Huron Superior Catholic District School Board

Hot Weather Action Plan

The Huron Superior Catholic District School Board recognizes the potential difficulties caused by workers' exposure to high heat and humidity. In order to be pro-active in reducing the potential for heat related illnesses, the Board has developed a HOT WEATHER ACTION PLAN. This program requires the full cooperation of management, supervisors, the Joint Health & Safety committee and workers.

Employers have a duty under Section 25[2][h] of the Occupational Health & Safety Act to take every precaution reasonable in the circumstances for the protection of the workers. This includes developing policies and procedures to protect workers in hot environments due to hot processes or hot weather. For compliance purposes the Ministry of Labour recommends the current Threshold Limit Value [TLV] for heat stress and heat strain. These values are based on preventing unacclimated workers' core temperatures from rising above 38 degrees C.
[reference: Ministry of Labour's "Heat stress health & safety guideline"]

RESPONSIBILITIES

Supervisors will consider weather conditions throughout the day and consult, as necessary, the Heat Stress Reference Chart.

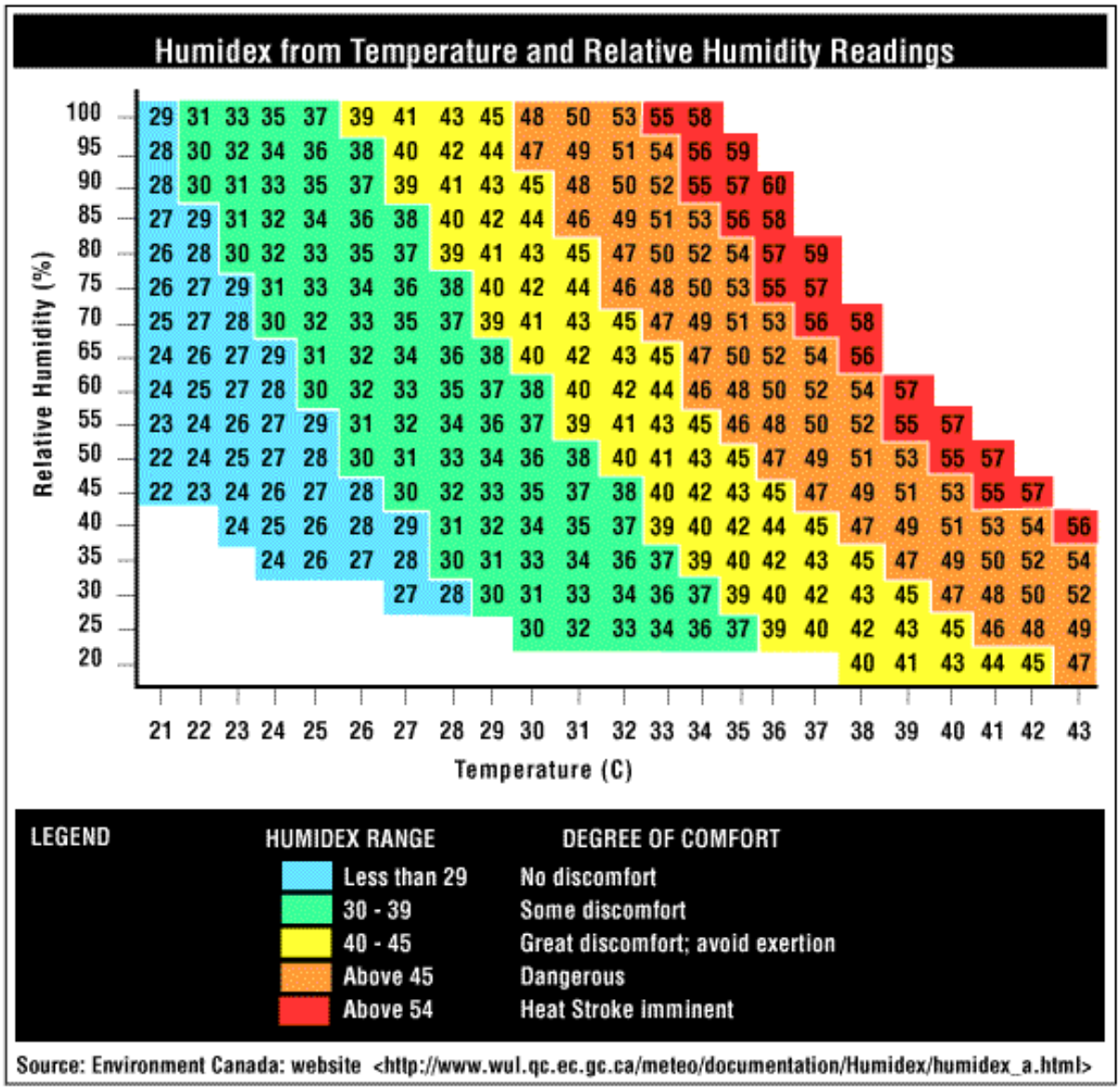
The Joint Health & Safety Committee will undertake an annual review to evaluate the effectiveness of the HWAP and will make any needed improvements to the plan. The committee will also receive and review all reports of heat related incidents.

Workers will familiarize themselves with the Hot Weather Action Plan and the hazards of working in hot humid environments. Measures will be taken to reduce symptoms associated with heat related stress.

