



A Guide to Clean Heating



Excessive smoke is a health hazard... and it's illegal

Did you know there are so many woodstoves and fireplaces operating today they produce more air pollution during the winter than industry?

Unlike industry smoke stacks, woodstoves and fireplaces emit their pollution directly into our residential areas where we spend most of our time.

Wood smoke – often accounting for most of the air pollution occurring in residential neighbourhoods – contain toxic organic compounds, cancer-causing substances and fine particles that, like cigarette smoke, can cause structural and biochemical lung damage.

It's an acute health threat to children, older people and persons with asthma, emphysema and other lung diseases. Its harmful components can even risk the well-being of healthy people.

Even in the absence of a burn ban, it is illegal throughout Saanich to generate excessive chimney smoke. Smoke drifting into the yards of neighbours can be a winter-long nuisance and health hazard. Fines can be levied against those who generate smoke thick enough to obscure objects viewed through it by more than 20%.

Those with no other source of adequate heat are exempted from voluntary no burn days. This exception, however, does not allow excessive chimney smoke. Proper burning techniques – especially when combined with cleaner heating technologies now available – remove all excuses for smoking out neighbours.

It is the responsibility of each person burning wood to be informed of burning restrictions, to be sensitive to the impact of their smoke on neighbours and to keep the smoke they generate within legal limits at all times.

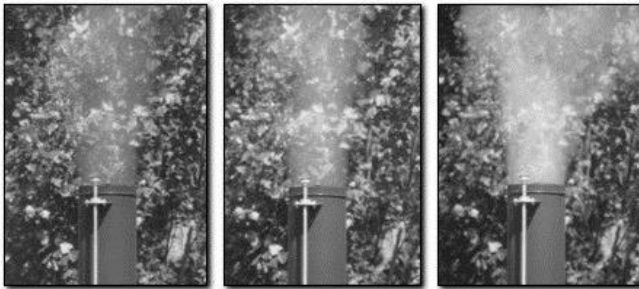


Woodstove Tips Reduce Emissions and Increase Efficiency

1. Burn seasoned, split wood.
2. Run on high fire 10-15 minutes after each refueling.
3. Don't reduce burn rate too far.
4. Don't have smoldering overnight burns.
5. Ensure good draft and proper chimney size (liner).
6. Install sealed double wall flue pipe from stove to chimney.
7. Circulate hot air away from stove area to rest of house.

How Much Smoke is Legal?

Saanich's Fire Prevention Bylaw prohibits excessive chimney smoke. Except for brief periods during start-up and refueling, smoke is in violation when it obscures objects viewed through it more than 20 percent. Here's what smoke looks like at densities of 20 percent, 40 percent and 80 percent.



20% - Legal

40% - Illegal

80% - Outrageous!

Generating smoke with densities more than 20% could result in fines. Woodstoves operated with dry wood and generous air supply produce less smoke and more heat.

Voluntary "No Burning" Days

Voluntary "No Burning Days" have been implemented to try to limit the amount of smoke when atmospheric conditions are least favourable to permit the dispersion of smoke upward into the atmosphere. When an air inversion or low ventilation index is forecasted (<http://www.env.gov.bc.ca/epd/epdpa/venting/venting.html> website), residents and burning permit holders are requested to voluntarily curtail their outdoor burning activities.

Voluntary "No Burning Days" also applies to users of wood burning stoves, fireplace inserts, masonry fireplaces and factory built fireplaces. Pellet stoves and primary wood heating systems are exempt from the program.

If You Burn Wood

- ❖ Burn only dry, seasoned wood or compressed sawdust logs. The high moisture content in unseasoned wood reduces efficiency and creates thick smoke.
- ❖ Ensure there is adequate fresh air supply to promote efficient burning and enhance safety. Attempting to prolong fires by closing down dampers reduces efficiency and produces heavy smoke emissions, leading to excessive creosote buildup.
- ❖ Make sure your woodstove or insert is properly sized. Too large a stove may produce more heat than you need. Excess smoke is created when you damper down the stove to reduce heat output.
- ❖ The burning of garbage, construction waste, demolition material, treated or painted wood, plastic or rubber products, animal or organic waste is not permitted. Paper products are not to be burned, other than for starting a fire in a woodstove or fireplace.

Learn to Conserve Energy

- ❖ Conserving energy with insulation, storm windows and weather-stripping has immediate benefits for our air quality. It reduces the amount of heat you need to produce. This cuts down on the pollution you generate while heating your home.
- ❖ When purchasing a new certified woodstove, consider an appliance which meets the emission standards established by the Canadian Standards Association and the Environmental Protection Agency.
- ❖ Don't buy or sell a used, uncertified stove. The installation will not be approved and can be a source of pollution and a fire hazard.

Make Use of High-Efficiency Furnaces

Modern gas and oil furnaces operate at 80-90 percent heating efficiency. With a high-efficiency furnace, you can heat your home for considerably less cost than with traditional appliances. That means less pollution.

Reduce Pollution and SAVE Fuel Dollars

1. Select a stove that's certified, clean-burning and tested to CSA B415 or EPA 1990 standards.
2. Make sure it's the proper size for its location and use (bigger is not always better).
3. Make sure it's properly installed and inspected.
4. Avoid smoldering fires by using proper burning techniques.
5. Use only seasoned firewood split to the right size for your stove.
6. Reduce your need for fuel; make your house more energy efficient.