

# Health Hazards Of Wood Smoke Pollution

No fault of their own, but most people are completely oblivious to the very real dangers of exposure to wood smoke - both to themselves and to the environment.

**The World Health Organization (WHO) states "there are no safe levels of exposure to wood smoke whatsoever."**

The Canadian Lung Association lists many short term effects that include reduced lung function (especially in children) more severe or frequent symptoms from existing lung diseases (such as asthma, emphysema, pneumonia and bronchitis) and risk of heart attack and stroke. Two of the long term effects they list include chronic lung disease and cancer.

**Dr. Brian Moench head of 'the Utah Physicians for a Healthy Environment' and a member of 'the Union of Concerned Scientists'** says the following in his 'YouTube' video entitled 'Health Hazards of Wood Smoke Pollution' -

"... wood smoke should not just be thought of as how much does it contribute to community air pollution, wood smoke is one of the most toxic types of pollution that there is. Think of it simply as cigarette smoke because chemically its almost the same. **It causes or exacerbates heart disease and every kind of lung disease. It triggers heart attacks and strokes. It raises blood pressure and accelerates the aging process.** The EPA

(Environmental Protection Agency) estimates that the lifetime cancer risk from wood smoke is twelve times greater than an equal volume of second hand tobacco smoke. The two hundred (200) or so chemicals in wood smoke are some of the most deadly known to science, like dioxins and formhaldehyde, heavy metals and PAHs, which are notoriously toxic benzene like compounds. Burning 10 pounds of wood over one hour produces more PAH's than 120,00 cigarettes. Other

unique characteristics of wood smoke contribute to its extreme toxicity. The free radicals in wood smoke are active 40 times longer than in cigarette smoke. They are extremely small, allowing them to be inhaled more easily and less likely to be exhaled than say the particles from tailpipes. **Particles this small are picked up from the lungs by the bloodstream and carried throughout the body where they can actually penetrate into individual cells and alter the chemical functioning of chromosomes. Undoubtedly one of the ways that they can lead to cancer and many other kinds of diseases.** Wood smoke is practically the only pollution emitted right where people spend most of their time, in their own neighbourhoods, at a height where dispersion is minimal. **The small size also allows wood particles to easily penetrate into the homes of neighbours. One homeowner burning wood can expose all the neighbours to pollution levels up to 100 times greater than what shows up at the nearest monitoring station.** What goes up your neighbour's chimney literally ends up in your living room in concentrations almost as high as what is measured outside. **Wood burning truly creates intense local intense pollution hot spots. local victims not revealed by overall community pollution levels.** If you are a nonsmoker, breathing wood smoke is probably the worst thing you can do for your own health. **It is clearly inappropriate for anyone to expose others involuntarily to that kind of risk. As a society, we decided years ago that people should not have to be exposed to second hand cigarette smoke . For all the same reasons, it is every bit as important that people not be exposed to their neighbour's wood smoke against their will. The common term "environmental justice" applies here. A person who burns wood creates pollution victims of everyone in his neighbourhood.**

compiled by *londonenvironmentalactionnow*