



Health
Canada

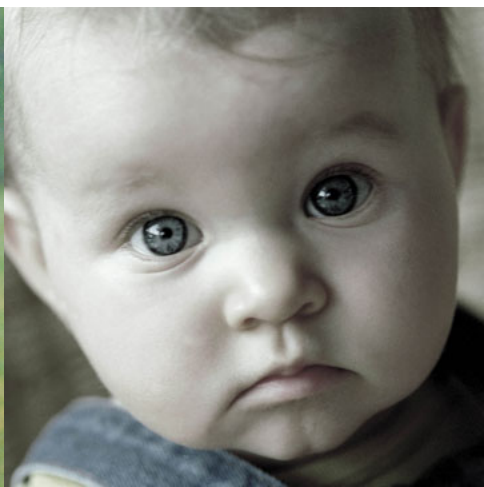
Santé
Canada

*Your health and
safety... our priority.*

*Votre santé et votre
sécurité... notre priorité.*

The Air Quality Health Index:

An Introduction



Canada 



Overview

- Air Quality and Health
- The New Air Quality & Health Index
 - What is it?
 - How does it work?
 - How to use it
 - Where to find it
- Questions



Air Pollution...

- is a mixture that accumulates and transforms in air
- comes from diverse sources, including:
 - transportation
 - industrial emissions
 - domestic activities
 - natural sources
- carried by wind for hundreds of kilometres
- **strongly influenced by weather conditions and topography**



Health Effects of Air Pollution Exposure

- Worsening of existing **heart** and **lung** conditions
 - Chest tightness, pain, fatigue, etc.
- Irritated eyes
- Increased mucus in the nose or throat
- Sore throat
- Cough
- Difficulty breathing,
especially during exercise
- Other subtle effects



RESPIRATORY EFFECTS



Symptoms:

- Cough
- Phlegm
- Chest tightness
- Wheezing
- Shortness of breath

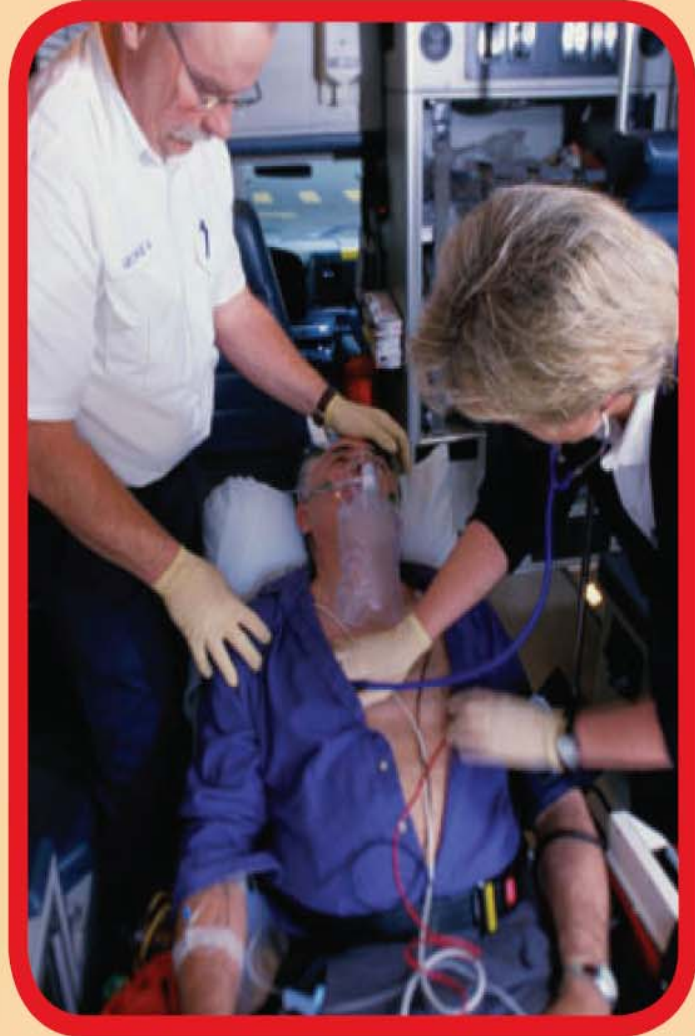
Increased sickness and premature death from:

- Asthma
- Bronchitis (acute or chronic)
- Emphysema
- Pneumonia

Development of new disease

- Chronic bronchitis
- Premature aging of the lungs

CARDIOVASCULAR EFFECTS



Symptoms:

- Chest tightness
- Chest pain (angina)
- Palpitations
- Shortness of breath
- Unusual fatigue

Increased sickness and premature death from:

- Coronary artery disease
- Abnormal heart rhythms
- Congestive heart failure

Who is at risk?

