

Saint Joseph's College

Policy Guidebook

Human Resources

Section Name: Environmental Health and Safety

Section Number: 10.06

Effective Date: 11/01/2021

SUBJECT: Working Conditions in Hot & Cold Environments

Purpose:

When working in a variety of positions where climate or varying degrees of temperature are a factor, the hazard cannot be readily managed using just engineering controls alone. In these circumstances some of the most effective ways of managing these environments is by using some simple administrative controls.

Applicable to:

All Employees working in environments that exposes them to extended periods of time in either cold or hot conditions.

Policy:

Saint Joseph's College is committed to providing a healthy working and learning environment for the entire campus community. To support this initiative, the College has a responsibility to provide employees with a place of employment which is free from recognized hazards, including hot and cold stress, which can cause serious physical harm including death.

Procedure:

Working in an environment that exposes employees to extended periods of time in either cold or hot conditions requires employees to understand how to be prepared to perform their work safely. Follow these work practices to stay safe in hot and cold environments and to minimize the physical impact on the body.

Cold working environments:

Our bodies are unable to acclimatize to cold in the same manner that they can adapt to heat. When the body is unable to warm itself, serious cold-related illnesses and injury may occur and permanent tissue damage and death may result. Cold related illness can slowly overcome a person who has been chilled by low temperatures, brisk winds or wet clothing. Cold stress is associated with low temperature, high air movement and humidity, for example, from a blast of cold, wet wind.

Symptoms of cold induced illnesses

Hypothermia - Lowering of body temperature has an effect on the brain, causing erratic behavior and numbness, muscular weakness and cramps. Hypothermia can occur when land temperatures are above freezing or water temperatures are below 37° C. Its symptoms are fatigue and drowsiness, uncontrolled shivering, cool bluish skin, slurred speech, clumsy movements, irritable, irrational or confused behavior.

Frostbite - Localized exposure to cold occurs through freezing in deep layers of skin and tissue causing waxy-white skin, skin becomes hard and numb and usually affects the fingers, hands, toes, feet ears and nose first.

All cases of cold illnesses must be taken seriously and medical attention must be sought as soon as possible. All cases of frostbite must be treated as an emergency and the patient taken to hospital.

To prevent cold stress, these safe work practices are in place:

- Dress properly; wear at least three layers of loose-fitting clothing, insulated gloves and boots, and cover your head
- Provision of mobile facilities for re-warming and encourage the drinking of warm fluids such as soup or hot chocolate
- Introduce more frequent rest breaks
- Use a buddy system (work in pairs)
- For outdoors work, consider whether the job can be delayed and undertaken at warmer times of the year without compromising on safety
- Education of workers about recognizing the early symptoms of cold stress

Hot working environments:

When the body is unable to cool itself through sweating, serious heat illness may occur. The most severe heat induced illnesses are heat exhaustion and heat stroke. If actions are not taken to treat heat exhaustion, the illness could progress into heat stroke and possibly death.

Symptoms of heat induced illnesses

Heat rash - The symptoms of heat rash include excessive sweating, resulting in the sweat gland becoming blocked and therefore reduces your ability to sweat more and lose heat.

Heat Exhaustion - The symptoms of heat exhaustion are headaches, dizziness, lightheadedness, weakness, mood changes (feeling irritable or confused), vomiting, decreased and dark colored urine, fainting and clammy skin. If heat exhaustion is not treated, the illness may advance to heat stroke.

Heat Stroke - The symptoms of heat stroke are dry pale skin (no sweating), hot red colored skin (looks like sunburn), mood changes (feeling irritable or confused), seizures, fits, collapse and unconsciousness.

All cases of heat stroke must be taken seriously as there is a high risk of death resulting from a lack of treatment. Medical attention must be sought as soon as possible. All cases of heat stroke must be treated as an emergency and the patient taken to hospital.

To prevent hot stress, these safe work practices are in place:

- Provide more frequent rest breaks and introduce shading to rest areas
- Wear light-colored, loose-fitting, breathable clothing-cotton is good
- If working outside in the sun, wear UV-absorbent sunglasses and use sunscreen with a sun protection factor (SPF) of least 30
- Provide cool drinking water, as well as juice or sports drink near workstations and remind workers to drink a cup every 20 minutes or so
- Encourage the removal of personal protective equipment when resting to help encourage heat loss
- For outdoors work, reschedule work to cooler times of the day
- Use a buddy system (work in pairs)
- Introduce shading in areas where the individuals are working
- Education of workers about recognizing the early symptoms of heat stress
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