

Wood Smoke

Problem, Solution, Regulations

Wood smoke problems can be common in winter. Weather conditions often cause stagnant air and inversions.

Inversions happen when a layer of cold air nearer to the ground gets trapped under a layer of warm air.

When inversions occur in winter, they trap wood smoke close to the ground in neighborhoods. At such times, air pollution can reach unhealthy levels.

Smoke particles also invade neighboring homes. Research shows as much as 70% of the pollution measured outside can seep inside nearby buildings.

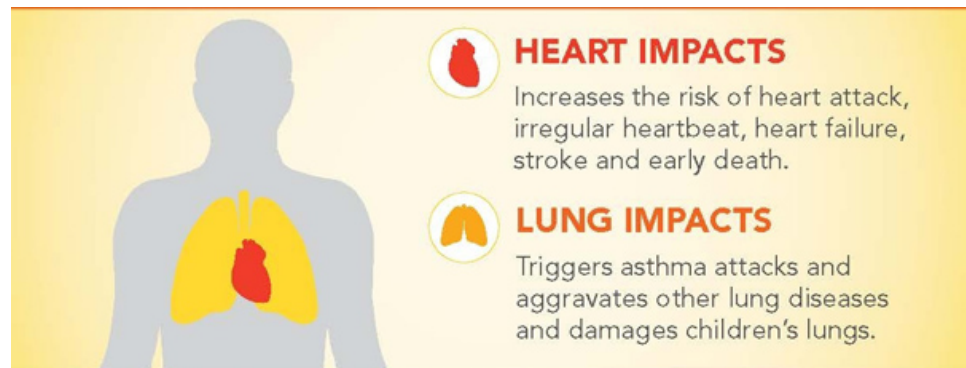


Why it matters

Wood smoke might smell good, but its mix of fine particles are toxic and can cause cancer. This fine particulate pollution is called PM_{2.5} because particles are 2.5 microns or less in size – much smaller than the diameter of a human hair. They can easily get lodged deep in the lungs.

Breathing wood smoke can cause serious health problems, especially for:

- Children, whose developing lungs are small and vulnerable
- People with asthma, heart disease or other respiratory illnesses
- Pregnant women
- The elderly



Studies show that people who heat their homes with wood have more respiratory problems than those who don't.

And children in wood-burning neighborhoods are more likely to have lung and breathing problems.

Burn wood wisely

Causes of excessive chimney smoke include burning wet wood, overloading the stove, and not giving the fire enough air by damping down the stove.



Moisture content of firewood: Burning dry wood saves money, producing more heat with less wood. Use a moisture meter to check wood's moisture content. In our damp climate, firewood needs to be seasoned for 6 to 12 months after it is split. For more information about drying wood, visit www.burndryfirewood.com.

What is legal to burn: Only wood or manufactured logs can be burned. Paper may only be used to start a fire. It is illegal to burn anything besides clean, untreated wood and manufactured logs.

Burn small, hot fires: They produce more heat and reduce smoke. Give the fire plenty of air. Never let a fire smolder, especially overnight.

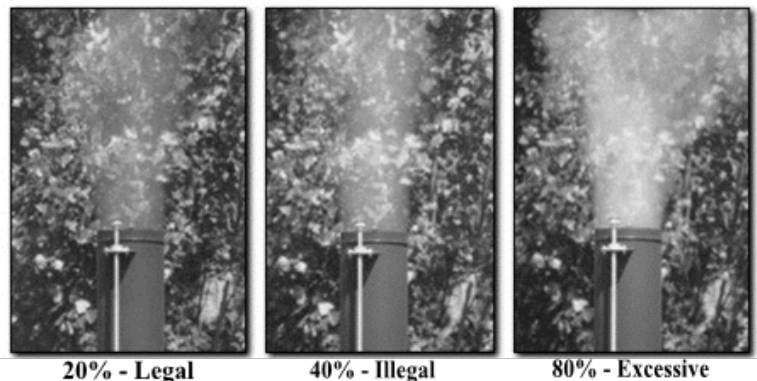
Washington's wood smoke laws

Washington wood smoke laws protect public health and our communities.

Chimney smoke: State law limits the density of chimney smoke to 20% opacity or just a "wisp" of smoke.

Burn bans: Burn bans are called when air pollutants are measured at unhealthful levels. The type of burn ban depends on the level of air pollution.

- **During a Stage I Burn Ban**, no outdoor burning or burning in any uncertified woodstove or fireplace is allowed.
- **During a Stage II Burn Ban**, no outdoor burning or burning in any woodstove, fireplace or pellet stove is allowed. Check local radio stations for burn ban information or visit our website at www.nwcleanairwa.gov.



Smoke nuisance: It is illegal to impact neighbors with smoke, odor or ash.

Wood stove installation and certification requirements: All woodstoves and factory-built fireplaces sold or installed in Washington must meet EPA certification requirements.

Check with our office or your local building and codes department before selling, buying or installing a wood-heating appliance.

A violation of the state burning and wood smoke regulations is subject to enforcement action and possible penalties.

Evaluating and changing your burning practices can make a healthy difference for you, your family and neighbors, and the environment.

For more information, visit www.nwcleanairwa.gov or call 360-428-1617