

# The Glebe Centre

## Management of Heat Related Illnesses

July 2024

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## Management of Heat Related Illnesses

### Purpose

The purpose of this Heat Related Illness (HRI) plan is to provide direction for the control of the complications of dehydration due to rapid body or environmental temperature changes. The aging process alters the ability to regulate body temperatures in a hot environment by decreasing the ability to dissipate heat. This is called thermoregulation. There is an organized plan in place to deal with extreme heat. The safety of the residents, clients, staff, and visitors is of primary concern during an emergency.

### Definitions

**Heat Exhaustion:** Heat exhaustion is caused by the raising of a person's body temperature from either environmental conditions or by exertion. Heat exhaustion can present with dizziness, headache, nausea, weakness, unsteady gait, muscle cramps and fatigue.

**Heat Related Illness:** HRIs are a group of serious and escalating medical conditions which include heat rash, heat cramps, heat exhaustion and heat stroke. A high body temperature (excluding infection) is also known as hyperthermia.

**Heat Stroke:** Heat stroke is the most serious heat-related illness. It occurs when the body can no longer control its temperature: the body's temperature rises rapidly, the sweating mechanism fails, and the body is unable to cool down. When heat stroke occurs, the body temperature can rise to 106°F or higher within 10 to 15 minutes. Heat stroke's primary symptoms include a change in mental status, such as confusion, delirium, combativeness, seizures, loss of consciousness, and a core body temperature above 104 F.

### References

Fixing Long Term Care Act, 2021 Ministry of LTC s. 24 of O. Reg. 246/22.

### Policy

A risk assessment of the home is to be completed with the action plans for each scenario.

A risk assessment is to be performed on each resident through the Hot Weather-related illness assessment in PCC annually in May.

The care plan will be updated with specific interventions for each resident who are at high risk related to heat exposure.

Staff are to be informed of the policy and expected to follow appropriate interventions for each resident that are in their care plan.

The HRI Prevention and Management Plan is in effect from May 15th to September 15th annually and on any day which the outside temperature forecasted by Environment Canada for the areas in which the Long-Term Care Home (LTCH) or Adult Day Program (ADP) is 26 degrees Celsius or above at any point during the day and anytime the inside temperature of the LTCH or ADP reaches 26 degrees Celsius or above.

**Resident rooms are all air conditioned and controlled remotely and monitored on a regular basis. In the event of a loss of power, the HVAC system transfers to the generator.**



## **Heat Stroke**

Become familiar with the signs and symptoms and immediate treatment as listed below:

- a. Weakness, faintness
- b. Dizziness
- c. Headache
- d. Disorientation, agitation or confusion
- e. Sluggishness, fatigue
- f. Seizures
- g. Hot dry skin
- h. Increased body (inner) temperature
- i. Loss of Consciousness
- j. Rapid heart rate
- k. Hallucinations

1. Notify the attending physician and immediately transfer the resident/staff/volunteer to hospital, Heat stroke can be deadly
2. Take the following actions while waiting to transfer the resident of hospital.
  - Maintain absolute bed rest and cool down by sponge bathing with cool water, redo often and fan the wet skin
  - Apply ice to head, neck, armpits and groin areas.
  - Monitor rectal temperature every 15 minutes and vital signs, record signs and symptoms, fluid intake, output, treatment provided and resident response. Forward this to the Paramedics to bring with the resident to the Hospital.
  - Administer oxygen

## **Prevention of Heat Stroke**

1. Keep the resident cool and out of direct sunlight.
2. Wear light-coloured clothes and hat if going outdoors.
3. Offer plenty of fluids throughout the day.
4. Avoid providing caffeinated beverages as much as possible, they accelerate the effects of heat stroke.

## **Heat Exhaustion**

Become familiar with the signs and symptoms and immediate treatment as listed below;

- a. Blurred Vision
- b. Nausea or Vomiting
- c. Headache
- d. Sluggishness, fatigue
- e. Thirst
- f. Profuse sweating
- g. Moderate increase body (inner) temperature

1. Place the resident/staff/volunteer in a cool environment to rest.
2. Restore fluids by giving small and may include small quantities of semi-liquid food, if the resident is conscious.
3. Apply cool water to skin and reapply often, fan the wet skin.



4. Have the resident/staff/volunteer drink fluids such as water or juice.
5. Apply ice to head, neck, armpits and groin areas.
6. If the resident/staff/volunteer begin to show signs of heat stroke, call 911 immediately.

### Prevention of Heat Exhaustion

1. Keep the resident cool, use fans where available, keep out of direct sunlight.
2. Wear light-coloured clothes and hat if going outdoors.
3. Offer plenty of fluids throughout the day.
4. Avoid providing caffeinated beverages as much as possible.

