



# AIR QUALITY HEALTH INDEX: How Air Pollution Affects Your Health

## Are you at risk?

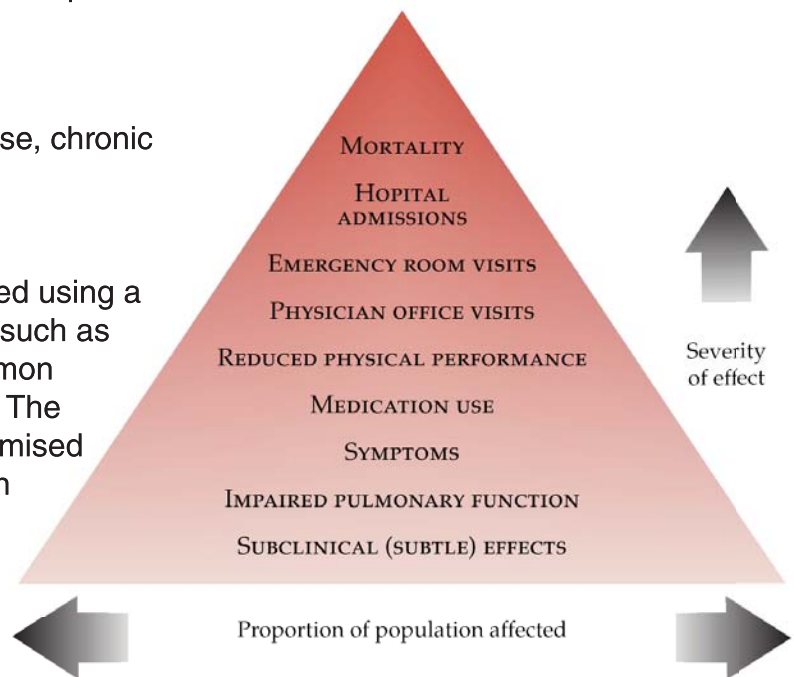
Every individual reacts differently to air pollution. The elderly, children and those with heart or lung disease are most sensitive to the adverse health effects of air pollution. People with diabetes are also at greater risk because they are more prone to heart disease. Even Canadians of all ages who are relatively fit and healthy can experience symptoms when exercising or working outdoors if pollution levels are higher than usual. Air pollution has a measurable impact on the health of Canadians. Analysis of data from eight Canadian cities shows that 5,900 deaths can be linked to air pollution every year. Air pollution sends thousands more Canadians to hospital each year.

## The health effects of air pollution

Depending on the length of time you are exposed air pollution can:

- Make it harder to breathe
- Irritate your eyes, nose and throat
- Worsen chronic diseases such as heart disease, chronic bronchitis, emphysema and asthma
- Lead to premature death

The health effects of air pollution can be illustrated using a pyramid, with the more serious and rare effects (such as death) at the peak and the milder but more common effects (such as difficulty breathing) at the base. The pyramid shows that quality of life can be compromised by air pollution long before individuals show up in hospital waiting rooms. As the severity of health effects increases, the number of people affected decreases.



## What we can do to protect our health

We can protect our health from the negative health effects of air pollution by appropriately changing our behaviour to reduce our exposure to air pollutants when air quality deteriorates. Checking the Air Quality Health Index on a regular basis is the first step.

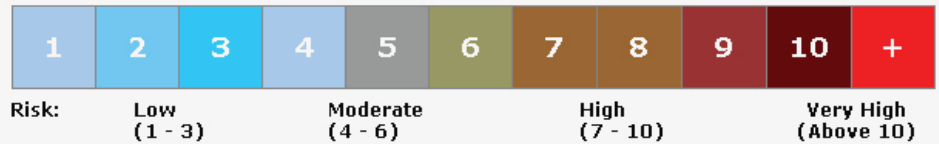
# The Air Quality Health Index

The index assesses the impact of air pollution on your health, listing a number from 1 to 10+ to indicate the level of immediate health risk associated with local air quality - the higher the number, the greater the risk and the greater your need to take precautions.

The **Air Quality Health Index** describes the level of health risk associated with these numbers as 'low', moderate, 'high' or 'very high', accompanied by health advice for the general population and for those at increased risk. In addition to current air quality health information, a forecast is provided for the next day.

## Air Quality Health Index

### Metro Vancouver - NW



#### Current

Observed at  
7:00 AM PDT Wednesday 9  
September 2009



#### At-Risk Population:

- Enjoy your usual outdoor activities.
- [Find out if you are at risk](#)

#### General Population:

- Ideal air quality for outdoor activities.

Even if you're relatively healthy, fit and active, you can consult the index to decide when and how much to exercise or work outdoors. The index does not, however, measure the effects of everything in the air on your health. Pollen, dust, heat or humidity and odours can affect your health and your sense of well being. Always pay attention to what your body is telling you, and follow your doctor's advice.

## Using the Air Quality Health Index to protect your health

The **Air Quality Health Index** is being introduced in communities across Canada in a phased approach. Look for it with weather forecasts for your community or go to [www.airhealth.ca](http://www.airhealth.ca). You can use the forecasts to plan your activities, whether over the next hour or the next day.

As seniors, parents of children with asthma, and people suffering from diabetes, heart or lung disease, you can use the index to assess the immediate risk air pollution poses to your health and take steps to lessen that risk. The table above explains the relative health risks based on the daily Air Quality Health Index forecast.

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

*The Air Quality Health Index empowers all of us  
— Canadian governments, advocates and citizens —  
to take action.*

For more information, please visit: [www.airhealth.ca](http://www.airhealth.ca)