

# EXTREME HEAT

## schools and childcare facilities



Extreme heat and heat waves both mean the same thing: hotter than normal weather. Extreme heat can lead to heat illnesses including dehydration, heat exhaustion and **heat stroke**, a medical emergency that can lead to permanent disability or death. Extreme heat can also worsen pre-existing health conditions.

**Infants and children** are sensitive to heat and can develop heat illnesses quickly. Infants and children at especially high risk include those with certain medical conditions. If you care for a child with medical conditions or medications, ask their parent/guardian to check with a healthcare provider or a pharmacist to ask if their child is at increased risk of heat-related illness.

**Making sure that children can keep cool and drink plenty of water can help to prevent heat-related illnesses.**



### Extreme Heat Alerts:

In British Columbia, there are two alert levels for extreme heat: **Heat Warning** (Level 1) and **Extreme Heat Emergency** (Level 2). These alerts mean that health risks are increased due to high heat.

It is important to sign up for official weather alerts from Environment and Climate Change Canada, to know when an alert is declared and when to take additional actions to keep children cool. See the weather links in the *resources* section on page 6 for more information.

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### Early signs of heat illness for infants and children (*heat exhaustion*):

Heat illness can quickly become an emergency. Watch children closely during hot weather and act promptly to cool them down if they show any of these signs:

- Changes in behaviour (e.g. more tired or fussy)
- Very thirsty
- Peeing less and very yellow pee
- Leg or stomach cramps
- Headache
- Nausea or vomiting
- Dizzy or fainting

If possible, move people with symptoms to a cool space. Give them water to drink. Loosen or remove clothing. Cool their body with water, e.g. dampen their clothes, apply wet towels, put ice packs against their body. Continue cooling and giving them water until they feel better. **If they do not start feeling better or if symptoms increase, call 9-1-1.**



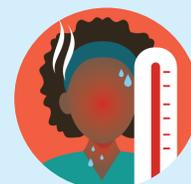
### Emergency signs of heat illness for infants and children (*heat stroke*):

Infants or children may not show early signs of heat illness and may only appear more tired or fussy than normal. Watch for these concerning signs:

- High body temperature (39°C / 102°F or higher)
- Fainting or decreased consciousness
- Confusion
- Lack of coordination
- Very hot and red skin

**CALL 9-1-1 OR SEEK MEDICAL ATTENTION**

If possible, move them to a cool space. Loosen or remove clothing. Quickly begin cooling their body with cool water, e.g. dampen their clothes, apply wet towels, put ice packs against their body, provide a cool sponge bath or shower. Continue applying cool water and watch them until 9-1-1 or medical personnel arrive.



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### Heat events and wildfire smoke:

Wildfire smoke and heat events can occur at the same time. Ensure that there are measures in place to provide clean indoor air. Make sure that indoor temperatures are measured and indoor spaces do not get too hot, especially when windows and doors need to be kept closed during wildfire smoke events. **Cooler and cleaner indoor air** is the best way to protect from negative health impacts.



### Risk of falls from windows:

Window falls are more common during hot weather when windows may be open to reduce indoor temperatures. Between 2016-2020, trauma centres across BC admitted 81 children after falling from windows or balconies, often with life-altering consequences. Schools and childcare facilities can **help reduce these injuries by installing window guards or window stops**, and sharing information with families (see resources on page 6).

### Use of fans:

Fans cannot effectively lower core body temperature and should not be used as the primary cooling method. Use fans to help blow cool air to where it is needed. Do not direct fans directly towards people when indoor temperatures are very high (over 35°C).



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### How to prepare for hot weather?

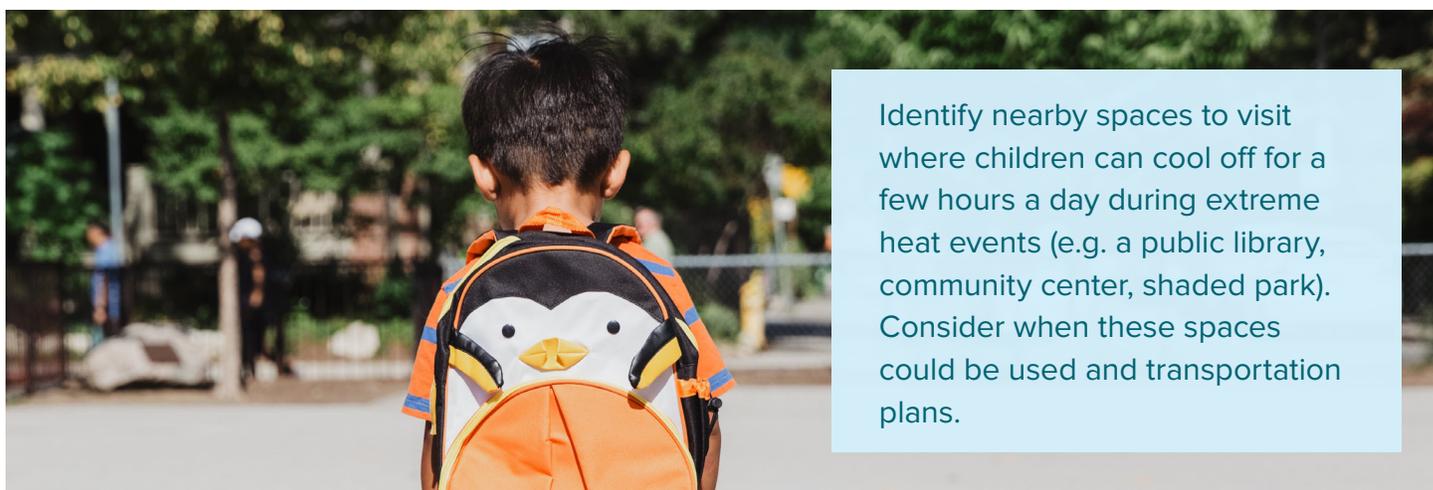
- Expand your emergency plan to **include a section on extreme heat response**.
- **Prepare staff** to recognize dangerous indoor temperatures, signs of heat illness and when it is an emergency.
- Know where to get official information on heat alerts.
  - Environment Canada [Public Weather Alerts for British Columbia](#)
  - Environment Canada [WeatherCAN App](#)
- Indoor temperatures below 26°C (79°F) are best. Learn about ways to **keep the building** cool when it is hot outdoors. Some examples include:

#### Passive Cooling:

- Place covers on the outside of windows to **block sunlight** (e.g. window shading, glazing, shutters or cardboard covered in tin foil).
- Consider using plants to cool the building.
  - **Plant trees** on the side of the building where the sun shines during the hottest part of the day and **use trees to create shade** in outdoor play spaces. Consider installing a green roof on the building, if possible.
- Identify where fans can be used to **move cool air** to different indoor spaces. See the correct fan use section on page 3.

#### Active Cooling:

- If passive cooling is not enough to keep your building cool, consider installing an **energy-efficient active cooling system** (i.e. heat pump or air conditioning) to be used on hot days.
- If the building has air conditioning, make sure it works properly before hot weather starts.
- If the entire facility cannot be cooled, consider creating **one or more specific cooling rooms** with air conditioning where children can cool off for a few hours on hot days.



Identify nearby spaces to visit where children can cool off for a few hours a day during extreme heat events (e.g. a public library, community center, shaded park). Consider when these spaces could be used and transportation plans.

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### Stock up!

Use this basic cooling equipment during hot weather:

- Play sprinkler for fun cooling activities
- Thermometers to monitor indoor temperature
- Towels to wet and drape over the skin
- Ice or gel packs (in a bag or towel) to apply to the skin
- Bottles for drinking water



## What to do during a heat alert?

The following are recommended *options* to help protect health from heat, implement them where feasible and appropriate.

- Check the latest **heat alert information** and weather forecast.
- Inform all staff. Consider notifying families and sharing the heat resources below.
- **Pay close attention** to how children are feeling and watch for signs of heat-related illness.
- **Keep children and staff cool:**
  - Encourage children and staff to **dress for the weather** with loose-fitting, light-coloured and breathable clothing.
  - If meals are prepared, where possible plan meals that don't need an oven or stove and consider menu items with more water content.
  - Reschedule **outdoor activities to cooler times of the day** and limit sun exposure when outside.
  - During longer outdoor activities, give children breaks from the heat by ensuring they spend a time in a cool place (e.g. air conditioned room, tree-shaded area).
- **Keep child and staff spaces cool:**
  - Keep **shades and blinds** closed during the day.
  - If the space does not have air conditioning, **close windows** around **10 a.m.** to keep the cooler air inside and open windows and doors around 8 p.m. to **let the cooler overnight air in** if safe to do so.

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### Heat Resources

#### Weather resources:

<p><a href="#">ECCC: Online Weather Alerts for BC</a></p>	<p>Online weather alerts. Environment and Climate Change Canada is the weather source used by government, emergency management and the health system.</p>
<p><a href="#">ECCC: WeatherCAN App</a></p>	<p>Cell phone notifications for weather alerts. Environment and Climate Change Canada is the weather source used by government, emergency management and the health system.</p>

#### Childrens health and heat illness resources:

<p><a href="#">Vancouver Coastal Health: Extreme Heat</a> <a href="#">Fraser Health: Sun Safety</a></p>	<p>Information for the public, community partners and health professionals regarding extreme heat, including a number of links to fact sheets and resources.</p>
<p><a href="#">HealthLink BC: Heat-related Illness in Infants and Young Children</a></p>	<p>Signs of heat-related illness in young children and actions to take for each age group (translated).</p>

#### Heat season preparedness resources:

<p><a href="#">HealthLink BC: Safety for Infants and Young Children During Extreme Heat</a></p>	<p>How to prevent heat-related illness and dehydration in young children (translated).</p>
<p><a href="#">Fraser Health: Window Safety for Children</a></p>	<p>Tips to prevent falls from windows and balconies.</p>

### Want to learn more?

Check out these other guidance documents for schools and childcare facilities:

