



SMOG

What is smog?

The word smog is a combination of the words smoke and fog. Smog is the most visible form of air pollution. It is a brownish-yellow hazy cloud caused when heat and sunlight react with various pollutants emitted from industry, cars, pesticides and oil based home products. Smog is a year-round problem but most smog watches and alerts occur from May to September, especially on hot days.

Where does smog come from?

Smog comes from many sources, including:

- gasoline and diesel powered vehicles
- factories and utilities
- oil-based paints, solvents and cleaners
- pesticides
- road paving (asphalt) and construction
- barbecues
- lawnmowers
- coal-fired generating stations

What is a smog advisory?

When air quality and weather conditions are likely to produce

elevated smog levels, the Ministry of the Environment takes steps to inform the public and warn those most vulnerable to the health impacts of poor air quality. Ontario's smog alert program provides two levels of warning:

- **Smog Watch:** When the Ministry issues a Smog Watch, there is at least a 50 per cent probability that elevated smog levels will occur within the next three days.
- **Smog Advisory:** A Smog Advisory indicates there is a high probability of widespread and persistent elevated smog levels occurring within the next 24 hours.

A Smog Advisory is also issued when widespread and elevated smog levels develop unexpectedly and are predicted to persist for at least six hours.

When Smog Advisories are issued, everyone (government, industry, businesses and residents) is encouraged to lower smog-causing emissions, and people are advised to avoid unnecessary exposure to smog. When the air clears, the ministry issues a Termination Notice.

How can smog affect the health of my child?

Children are more likely to experience respiratory effects of smog such as wheezing, coughing and shortness of breath, because:

- Children breathe in more air than adults and they breathe faster than adults especially during strenuous activity and play.
- Children tend to breathe through their mouths and bypass the natural filtering system in the nose. This allows large amounts of polluted air to get directly into their lungs.
- Children spend more time outside than adults.
- Smog increases a child's risk of getting sick. Children are more susceptible to infections than adults, smog reduces the respiratory system's ability to fight infection and remove foreign particles.
- Smog can make the symptoms of childhood asthma and allergies worse.
- Some studies show that children's exposure to air pollution can lead to decreased lung function as an adult.

How does smog affect the health of a senior or someone with a heart or lung condition?

If you are a senior or you suffer from heart disease or lung conditions such as asthma, emphysema, or chronic bronchitis, smog can make your symptoms worse.

- Smog can decrease the lung's working capacity causing breathing to be more difficult. You may find your daily activities harder to do, and you may be more tired.
- Smog reduces the respiratory system's ability to fight infections and remove foreign particles, increasing your risk of getting sick.
- Smog can make the symptoms of allergies and asthma worse.

Although children and seniors may be more vulnerable, everyone can experience ill effects from poor air quality.

How do I protect my health on a smog watch advisory day?

- Be aware of environmental conditions including the smog status, the Air Quality Index (AQI), heat (temperature), UV Index (ultraviolet rays) and humidity.

- Avoid being outside around high traffic areas and during peak rush hour times to reduce your exposure to smog.
- If you must be outside, especially when it is hot and humid, take lots of rest breaks, preferably in the shade or an air conditioned area and drink plenty of water or natural juice.
- Reschedule strenuous outdoor work and exercise if possible to another time when the alert is over.
- See your doctor if you experience symptoms such as tightness in your chest, coughing and/or wheezing.
- Plant trees—trees are one of our least expensive and most effective and efficient resources for lowering temperature.
- Switch to fluorescent or energy-saving incandescent light bulbs.

You can improve the air you breathe in your home as well, just by using alternate and/or natural forms of cleaners that do not contain volatile organic compounds. For example instead of ammonia based cleaners use vinegar/salt mix or baking soda/water mix and instead of glass/window cleaner use a vinegar/water mix and wipe with a newspaper.

Where can I get more information?

For more information call Your Health Connection at 721-7520 (1 877-721-7520) Monday to Friday or visit the following websites:

Simcoe Muskoka District Health Unit

www.simcoemuskokahealth.org

Ministry of Environment

(current AQI readings and air quality forecasts)
www.airqualityontario.com.

Health Canada

<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/environ/smog-eng.php>

Environment Canada

<http://www.ec.gc.ca/Air/default.asp?lang=En&n=13D0EDAA-1>

Adapted from the Toronto Public Health and the Ministry of Environment.

What can I do about smog?

There are many things you can do to help reduce air pollution.

Reducing energy use everyday helps improve air quality:

- Take public transit.
- Avoid idling your car.
- Bicycle or carpool.
- Keep your car in top condition: a car that is not properly maintained is less fuel efficient and emits more pollutants.
- When renovating, think green. For example, energy efficient windows, solar hot-water systems and better weather stripping and caulking can help save energy, money and the environment.