



American Lung Association Says Wood Smoke Pollution Hazardous to Health

As cooler temperatures begin to mark the beginning of fall, the American Lung Association of California is urging the public to avoid wood burning and to consider cleaner burning alternatives. Burning wood emits harmful toxins and fine particles in the air that can worsen breathing problems and lead to heart and lung disease and even early death.

“Breathing particle pollution – or soot – can literally shorten life and send our most vulnerable residents to the emergency room. Study after study shows that when particle pollution levels increase, people can die,” said David Pepper, MD, a volunteer of the American Lung Association in California.

Wood smoke poses a special threat to people with asthma and COPD (chronic obstructive pulmonary disease) and should be actively avoided by those with lung disease. The American Lung Association strongly recommends using cleaner, less toxic sources of heat, such as natural gas. Converting a wood-burning fireplace or stove to use either natural gas or propane will eliminate exposure to the dangerous toxins wood burning generates including dioxin, arsenic and formaldehyde.

Wood smoke is the largest source of wintertime particle pollution in the Bay Area. Numerous studies have linked wood smoke exposure with exacerbation of lung disease. In the greater Bay Area, nearly one million residents have lung disease. “When they breathe wood smoke, they suffer even more,” said Dr. Pepper.

As with any pollution, children are especially at risk. Their lungs do not fully form until the age of 18 and cumulative exposures of wood smoke can lead to reduced lung function and risk of future disease. For asthmatic children, breathing wood smoke can lead to immediate harm, including asthma attacks and respiratory distress.

Although both natural gas and propane stoves are much cleaner than their wood-burning alternatives, these devices must be directly vented outside the home to reduce exposure to carbon monoxide, nitrogen oxide and other emissions produced by these energy sources. The American Lung Association warns that gas and propane stoves can be a threat to any family’s health without proper outdoor ventilation.

Indoor exposures to wood smoke can also pose health risks to residents. “Studies have also shown that people using wood burning devices to heat their homes can be routinely exposed to excessive levels of fine particulate matter in their indoor air,” added Dr. Pepper.

Many air districts in California have adopted regulations to control wood burning. The Bay Area Air Quality Management District’s (BAAQMD) wood burning regulation will be in effect in all nine Bay Area counties beginning November 1. The Air District will call a winter Spare the Air Alert making wood burning illegal until the alert is lifted. Individuals can make a complaint

about wood smoke pollution by calling the air district's hotline at 1-877-4NO-BURN or sign up to receive air alerts on the District's website at www.sparetheair.org

When a wood burning curtailment is called, the regulation bans the use of all wood burning appliances, including US EPA certified stoves. Currently, a US EPA Phase 2 certified device is any device built on or after July 1, 1992. While new US EPA Phase 2 certified devices burn much more cleanly, older ones may not. A study conducted by the US EPA found that Phase 2 Certified devices can emit significant levels of pollution above certified values, due to improper operation and maintenance, and through normal equipment degradation.

“Wood smoke pollution is a huge problem in the wintertime, both at the neighborhood and regional level,” Dr. Pepper said. “So many people are suffering health effects from breathing smoke in their homes and neighborhoods. Every single chimney and wood-burning stove can have an impact on air quality so we are urging the public to burn less.”

For more information about the health effects of wood burning and cleaner burning alternatives to heating, please visit our website at www.lungusa.org or call 1-800-LUNG-USA.