX TALK #48

### UNDERSTANDING HYPOTHERMIA

Working in cold conditions can be unpleasant, uncomfortable and even dangerous if proper safety precautions are not followed. One risk is hypothermia, which the Mayo Clinic defines as “a medical emergency that occurs when your body loses heat faster than it can produce heat, causing a dangerously low body temperature.” A person’s regular body temperature is about 98.6 degrees F; hypothermia happens when a person’s body temperature falls below 95 degrees F.



#### **The different stages**

Hypothermia has three stages: mild, moderate and severe. The Canadian Center for Occupational Health and Safety (CCOHS) describes the conditions:

**Mild:** Normal shivering can be the first sign of mild hypothermia, followed by experiencing an overall cold sensation, goose bumps and the inability to perform complex tasks with one’s hands. Shivering may become severe, and hands may become numb.

**Moderate:** Signs of moderate hypothermia include intense shivering, muscle incoordination and labored movements – all while remaining alert. As hypothermia progresses to the more dangerous end of the moderate spectrum, the person may have difficulty speaking and amnesia may start. In addition, the victim may be unable to use his or her hands and may experience violent shivering and stumbling.

**Severe:** When severe hypothermia sets in, shivering will stop, exposed skin may turn blue and puffy, and the victim may lose the ability to walk. He or she may become severely confused and lack awareness. If hypothermia progresses further, muscles will become rigid and pulse and respiration rate may decrease. In its final stages, severe hypothermia may result in pulmonary edema, cardiac and respiratory failure, or death.

#### **What to do**

If hypothermia appears to be setting in, you need to act fast. “At the first sign, find medical help immediately,” CCOHS states. “The survival of the victim depends on their coworkers’ ability to recognize the symptoms of hypothermia.” The center adds that hypothermia victims generally are unable to notice their own condition. If you suspect a coworker is experiencing hypothermia:

- Get the victim to an emergency medical facility as soon as possible.
- Remove wet clothing and place the victim between blankets or towels in an effort to raise the body temperature gradually. Make sure the person’s head is covered.
- Use hot water bottles or electric blankets with caution. Don’t warm the arms and legs directly, and refrain from warming the victim too quickly (such as soaking the victim in a hot bath).
- Begin CPR if the victim stops breathing. Continue until medical aid is available. “The body slows when it’s very cold, and in some cases, hypothermia victims may have appeared ‘dead’ have been successfully resuscitated,” according to CCOHS.