Heat Plan: Long-Term Care/Assisted Living

Overview and Completion Guide

What is a Heat Plan?

A Heat Plan outlines site-specific interventions, actions, and resources that may be implemented when there is a heat event that has caused, or has the potential to cause, significant impacts to client/resident and staff safety. This plan is intended to be a practical, in-the-moment reference prior to the heat season and once the specific trigger levels are met.

Summer in Canada starts on June 21 and ends on September 22. It is recommended that the summer preparation actions are completed in all applicable buildings by the end of April. Normally extremely hot weather can be expected between May and October. In the last couple of years, the first heat waves in Metro Vancouver occurred in mid May and the summer of 2021 has seen three distinct heatwaves in the metro Vancouver area.

Purpose/Objective

This document serves as a guide for staff to complete the Heat Plan template. It provides step-by-step instructions for documenting essential information related to heat considerations, actions, and resources. Staff may fill in site specific terminology in the Heat Plan template highlighted in purple.

Components

- Site Information
- Threshold Criteria and Response Level Triggers
- Heat Season Preparedness
- Response Level Triggers and Control Interventions
- Equipment and Supplies
- Evaluation and After-Action Review
- Plan Maintenance

Site/Unit/Department Information	
Site/Unit/Department Name:	*Specify the LTC/AL home name if the plan covers the entire site. If the plan is for a specific unit or department, provide its name, especially if different interventions apply*
Type of Services:	*Describe the types of services provided to clients/residents*
	Select the applicable service categories from the provided checkboxes
Number of Clients/Residents Served	Include how many clients/residents are LTC vs. AL and how many are contracted
Key Contact Number(s)	*Provide the main reception line and any after-hours contact numbers. Also include any Maintenance contacts or additional contacts, including those for HVAC issues*
Other Information:	*Identify any site/unit/department information that may be important to add to the plan*

Threshold Criteria and Response Level Triggers

Heat Alert Response System (HARS) Criteria

The thresholds detailed below are those that have been established by the BC Health Effects of Anomalous Temperatures (BC Heat) Coordinating Committee (BC HEAT Committee). The BC HEAT Committee provides public and partner organizations with a warning of the health risk from heat events with the overarching objective to support planning and response efforts related to public health impacts for significant heat events in British Columbia (BC).

Heat Warning

A **heat warning** is issued for a region when there are two or more consecutive days during which the daytime maximum temperatures are forecast to reach or exceed the trigger temperature criteria for that region, and the nighttime minimum temperatures are forecast to fall only to the region-specific temperature or warmer. These temperature thresholds indicate moderate public health risk. This criterion is the minimum basis for the extreme heat emergency.

Extreme Heat Emergency

An **extreme heat emergency** emphasizes the very high public health risk that exists when high temperatures increase day over day, based on temperatures and conditions that indicate a very high public health risk, including a larger increase in deaths in the community is expected. Criteria are met when the forecast or observed temperatures in each region surpasses the heat warning criteria, and there is high certainty that temperatures would substantively increase day over day for three or more consecutive days.

Lower Mainland

The table below is a high-level overview of the HARS criteria, specific to the Lower Mainland regions.

Tier	Region	Criteria
Level 1: Heat Warning	**Southwest**	
	Western Metro Vancouver, including the North Shore, City of Vancouver and Richmond, Howe Sound, Whistler, Sunshine Coast, Vancouver Island (except northern sections)	2 or more consecutive days of daytime maximum temperatures are expected to reach 29°C or warmer and nighttime minimum temperatures are expected to be at 16°C or warmer
	Southwest inland	

	Eastern Metro Vancouver including Coquitlam and Surrey, and the Fraser Valley	2 or more consecutive days of daytime maximum temperatures are expected to reach 33°C or warmer and nighttime minimum temperatures are expected to be at 17°C or warmer
Level 2: Extreme Heat Emergency	**Southwest**	
	Western Metro Vancouver, including the North Shore, City of Vancouver and Richmond, Howe Sound, Whistler, Sunshine Coast, Vancouver Island (except northern sections)	Daytime maximum temperatures are expected to reach 31°C or warmer, based on today's temperature and tomorrows forecasted max
	Southwest inland	
	Eastern Metro Vancouver including Coquitlam and Surrey, and the Fraser Valley	Daytime maximum temperatures are expected to reach 34°C or warmer, based on today's temperature and tomorrows forecasted max

Response Level Triggers

The **response level triggers** detailed below provide a structured approach for staff intervention. These measures are designed to prevent temperatures from nearing 26°C and those that must be taken immediately if temperatures reach or exceed this threshold and are aligned with the BC HARS criteria for the Lower Mainland.

Level	Trigger
Standard activities	To be taken to prevent indoor temperatures from exceeding 26°C
Escalated interventions	To be taken when indoor temperatures approach or reach 26°C
Emergency interventions	To be taken if the indoor temperatures exceed 26°C

Heat Season Preparedness

Client/Resident Risk Identification

While all older adults are at heightened risk during heat events, the criteria detailed in the Heat Plan template has been established for those that are at heightened risk for heat illness during heat events. It is recommended that care plans be updated/adjusted during the heat season for individuals that fit the criteria noted in the Heat Plan.

