



Health Facilities Preparation for Extreme Heat

Recommendations for Retirement and Care Facility Managers

The number of heat waves and extreme heat events is increasing. Extreme heat is a health risk. People in non-air conditioned buildings or in buildings during power outages are at greater risk. Below are recommendations for effective health facility management to protect your staff and patients.

Cooling Measures for Existing Buildings and Outdoor Spaces

Key Actions

- **Monitor indoor heat:** Follow your regional requirements (thermometers, thermo hygrometers, WBGT).
- **Block direct sun:** Use window awnings, shutters, thermal curtains/blinds, and outdoor umbrellas.
- **Increase air flow:** Encourage cross breeze (electric fans, open windows).
- **Dehumidifiers:** Effective in areas with high humidity, but give off heat.
- **Electric Fans:** Effective in dry heat, but efficiency decreases with high humidity.
- **Air conditioner:** Effective during extreme heat.

Considerations for Management of Staff and Supplies

Key Actions

Staff Education and Protection

- Educate (or refresh) staff annually on signs and symptoms of heat illnesses such as dehydration, heat cramps, heat exhaustion, and heat stroke (classic and exertional).
- Ensure staff is trained in and follow first aid procedures appropriately. (*Refer to Health Canada's Acute Care Fact Sheet.*)
- Develop and educate your staff on heat emergency plans.
- Follow your emergency/surge procedure to ensure adequate capacity (staff and supplies) and ensure personnel are working within ACGIH TLV[®] Guidelines for work-rest cycles in the heat, as outlined in your region, with use of personal cooling options.

Facility Maintenance

- Follow your existing regional requirements to keep the facility cool and comfortable.
- Evacuate room(s) if extremely high temperature occurs (determine on a case by case basis).

Patient / Resident care

- Ensure cooling supplies are available for your patients and residents (e.g. cooling jackets, ice water baths) and appropriate support to avoid injury.
- Provide cooling options/areas, available for several hours each day, (designated cool room, cool showers, fan, sponging with cool water).
- Keep medications cool (storage below 26°C for room temperature is typical).
- Ensure meals with high water content are prepared and that spoiled food is discarded.

Considerations for Care Management During Extreme Heat

Key Actions

- Review clinical management of patients and residents most at risk either due to reduced mobility, chronic illnesses (pulmonary, cardiovascular, renal), and certain medications, social isolation, inadequate housing, or environmental factors (urban heat island, air pollution). (*Refer to Health Canada's Acute Care Fact Sheet.*)
- Increase frequency of patient observations, especially of those at high risk.
- Advise staff to closely monitor early indicators of heat illnesses and initiate appropriate treatment (Check patient and room temperature, monitor fluid intake and output, pulse rate, and blood pressure).
- Consider indoor/outdoor temperatures when planning group activities.

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Facility Emergency Plan Check List

Key Actions to Prepare for Extreme Heat

- Have an integrated plan for extreme heat events.
- If no plan exists, create a plan on how extreme heat will be managed, and integrate it into your current facility's emergency plan.
- Provide staff training on extreme heat emergency measures.
- Regularly review prevention and emergency guidelines with staff – this increases effectiveness.

Key Elements to Include in a Heat Emergency Plan

- Administrative procedure to meet emergency/surge staff capacity needs.
- Plan staff training on heat-health risk information.
- Steps to follow to keep older adults and the chronically ill cool and comfortable.
- Emergency cooling options (air-conditioned rooms, ice-water baths/showers).
- Identify need for back-up generators, during possible power brown-outs/black-outs.
- Plan to manage employee heat exhaustion (e.g. air conditioning in the staff room, light-weight breathable uniforms).

Planning for New Facilities and Renovations

Key Actions for Capacity Building

- Understand how the built environment affects human health.
- Coordination with public health professionals and planners to:
 - Discuss information regarding the effects of the built environment on health.
 - Develop a plan to reduce the carbon foot-print (e.g. use green space strategically to provide shade) and the urban heat island (e.g. consider alternate surfaces for parking lots and roofs) contributions of your facility.

For additional information refer to Health Canada's Extreme Heat Events Guidelines: Technical Guide for Health Care Workers

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