

Outdoor events can expose attendees, staff, volunteers and vendors to environmental health hazards like extreme heat and poor air quality that can increase the risk of heat illness, dehydration, respiratory symptoms and other health impacts:

Extreme Heat

Hot weather can lead to heat-related illness, especially during long outdoor events or physical activity:

Signs of heat exhaustion:

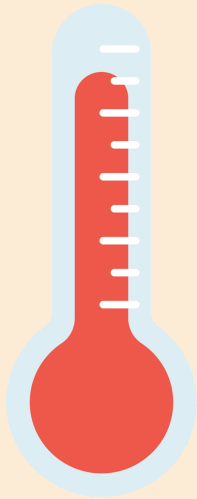
- Heavy sweating
- Dizziness
- Headache
- Muscle cramps
- Vomiting

Signs of heat stroke:

- Confusion or disorientation
- Fainting or seizures
- Hot, dry skin

Those at greater risk include:

- Older adults
- Infants and young children
- People with chronic illness
- People on certain medications
- Outdoor workers, vendors or volunteers



Poor Air Quality

Air quality may worsen during wildfire smoke events or pollution episodes.

Event organizers should monitor AQHI forecasts and prepare to adjust activities if air quality worsens:

Air Quality Health Index (AQHI)

| | | |
|-------------|----------------|-------------------------------|
| 1-3 | Low risk | Ideal for outdoor activities |
| 4-6 | Moderate risk | Reduce strenuous activity |
| 7-10 | High risk | Reschedule strenuous activity |
| 10+ | Very high risk | Avoid outdoor exertion |



Why Planning Matters:

- Extreme heat events and poor air quality are becoming more frequent due to climate change.
- Planning ahead helps ensure events remain safe and enjoyable even when environmental conditions change.
- Outdoor events can increase exposure to these hazards due to:
 - Long periods outdoors
 - Physical activity
 - Limited shade or cooling
 - Large crowds

Pre-event Checklists

Consider these actions to make your event safer, more comfortable and better prepared for changing environmental conditions.

Monitoring Weather and Air Quality

- Check weather forecasts leading up to and during the event
- Watch for heat warnings issued by Environment Canada (>30°C poses a risk to everyone)
- Monitor the Humidex (>35°C can be dangerous)
- Monitor the Air Quality Health Index (AQHI 7 and above indicates high risk)
- Download the WeatherCAN app and enable notifications to receive alerts
- Monitor health and well-being of staff, vendors and attendees even when no warnings are issued

Roles and Responsibilities

Assign staff for each of the following roles:

- Monitoring conditions
- Implementing response actions
- First aid and emergency communications
- Attendee outreach

Important:

- Ensure all staff know the process for escalating concerns

Risk Considerations

Does the event involve:

- Mostly outdoor activities?
- Limited natural shade?
- Long periods of physical activity?
- Alcohol service?
- Large crowds?
- Participants from at-risk groups?
(e.g., elderly, young children, those with chronic illness)

Communications Plans

How will you inform attendees and staff about environmental conditions?

- Social media updates
- Staff and volunteer reminders
- PA system or megaphone announcements
- Signage encouraging breaks and hydration

During the Event

Consider implementing the supports listed below to reduce environmental exposures.

Supports Checklist

Hydration supplies:

- Free drinking water
- Water coolers
- Cups and refill stations

Safety and first aid supplies:

- First aid kit
- Sunscreen
- Thermometer

Cooling tools:

- Spray bottles
- Fans
- Ice packs
- Wet towels

Other supports:

- Shade tents or umbrellas
- Misting tents
- Shaded seating areas
- Clearly marked rest and washroom areas

Staff Safety Recommendations

- Schedule regular breaks in shaded and cool areas.
- Encourage and provide reminders about hydration.
- Rotate staff and volunteers in high-exposure roles.
- Monitor staff and volunteers for signs of heat stress.

Extreme Heat Response

If a heat warning or high heat conditions occur:

- Increase water availability.
- Encourage hydration breaks.
- Monitor for heat illness.
- Increase access to shaded or indoor rest areas.
- Monitor staff and volunteers for signs of heat stress.
- Modify staff schedules to reduce strenuous activity.
- Have a procedure to respond to heat illness among staff.

Air Quality Response

If AQHI reaches high risk levels (7 and above):

- Reduce strenuous activity outside.
- Inform attendees of air quality conditions.
- Provide indoor break areas where possible.
- Adjust or shorten event programming if needed.

Post-event and Additional Resources

After the Event:

- | | |
|--|---|
| <input type="checkbox"/> Debrief with staff and volunteers | <input type="checkbox"/> Track use of supports (e.g., water refill station traffic) |
| <input type="checkbox"/> Document any issues or incidents | <input type="checkbox"/> Note additional resources that may improve response |
| <input type="checkbox"/> Identify gaps and improvements | <input type="checkbox"/> Update plans for future events |



Online Weather Safety Resources for Event Planners

- Water wagons are available for special event bookings:
 - City of Guelph: [Water Wagon information page](#)
 - Centre Wellington: [Cultural Resource Centre / Water Cart information page](#)
- Weather and air quality monitoring tools:
 - [Environment Canada Weather Alerts](#)
 - Air Quality Health Index: [Ontario region](#)
 - [Sign up](#) for Air Quality Ontario email alerts
 - WeatherCAN:
 - [Information page](#)
 - [Download the app](#)
- Contact the public health inspector supporting your event:
 - 1-800-7293 ext. 4753
 - PHI.Intake@wdgpublichealth.ca