Temperature Monitoring

The temperature monitoring table provides the site-specific plan for monitoring indoor temperatures throughout the heat season. It is recommended that each LTC/AL home have a plan for monitoring temperatures to ensure consistent monitoring practices among staff. The Heat-Response-Temperature-Log document can be used to track all temperature monitoring activities.

The temperature monitoring table below provides an example of the temperature monitoring practices.

Considerations	Details
Equipment used for temperature monitoring	• *Building equipped with temperature sensors that will sense if site reaches 26°C* • *Thermometer also used to measure designated locations as secondary method of measuring*
Designated locations for temperature testing	• *All resident rooms and common areas where air conditioning units do not reach (near window)* • *Kitchen* • *Dining area (near window)* • *Staff lounges (near window)*
Storage location for temperature records	*Temperature records stored in drive under "Temperature Monitoring" folder*

Pre-Heat Season Actions Checklist

The pre-heat season actions checklist provides the site-specific plan for activities that are used to prevent indoor temperatures from reaching 26°C and ensures that a plan is in place should the temperatures approach or exceed 26°C.

It is recommended that each LTC/AL home complete the actions listed below at a minimum with site specific actions added as needed. The table below provides an example of who is responsible for leading the specific actions.

Who	Actions	Completed – check box
Alerts and Communication		
All staff	• Ensure staff are familiar with BC HARS heat alert triggers and activation process	☐
All staff	• Ensure all relevant staff are subscribed to receive weather alerts using WeatherCAN	☐
All staff	• Ensure staff are aware of resources available to them for heat, including "cooling break zones", hydration stations, wellness resources, etc.	☐
All staff	• Ensure staff are trained on protocol to assess clients/residents for signs of heat-related illness and dehydration	☐
Manager	• Prepare messaging for clients/residents and families that detail site plan and locations of "cooling zones" • Prepare material to be posted around site that details location of "cooling zones"	☐
High Risk Clients/Residents		
Care staff	• Identify high risk clients, as detailed in Client/Resident Risk Identification and ensure care plans are reviewed/updated by most responsible physician or dietician. Consider implementing when the following interventions will be used: ○ Increasing hydration ○ Dietary changes	☐

	○ Cooling baths, clothing misting, and/or cool pack application	
Site and Temperature Monitoring		
Manager	• Establish a plan to monitor indoor temperatures throughout the site and ensure that the hottest areas of the building are used to initiate response actions	☐
Manager and Facilities	• Assess the building and identify hot areas that may need cooling interventions, such as portable air conditioning, fans, etc.	☐
Manager	• Assess where there might be potential cooling opportunities within the building for clients/residents • E.g. set up “cool rooms” or “cooling zones” by installing a portable air conditioning and HEPA air filter in the common rooms	☐
Equipment and Supplies		
Manager and Facilities	• If building already has cooling systems, ensure that systems have been cleaned and filters replaced, and are in working order, such as HVAC, air conditioning units, ice machines, and water fountains	☐
Facilities	• Install blinds or curtains on all windows	☐
Facilities	• Plant shade trees strategically around the building to reduce heat exposure	☐
Manager	• Acquire/make arrangements for items that may be needed during the heat season to keep rooms and clients/residents, and staff cool, such as portable units, ice, water, towels, etc.	☐
Staffing		
Manager	• Establish a plan to address potential staff shortages during the heat season, including re-deployment of staff to support cooling of clients/residents ○ E.g. relocating work of recreation staff, allied staff, etc. • Update staff and contractor call-out lists in case of gaps in coverage	☐

Administrative Coordinator	• Review staff and contractor schedule and update call-out list, as needed, in case of gaps in coverage or re-deployment of staff	☐
Other		
	Other:	☐

Response Level Triggers and Control Interventions

The response level triggers, and control actions tables below provides recommended interventions staff should implement **during** the heat season when the Response Level Triggers are met at a minimum with site specific actions added as needed.

Escalated Interventions When Indoor Temperatures Approach or Reach 26°C

It is recommended that these interventions be implemented at a minimum to prevent indoor temperatures from approaching or reaching 26°C. Additional site-specific interventions can be added as needs are identified.

Who	Actions	Completed – check box
Alerts and Communication		
Manager	• Ensure staff are made aware of indoor temperatures approaching 26°C and communicate the recommended revised actions	☐
Manager	• Send/update prepared materials for clients/residents and families to let them know the implemented actions, as appropriate	☐

High Risk Clients/Residents		
Care staff	• Conduct regular assessments of all clients/residents for signs of heat-related illness or dehydration and implement cooling interventions, as needed	☐
Care staff	• Follow and/or adjust care plan as advised by most responsible physician or dietician, such as increasing hydration of clients, adjusting fluids, etc.	☐
Site and Temperature Monitoring		
Manager and Facilities	• Regularly monitor temperatures within the building, as per monitoring plan	☐
Manager and Facilities	• Assess hot areas that may need cooling interventions, such as portable air conditioning, fans, etc.	☐
Manager and Facilities	• Assess if pre-identified "cooling zones" are still suitable and start preparing the space for clients/residents	☐
Equipment and Supplies		
Care staff and Facilities	• Deploy cooling supplies to keep rooms and/or clients/residents cool, such as portable air conditioning units, fans, ice water, towels, etc.	☐
All staff	• Ensure blinds or curtains are closed in the morning to block heat and opened in the evening to promote heat ventilation	☐
Staffing		
Manager	• Review staff and contractor schedule and assess if additional coverage and/or re-deployment is needed to ensure there is coverage to regularly assess clients/residents for signs of heat illness, staff "cooling zone", and/or increase hydration efforts	☐
Other		
	• Other:	☐

Escalated Interventions if Indoor Temperatures Exceed 26°C

It is recommended that these interventions be implemented at a minimum to prevent indoor temperatures from exceeding 26°C. Additional site-specific interventions can be added as needs are identified.

Who	Actions	Completed – check box

Alerts and Communication		
Manager	• Ensure staff are made aware of indoor temperatures exceeding 26°C and communicate the recommended revised actions	☐
Manager	• Send/update prepared materials for clients/residents and families to let them know the implemented actions, as appropriate	☐
High Risk Clients/Residents		
Care staff	• Conduct regular assessments of all clients/residents for signs of heat-related illness or dehydration	☐
Care staff	• Increase hydration of clients/residents	☐
Care staff	• Encourage clients/residents to use self-dousing or ice towels, where it is safe to do so	☐
Manager and Care staff	• Transfer clients/residents to alternative locations, as needed	☐
Care staff	• Rotate clients/residents into air-conditioned rooms, as needed	☐
Site and Temperature Monitoring		
Manager and Facilities	• Increase frequency of temperature monitoring within the building	☐
Manager and Facilities	• Assess hot areas that may need cooling interventions, such as portable air conditioning, fans**, etc. ***** Note:** Fans may not provide adequate cooling during heat events, especially during extreme heat events. There should be contingency plans for clients/residents who are in rooms that are only cooled by fans*	☐
Manager and Facilities	• Assess if pre-identified "cooling zones" are still suitable and ensure that cooling supplies are available for staff and clients/residents	☐
Manager and Recreation staff	• Modify recreational services, including types of activities to accommodate for the indoor and outdoor temperatures	☐
Equipment and Supplies		

Facilities and Care staff	• Deploy cooling supplies to keep rooms and/or clients/residents cool, such as portable air conditioning units, fans, ice water, towels, etc.	☐
All staff	• Ensure blinds or curtains are closed in the morning to block heat and opened in the evening to promote heat ventilation	☐
Manager and Facilities	• Acquire additional cooling supplies, as needed	☐
Manager and Food Services	• Modify food services menu, as needed, and consider foods that do not need to be cooked because this may increase indoor temperatures	☐
Staffing		
Manager	• Review staff and contractor schedule and assess if additional coverage and/or re-deployment is needed	☐
Manager	• Rotate staff schedules/positions, as needed, to ensure cooling efforts are prioritized while maintaining staff safety	☐
Other		
	• Other:	☐

Equipment and Supplies

The equipment and supplies table below provides an example of the equipment and supplies that may be used to support the interventions listed in the sites Heat Plan response level triggers and control interventions.

Item	Location or how to obtain, if not readily available
Hydration	
Extra water jugs	• *Extra water jugs stored in dining area closet and food services basement storage room*
Water coolers	• *Water coolers in dining area, kitchen, and staff lounge* • *Extra water jugs stored as noted above*
Ice	• *Kitchen* • *Extra stockpile in kitchen deep freeze if ice maker runs out during heat event*

Chilled items (i.e., ice cream, popsicles, etc.)	• *Kitchen deep freeze*
Bottled water	• *Back up bottled water in food services basement storage room*
Modified (thickened) fluids	• *Kitchen, food services, or pre-mixed carton boxes*
Cooling	
Misters	• *Administration storage closet*
Ice packs/cool gel packs	• *Kitchen deep freeze*
Portable air conditioning unit	• *Portable units stored in basement storage to be deployed* • *Agreement in place for additional units, as needed*
Fans	• *Basement storage*
Other	

Evaluation and After-Action Review

It is recommended that after each heat season, the response and interventions be reviewed so any opportunities for improvement can be implemented. To identify the learnings, a debrief can be held with staff to reflect on what went well, what lessons did we learn, and any improvement opportunities.

Following the debrief, it is recommended that the site-specific Heat Plan be updated with the learnings incorporated.

Plan Maintenance

This plan should be reviewed annually and/or updated every three years if no changes are needed annually.

☐ Review and update the plan and kit on an annual basis (12 months) from the publish date.