

# Health and Safety Information

## Early Learning and Child Care

### Air Quality and Wildfire Smoke

Information for Licensed Centres, Nursery Schools and Homes

#### Why Air Quality and Wildfire Smoke Matter in Child Care

Wildfire smoke and poor air quality events are becoming more frequent in Manitoba, particularly during spring and summer months. Children are more vulnerable to the effects of smoke because their lungs are still developing, they breathe more rapidly than adults and they may not communicate or recognize symptoms. Exposure to poor air quality can cause coughing, breathing difficulties, eye irritation, fatigue, and can worsen asthma and other respiratory conditions.

#### What is a Poor Air Quality Event?

Poor air quality events occur when pollutants in the air such as wildfire smoke, fine particulate matter, and other contaminants reach levels that may pose health risks. In Manitoba, these events often occur during wildfire season and may coincide with Air Quality Health Index (AQHI) advisories or visible smoke conditions, even when a formal advisory is not issued.

#### Role of Child Care Providers

- Monitor local air quality conditions daily during smoke, wildfire and poor air quality events using Environment Canada weather forecast page or the WeatherCAN app.
- Adjust programming, schedules, and environments to reduce children's exposure based on Air Quality Health Index (AQHI) levels and observed conditions.
- Closely observe children for symptoms and respond promptly.

#### Understanding Air Quality and Advisories in Manitoba

- Manitoba Environment, Climate and Parks monitors air quality and issues information and advisories to help guide public health decisions.
- The AQHI is a scale from 1 to 10+, designed to help understand health risks related to air pollution.
- Higher AQHI values indicate greater health risks, especially for children and other vulnerable individuals.
- Poor air quality may occur even without a formal advisory. Child care providers should respond to both AQHI levels and visible smoke conditions to assess risk and adjust programming as needed.

#### AQHI Guidance for Child Care Outdoor Activities

AQHI 1-3	Low Risk	Outdoor activities may proceed as usual.
AQHI 4-6	Moderate Risk	Consider reducing strenuous outdoor activity, especially if children show symptoms.
AQHI 7-10	High Risk	Reduce or reschedule outdoor play, children should take it easy.
AQHI 10+	Very High Risk	Avoid outdoor activities, move programming indoors where possible.

## **Planning During Wildfire Smoke Events**

- Use AQHI levels and visible conditions (smoke, reduced visibility) to guide decisions.
- Limit time spent outdoors when smoke is visible or air quality is poor.
- Move physical activities indoors and reduce activity intensity.
- Keep windows and doors closed when outdoor air quality is poor, where feasible.
- Use air filtration or air cleaners, if available.
- Avoid activities that may worsen indoor air quality.

## **Children at Higher Risk**

- Infants and young children are particularly sensitive to air pollution.
- Children with asthma, heart conditions, or other respiratory illnesses may experience symptoms at lower AQHI levels.
- Ensure prescribed medications (such as inhalers) are readily available and used according to care plans.

## **Use of Masks**

- Infants and children under 2 years of age must not wear masks.
- Children over 2 years may wear a mask if tolerated and supervised, but masks do not eliminate all smoke exposure.
- Masks must never be worn while sleeping or resting.

## **Responding to Symptoms**

- Watch for coughing, difficulty breathing, wheezing, fatigue, headaches, or eye irritation.
- If symptoms occur, move the child to cleaner indoor air and reduce or stop physical activity.
- Seek medical advice if symptoms persist or worsen.

## **Recommended Practices**

- Develop an air quality and wildfire smoke response plan. (See below.)
- Review emergency and communication procedures before wildfire season.
- Communicate air quality and wild fire smoke policies and expectations clearly with families.
- Monitor air quality conditions throughout the day during smoke events.
- Review and adjust practices following significant air quality events.

## **How to Create an Air Quality and Wildfire Smoke Response Plan**

An air quality response plan helps programs prepare for smoke events and respond consistently when air quality may pose a risk.

Key elements include:

1. When the plan applies
  - Applies during AQHI advisories, wildfire smoke events, or periods of poor air quality.
  - Identifies who is responsible for monitoring air quality conditions.

2. Prevention measures
  - Monitor AQHI and forecast conditions regularly.
  - Adjust outdoor play (shorter duration, lower intensity, indoor alternatives).
  - Improve indoor air quality (closing windows, using air filtration).
3. Staff roles and responsibilities
  - Identify who monitors children for symptoms.
  - Clarify who adjusts programming and communicates changes.
  - Ensure staff understand response procedures and reporting requirements.
4. Response to symptoms or exposure
  - Ensure staff are familiar with symptoms of smoke-related illness.
  - Reference existing medical and emergency procedures.
  - Identify when to seek medical attention.
5. Communication with families
  - Describe how families will be informed about air quality-related changes.
  - Share policies and expectations in advance of wildfire season.
  - Review and improvement
  - Review practices after smoke events.
6. Review and improvement
  - Review practices after air quality and wildfire smoke events
  - Update the plan as needed and share changes with staff and families.

## Responding to Symptoms

- [Health Effects of Smoke Exposure due to Wildland Fires](#) (Government of Manitoba)
- [Air Quality and You](#) - Air Quality Guidance for Schools and Child Care (Government of Manitoba)
- [Air Quality Health Index](#) (Government of Canada)