### Summary Table

	Heat Exhaustion	Heat Stroke
<b>Rectal Temperature</b>	38-40°C	greater than 40.6°C
<b>State of Consciousness</b>	(usually) conscious	withdrawal, stupor or unconsciousness
<b>Orientation</b>	mild confusion but usually oriented	marked confusion and disorientation, if conscious
<b>Blood Pressure</b>	reduced difference between systolic and diastolic pressure; marked drop in pressure on standing up	increased difference between systolic and diastolic pressure
<b>Pulse</b>	less than 150 beats/minute	greater than 160 beats/minute
<b>Skin</b>	pale and cool; pronounced sweating	
<b>Other symptoms</b>	fatigue, nausea, irritability, headache, dizziness	severe headache, convulsions

### Procedure

#### Heat Advisory

Ottawa Public Health Faxes and emails the home with the advisories.  
The Home acts on the advisories as noted below.

### Communication Protocol

- (1) Notify the Director of Environmental Services (ES), the Director of Care (DOC) and the Executive Director (ED) if the building temperature is **26 degrees Celsius or higher** in any of the resident home areas and 32 degrees in either the kitchen or laundry room.
- (2) The Director of Operations will communicate the resultant action plan to address the rise in temperature to the Chair of the Resident Council verbally, the Family Council Chair through email, and all family members and Substitute decision Makers through MailChimp.



- (3) The Director of Care/delegate, if required, will submit a CIS through the MOLTC online system outlining the incident and the resulting action plan.
- (4) The Director of Care/delegate will maintain communication with staff through Point Click Care and informal channels such as huddles and nursing meetings.

## **Action Plan**

The following departmental staff will:

### **(a) Nursing Department**

- Provide additional fluids for all residents. These fluids should be water or fruit juice.
- Observe residents for symptoms of heat related illness; notify Medical Director and Director of Care/Delegate of resident who are suffering.
- Discourage residents from going outside.
- Ensure that all residents are dressed appropriately. Residents who dress themselves should be checked for over dressing. Frail residents should be dressed in cotton undershirts or nightgowns.
- Close blinds and drapes and turn off lights as appropriate.
- Turn off any unnecessary heat generating equipment.
- Check the impacted floor and room temperatures immediately and every eight hours thereafter.

### **(b) Environmental Services**

- Work with mechanical maintenance workers and contractors (if applicable) to ensure air conditioning is fully functionality as soon as possible. Inform Executive Director of affected areas and further action plan.
- If laundry room temperature exceeds 32 degrees Celsius, under the direction of the ES Manager/Delegate dryers should be shut down for 2 hours or until the temperature drops. Laundry production may be shifted to cooler nighttime hours if possible.
- Ensure temporary cooling devices (fans, portable Acs, coolers) are available to use and cords are not tripping hazard.
- Conduct temperature checks on all home areas every 4 hours until temperature is 26 degrees Celsius or below, manually record temperature checks on tracking form.
- Close all windows and exterior doors. Monitor the building, ensuring blinds and drapes are closed, windows are closed, lights are off (whenever applicable), cords are not a tripping hazard.

### **(c) Programs and Recreation**

- The Supervisor of Recreational Programming to meet with the Director of Operations to determine an appropriate course of action, which may include cancellation of recreation programs.
- Some or all recreation staff assist in serving fluids or popsicles.
- Assisting residents to cool areas in the building if possible.



- Providing impromptu nonphysical programs in cooler conditioned areas (activity room) of the home.

### **Outdoor events formal**

When there is a planned outdoor recreation event, staff are to check the weather status several days prior to the event. If there is a hot weather advisory, the event will be cancelled and a modified event will take place. If the event is already in process and an advisory comes in staff will do the following:

- Invite resident back indoors.
- If the resident chooses to remain outside – advise them of the risks of remaining outdoors.
- Ensure the resident has applied sun block, hat and is dressed in light-colored loose-fitting clothes.
- Encourage residents to sit in shaded areas and under open umbrellas or covered gazebos.
- Provide jugs of water to resident's when outdoors during summer months.
- Ensure residents and staff drink clear, cool fluids frequently.
- Avoid drinks with alcohol, caffeine, or high sugar.
- Activate emergency call bell if required.

### **Outdoor events informal**

For informal outdoor activity, residents with capacity will be informed that there is a hot weather advisory and to limit their time outdoors, remain in shady areas and to drink plenty of fluids. Signage will be posted on the exits to the outdoors warning of the heat advisory.

### **(d) Food Services**

- Cold meal menus to be implemented under the direction of the Director of Food Services/Delegate.
- Provide ice water/ popsicles to all home areas - ensuring adequate supply for residents, staff, and visitors.
- Increase quantity of cold beverages available on the nourishment cart, limiting caffeine beverages.
- Turn off any unnecessary heat generating equipment whenever applicable.
- Ensure fans are placed around the kitchen whenever possible.

### **(e) Employees:**

Employees are expected to:

- Be familiar with the signs and symptoms of a heat related illness.
- If you feel that you are experiencing signs of heat exhaustion, notify the RN in Charge for assessment.
- Wear light cotton uniforms.
- Drink plenty of fluids equivalent of eight to twelve glasses/day.
- Avoid caffeinated drinks.
- Eat smaller meals.