Most vulnerable:

- People with existing heart or lung conditions
- Diabetics
- Seniors
- Children
- People doing strenuous sports or work outdoors

Note:

- Some people are not aware that they have heart or lung conditions
- Even adults who are in good health can be susceptible



What Can You Do?

1. Become informed – Air Quality in **your community**
 - the ***Air Quality Health Index (AQHI) is currently available in 49 locations, reaching about 18 million Canadians***
2. Estimate your risk level:
 - Consider your age, your health status, and your level of outdoor activity
3. Talk to your doctor or other health professional.



The Air Quality Health Index

What is it?

- A scale showing the relative health risk associated with the air you breathe.
- A tool to help protect you and those in your care.
- An information source to encourage pollution reduction actions.



The Air Quality Health Index

How does it work?

- Tells you how the air you breathe can affect your health
 - Shows the short-term health risks from the mixture of outdoor air pollutants (smog) in your community.
- A tool to help protect you and those in your care -
 - Shows the health risks of *current* and *future* (forecasted) air quality conditions – helps you plan your activities.
 - Provides advice, based on your risk status.
- Tells you how you can reduce your contribution to pollution.

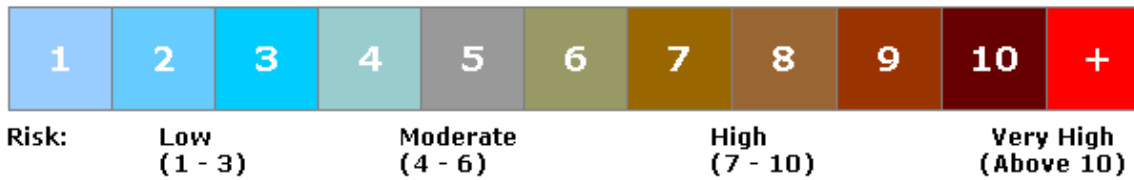


Main features:

- ✓ Updated each hour
- ✓ Index number (1-10, 10+)
- ✓ Health Risk Category (*general* or *at-risk* population)
- ✓ Recommended actions for each population
- ✓ Forecast “high” for today, tonight and tomorrow
- ✓ Additional information – how to improve air quality



AQHI Toronto



Current

Observed at
11:00 AM EDT Thursday 24
April 2008



At-Risk Population:

- If you have heart or breathing problems, and experience symptoms, consider reducing physical exertion outdoors or reschedule activities to times when the index is lower.
- Follow your doctor's usual advice about managing your condition.

General Population:

- No need to modify your usual outdoor activities.

Forecast Maximums

Issued at 5:57 AM EDT Thursday 24 April 2008



Who is at risk?

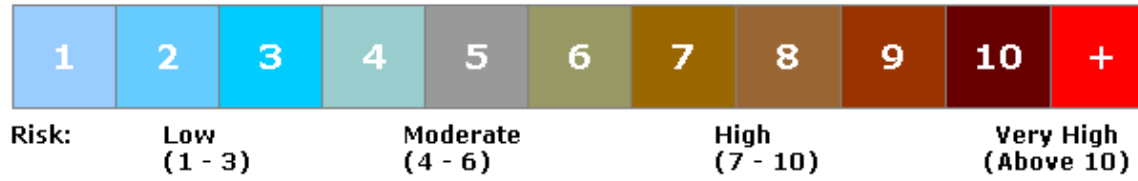
People with heart and lung conditions are most affected by air pollution.

To find out if you are at risk, consult [the health guide](#), your physician, or [Toronto Public Health](#).

Did you know...?

The quality of the air you breathe today can affect your health now and for many years to come.

AQHI Toronto



Current

Observed at
11:00 AM EDT Thursday 24
April 2008

4

Moderate Risk

At-Risk Population:

- If you have heart or breathing problems, and experience symptoms, consider reducing physical exertion outdoors or reschedule activities to times when the index is lower.
- Follow your doctor's usual advice about managing your condition.

General Population:

- No need to modify your usual outdoor activities.

