What is extreme heat and why is it a health concern?

Extreme heat is when the weather is much hotter than average for a particular time and place. Hot weather can cause heat-related illnesses such as heat exhaustion and heat stroke. Symptoms may include dehydration, difficulty concentrating, dizziness, nausea, and in extreme cases, heat may cause permanent disability or death.

Infants and young children are particularly susceptible to heat-related health problems.

What facility design factors help keep the air cool for children on extremely hot days?

**Outdoor space:**
- Install exterior window shading or glazing to reduce sun penetration into the indoor space.
- Place covers, vegetation and trees strategically to indoor and outdoor play spaces to create shade.
- If there is a lot of concrete/asphalt that gets hot in the sun, reduce the amount of it and increase the amount of vegetation covered ground space.

**Indoor space:**
- Install energy efficiency windows.
- Upgrade windows to allow for good airflow and cross-ventilation.
- If it is still hot despite using windows for ventilation, install an energy efficient mechanical cooling system (e.g. heat pump that acts as an air conditioner).
- Get a professional review and install a green roof on the building.

What operational strategies and technologies can I use to provide cool spaces for children?

- In the mornings/evenings (at cool times of the day), increase air flow and ventilation (passive cooling) by using the following methods:
  - Close the blinds.
  - Open the windows.
  - Use fans.
- Buy portable air conditioning units to use on hot days if passive cooling is not effective.
- If the entire indoor space of the childcare facility cannot be cooled, look up available nearby locations to visit where all children can cool off for a few hours a day (e.g. a public library, indoor mall, shaded park, outdoor pool, etc.).
- Limit outdoor activities to the morning when temperatures are cooler and stay indoors when temperatures are highest.

*Heat events may coincide with wildfire season. See WILDFIRE SMOKE fact sheet in this series for more information.

For additional information and fact sheets, visit:
- Vancouver Coastal Health – Extreme heat
- City of Vancouver – Extreme heat, cool buildings: A review of alternatives to traditional air conditioning

DID YOU KNOW...?

Ensuring children have access to a cool space for as much of the day as possible is a good way to prevent heat-related illnesses during extreme heat events.