

## SMOG AND HEALTH

Smog can affect everyone's health. Some people are more sensitive to the effects of smog than others, particularly those with lung and heart conditions, the elderly, and young children.

### What is smog?

- Smog is a mixture of air pollutants, including gases and particles that are too small to be seen. It often appears as a brownish-yellow haze over cities, but it isn't always visible. Smog levels can also be high in rural and suburban areas.
- Since smog is a mixture of air pollutants, its impact on health depends on a number of factors, including the types and levels of pollutants in the air, the duration of exposure, the age and general state of health of those exposed, and the weather conditions.
- The air pollutants of most concern to human health are ground-level ozone and Particulate Matter (PM).

### What are the potential health effects of smog?

- Smog irritates the eyes, nose and throat, and can cause wheezing, coughing and breathing difficulties.
- Smog may adversely affect the lungs and heart, and has been linked to increased respiratory and cardiovascular hospitalizations. It can aggravate pre-existing heart and lung conditions such as asthma, emphysema and bronchitis and in some cases can result in premature death.
- Studies show that ozone continues to cause lung damage even when the acute symptoms disappear, and that repeated exposure may result in permanent damage to the lining of the lungs. Studies also suggest that long-term regular exposure to particulate matter can increase the risk of early death and perhaps lung cancer.

### Who is at greater risk from smog?

Smog can affect everyone's health, even healthy young adults may breathe less well on days when the air is heavily polluted. Some people are more sensitive to the effects of air pollution than others, however, and may

experience adverse health effects at lower levels of air pollution. Sensitive groups include:

- people with lung diseases and heart conditions
- seniors
- children
- pregnant women
- people with asthma
- smokers
- people who work or exercise outdoors

### How can you protect yourself from the health risks of smog?

To protect yourself from potential adverse health effects of smog you need to be aware of the smog levels and take actions to reduce exposure to it.

- Check the Air Quality index in your community, especially during "smog season" from May to September. The air quality index for communities across Ontario is reported daily on the radio, TV, newspapers and on the Ministry of the Environment website (<[www.airqualityontario.com](http://www.airqualityontario.com)>). If a Smog Advisory is issued in your community, consider tailoring your activities accordingly.
- Avoid or reduce strenuous physical outdoor activities when smog levels are high, especially during the late afternoon when ground-level ozone reaches its peak. Try not to exert yourself outdoors.
- Avoid or reduce exercising near areas of heavy traffic, especially during rush hour.
- Spend time indoors or in other environments where the smog levels are low and you experience no symptoms or fewest symptoms.
- If you have a heart or lung condition, talk to your doctor about additional ways to protect your health when smog levels are high.

If you experience any breathing difficulties or respiratory complications, contact your physician or go to the nearest hospital.