Forecast Maximums

Issued at 5:57 AM EDT Thursday 24 April 2008

Thursday

6

Moderate Risk

Health Message

Thursday night

5

Moderate Risk

Health Message

Friday

6

Moderate Risk

Health Message

Who is at risk?

People with heart and lung conditions are most affected by air pollution.

To find out if you are at risk, consult [the health guide](#), your physician, or [Toronto Public Health](#).

Did you know...?

The quality of the air you breathe today can affect your health now and for many years to come.

Using the Air Quality Health Index

1. **Determine which audience you belong to:**
 - **At-risk Populations:** people with existing heart or lung conditions, seniors, children or people participating in sports or strenuous work outdoors

OR:

 - **General Population:** otherwise healthy people, and those not exerting themselves outdoors.
2. **Read and follow actions recommended for you**
3. **Use the forecast to plan outdoor activities**



Health Risk	Air Quality Health Index	Health Messages	
		At Risk Population*	General Population
Low Risk	1 - 3	Enjoy your usual outdoor activities.	Ideal air quality for outdoor activities.
Moderate Risk	4 - 6	Consider reducing or rescheduling strenuous activities outdoors if you are experiencing symptoms.	No need to modify your usual outdoor activities unless you experience symptoms such as coughing and throat irritation.
High Risk	7 - 10	Reduce or reschedule strenuous activities outdoors. Children and the elderly should also take it easy.	Consider reducing or rescheduling strenuous activities outdoors if you experience symptoms such as coughing and throat irritation.
Very High Risk	Above 10	Avoid strenuous activities outdoors. Children and the elderly should also avoid outdoor physical exertion.	Reduce or reschedule strenuous activities outdoors, especially if you experience symptoms such as coughing and throat irritation.

***People with heart or breathing problems are at greater risk.
Follow your doctor's usual advice about exercising and managing your condition.**

Self-Calibrating to the AQHI

Find out how the AQHI works for you:

1. Check the Index number when you notice symptoms



2. Keep track of your symptoms as the AQHI changes
3. Determine which number on the scale triggers worsening of your health condition or symptoms



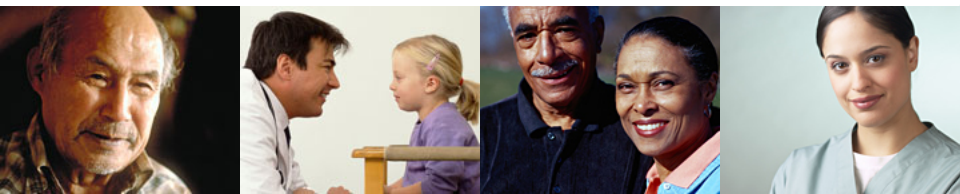
Using the Air Quality Health Index

When to check:

- Before you, or those you care about, head off to work or play
- When planning outdoor activities
- If you notice health symptoms

How to check

1. Website at www.airhealth.ca
2. Environment Canada's Weather Office
 - <http://www.weatheroffice.ec.gc.ca> - *go to the page for your city*
3. The Weather Network



AQHI home page: www.airhealth.ca



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[Your Local AQHI Conditions](#)

[Are You At-Risk?](#)

[How Can You Improve Air Quality?](#)

[AQHI in Action!](#)

[Air Quality and Weather](#)

[FAQ](#)

[Learn More](#)

Air Quality Health Index

The Air Quality Health Index (AQHI) is a new public information tool that helps Canadians protect their health on a daily basis from the negative effects of air pollution. This tool has been developed by Health Canada and Environment Canada, in collaboration with the provinces and key health and environment stakeholders. Choose from the links below to learn more about the AQHI, to get your local AQHI update, or to find out if you are "at-risk" from air pollution.



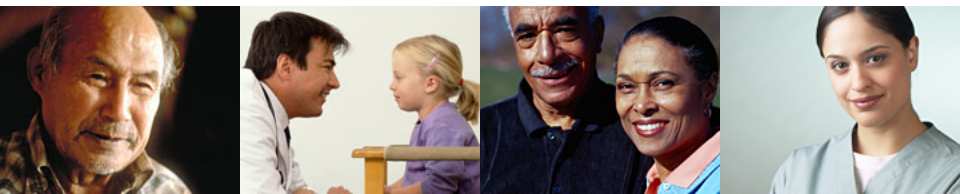
[About the AQHI](#)



[Your Local AQHI Conditions](#)



[Are You At Risk?](#)



Questions?

For more information:

- www.airhealth.ca

