Wood smoke

Before 1970, industrial sources were largely responsible for Missoula's air pollution. By 1974, strict enforcement of emission standards had reduced industrial pollution by over 90%.

Then came the Arab oil embargo of the 1970's and more people began heating their homes with wood. In 1960, only about 300 households had woodstoves. By 1980, almost 12,000 Missoula homes had woodstoves or fireplaces.

Wood smoke caused Missoula to violate federal air quality standards. In 1983, the Air Pollution Control Board adopted the first regulations on wood stoves. These were strengthened in 1985 so that only clean burning wood stoves could be installed inside the Air Stagnation Zone. In addition, during Stage I Air Alerts burning was severely limited .

In 1987, wood smoke was still responsible for a significant portion (47%) of Missoula's wintertime air pollution. Missoula continued to violate the federal air quality standards.

As a result, the Air Pollution Control Board adopted even more stringent rules. Since 1994, it has been illegal to install woodstoves in the Air Stagnation Zone and all woodstoves that emit more than 5.5 grams particulate per hour must be removed upon the sale of a property.

Wood smoke

By 1996, wood smoke was responsible for about 10% of Missoula's wintertime air pollution. The number of people using woodstoves in the Missoula valley had been cut in half, and that number is still declining.

Missoula suffers from frequent inversions that trap smoke and other pollutants, so we will always have to be careful with how much pollution we are putting into our air.

The Missoula City-County Health Department does not advocate wood burning. But, if you must burn, please follow the guidelines in this pamphlet.

How You Burn Makes a Difference

Woodstoves and Fireplaces

The Missoula City-County Health Department

301 West Alder
Missoula, MT 59802

(406) 523-4755
(406) 523-4781 FAX

1 Burn dry, well-seasoned wood.

Burning dry wood reduces particulate and carbon monoxide emissions and produces more heat.

2 Start your fire with small, dry kindling.

Establish a hot flame with kindling, and gradually add 4” to 5” diameter wood to maintain a hot, clean burning fire.

3 Keep the damper open enough to maintain a hot fire.

Smoldering fires can cause six times more emissions than a hot, clean fire.

4 Don’t overload your stove.

Load your stove regularly with as few logs as possible to maintain a hot, clean flame.

5 Check for creosote buildup.

A clean chimney increases wood burning efficiency and reduces the chance of dangerous chimney fires.

6 Avoid burning during warm weather.

Burning in temperatures above 40°F requires constant dampering, increasing emissions.

7 Go outside and check your chimney for smoke.

After about 15 minutes of starting a fire, you should see very little smoke coming from the chimney.

8 Never burn on poor air quality days.

Call 728-AIRE for air quality status and updates.