HEAT STRESS AWARENESS DEFINITION

Heat stress symptoms are a set of natural signals telling you that something needs to be done to balance your body's heating and cooling. Factors influencing heat stress include:
air temperature
humidity
physical activity
underlying medical conditions
UV exposure

HUMIDEX CALCULATION



Source: Environment Canada: website <http://www.wul.qc.ec.gc.ca/meteo/documentation/Humidex/humidex_a.html>

Recognizing and Treating Heat Related Conditions

CONDITION	CAUSE	SYMPTOMS	TREATMENT	PREVENTION
HEAT RASH	Hot humid environment Plugged sweat glands	Red bumpy rash Itching	Move to cool area Rinse skin with cool water	Wash regularly Keep skin clean and dry
SUNBURN	Too much exposure to sun UV rays	Red, painful, blistering, peeling skin	Seek shade Use UV blocking sun screen products	See UV sun protection chart
HEAT CRAMPS	Heavy sweating drains the body of salt which can't be replaced by simply drinking water	Painful cramps in arms, legs, stomach that occur at work or later Heat cramps are serious because they can be a warning of more dangerous heat induced illness	Move to cool area and loosen clothing Drink cool salted water or similar drink If cramps are severe seek medical aid	Reduce activity levels and heat exposure Drink fluids regularly Workers check on each other to monitor symptoms that may lead to heat stroke
FAINTING	Fluid loss and inadequate water intake	Sudden collapse Cool, moist skin Weak pulse	GET MEDICAL ATTENTION Assess need for CPR	Reduce activity level and heat exposure Drink fluids regularly Workers check on each other to monitor symptoms that may lead to heat stroke
HEAT EXHAUSTION	Fluid loss and inadequate salt and water intake causes a body's cooling system to start to break down	Heavy sweating Cool, moist skin Body temperature rises Weak pulse Normal or low blood pressure Tired, weak Nausea and vomiting Thirsty, panting Rapid breathing Blurred vision	GET MEDICAL AID Condition may lead to heat stroke which can be fatal Loosen and remove excess clothing Apply cool water to skin	Reduce activity level and heat exposure Drink fluids regularly Workers check on each other to monitor symptoms that may lead to heat stroke
HEAT STROKE	When the body is depleted of water and salt reserves, sweating will stop, causing elevated body temperature May develop suddenly or from heat exhaustion	High body temperature and any one of: Weakness Confusion Agitation Hot, dry red skin Rapid pulse Headache Dizziness Unconsciousness Convulsions	CALL AMBULANCE Heat stroke kills quickly Remove excess clothing Fan skin and apply cool water	Reduce activity level and heat exposure Drink fluids regularly Workers check on each other to monitor symptoms that may lead to heat stroke

UV Index Sun Protection

Environment Canada developed the UV Index to inform Canadians about the strength of the sun's UV (ultraviolet) rays. UV rays can cause sunburns, eye cataracts, skin aging and skin cancer. The higher the UV Index number, the stronger the sun's rays, and the greater the need to take precautions. The table below outlines the sun protection actions recommended at different levels of the UV Index.

UV Index	Description	Sun Protection Actions
0-2	Low	• Minimal sun protection required for normal activity • Wear sunglasses on bright days. If outside for more than one hour, cover up and use sunscreen • Reflection off snow can nearly double UV strength. Wear sunglasses and apply sunscreen
3-5	Moderate	• Take precautions - cover up, wear a hat, sunglasses and sunscreen especially if you will be outside for 30 minutes or more • Look for shade near midday when the sun is strongest
6-7	High	• Protection required - UV damages the skin and can cause sunburn • Reduce time in the sun between 11 a.m. and 4 p.m. and take full precautions - seek shade, cover up, wear a hat, sunglasses and sunscreen
8-10	Very High	• Extra precautions required - unprotected skin will be damaged and can burn quickly • Avoid the sun between 11 a.m. and 4 p.m. and take full precautions - seek shade, cover up, wear a hat, sunglasses and sunscreen
11+	Extreme	• Values of 11 or more are very rare in Canada. However, the UV Index can reach 14 or more in the tropics and southern U.S. • Take full precautions. Unprotected skin will be damaged and can burn in minutes. Avoid the sun between 11 a.m. and 4 p.m., cover up, wear a hat, sunglasses and sunscreen • White sand and other bright surfaces reflect UV and increase UV exposure

RESPONSES TO HEAT STRESS CONDITIONS

Measures will commence whenever heat stress conditions are present.

- Supervisors will alert workers to implement the Hot Weather Action Plan
- Provide water and ensure workers drink water every 20-30 minutes even if workers are not feeling thirsty
- First Aiders are to be alerted and ready to respond, if necessary, to heat related incidents
- Workers are to be directed to take breaks in the coolest areas
- Provide cooling fans as required
- After consideration of physical demands, postpone or minimize strenuous activities until a cooler time [including field trip situations]
- If required to be outdoors workers are to take protective measures, minimize strenuous activities, minimize sun exposure and seek shade
- Rotate workers in and out of hot areas as required
- Provide personal protective equipment as required [examples: umbrella, cooling vest, lighter clothing]
- Consider replacing the use of regular personal protective clothing with lighter options

The success of the Huron-Superior Catholic District School Board Hot Weather Action Plan is dependent on the collaboration of management, supervisors, Joint Health & Safety Committee members and workers.

Working as a team we can help prevent heat stress incidents and support worker safety for all Board employees.

Resources: City of Greater Sudbury – Health Unit Hot Weather Response Plan
Dufferin Peel Catholic District School Board Heat Stress/Hot Weather Program
WSIB Heat Stress Awareness Guide
Environment Canada
OHCOW heat stress calculator