

HEALTH RISKS OF WOOD SMOKE



Lung Problems

Small particles in wood smoke are known to damage children's lungs, trigger asthma attacks, and aggravate existing lung diseases such as COPD.



Heart

Fine particulate matter from burning wood is linked to increased risk of heart attack, irregular heart beat, stroke, and early death.

Source: [United States Environmental Protection Agency](https://www.epa.gov/woodsmoke).

WHAT'S IN WOOD SMOKE?

Particulate Matter (PM 2.5)

is made up of inhalable particles less than 2.5 microns. These particles are smaller than the width of a human hair. One of the most immediate risks of wood smoke, these particles can be inhaled deep into the lungs. PM 2.5 causes irritation, decreases lung function, and aggravates existing heart and lung conditions.

Polycyclic Aromatic Hydrocarbons (PAHs)

are a class of chemical compounds produced by burning of coal, gas, wood, and garbage. Prolonged exposure to PAHs is linked to increased cancer risk.

Carbon Monoxide (CO) is a colourless, odourless gas. When inhaled, it reduces the body's ability to move oxygen through the bloodstream. Exposure to very high levels causes unconsciousness and death.

Volatile Organic Compounds (VOCs) are a group of organic compounds commonly found in the air. They contain carbon atoms that evaporate and reduce air quality. VOCs cause lung irritation and illness.

Some VOCs are known to be carcinogenic.

Small amounts of other toxic compounds including nitrogen oxides and chlorinated dioxins. Some of these toxins are carcinogenic, others cause eye and lung irritation.

Source: [Government of Canada, canada.ca](https://www.canada.ca/en/govcanada)

WHO IS MOST AT RISK?

- Children
- Seniors
- People with heart or lung conditions
- People doing strenuous physical activity near a source of wood smoke

WHAT CAN YOU DO?

- **Burn less often, and burn responsibly. Read our Better Burning Tip Sheet for guidance.**
- If possible, don't use wood burning as a primary heat source. If you must use a wood stove, choose a certified, energy-efficient appliance and maintain it well.
- Protect those most at risk. Make sure smoke directs away from neighbouring homes. Don't burn wood on poor air quality days.

Find more resources at

wcas.ca



587.499.4900



WestCentralAirshedSociety



info@wcas.ca



AirshedWest