

What you can do

You might want to search the internet for allergy companies that sell **Hepa air filters and facemasks**. Make sure that they are true Hepa filters and if possible, buy one that will also absorb volatile organic compounds (VOCs). This will also protect you from traffic and other air pollution. Face masks and respirators: The little paper face masks are not very good — but better than nothing. There are new soft masks that have a replaceable carbon filter in them.

Small Hepa filters are also sold at drug stores, shopping warehouses, and Target.

Hardware stores sell masks for carpenters and painters manufactured by 3M. More aggressive protection can be found in a respirator. The drawback is that respirators are bulky, hard to carry and somewhat uncomfortable. Sometimes it is important to cover your nose immediately, so you will want to keep a soft mask handy.

None of these devices offer total protection — even fire fighters don't have that — which is why it is important not to create smoke in the first place.

Everything you do to improve the quality of the air you breathe will improve the way you feel. It is our hope that these simple measures will bring you comfort, vitality and the speediest recovery.



“Just one important outdoor source of air pollution remains inadequately addressed in most areas — residential fireplaces and wood stoves. Yet this is the one source of air pollution that produces fine particles and gases containing a multitude of toxic substances and carcinogens, and fine particles are associated with morbidity and mortality in urban areas... For those on the receiving end of a neighbor's fireplace or wood stove, it is often similar to living with a chain smoker. The pollutant exposure is involuntary, repetitive, caused by a tiny minority of burners, and composed of a great array of toxic chemicals and cancer-causing compounds.. (Wayne Ott, Ph.D. Stanford University, Science Preface to BurningIssues.org).”

The Importance of Clean Air

Clean Air Revival provides public education about the medical hazards of exposure to wood smoke and other fine particulate pollution. Please join in our effort to educate others by sharing this brochure and/or making a tax-deductible donation to: Clean Air Revival, Inc., PO Box 1045 Point Arena, CA 95468-1045

For more information please visit:

BurningIssues.org

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Highly Recommended Site by **Schoolzone**
Chosen as a Site of Educational Excellence by BBC

Medinex Certified Health Site

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Cancer Recovery and Wood Smoke

Now that you are beginning treatment to beat cancer, a healthy environment with clean water, clean air and healthy food will



provide personal protection with a focus on healthy cellular support. With that in mind avoiding tobacco smoke, wood smoke and other oxygen blocking toxins makes a lot of sense. Progress has been

made to control tobacco smoke and traffic, but wood smoke is still very common.

Most people don't know that air pollution can interfere with their health and recovery.

This pamphlet provides you with the latest science on wood smoke, why it would make sense to avoid it, and why you might want to avoid burning altogether.

Emerging air pollution research links soot or fine particulate matter (PM2.5) from all sources to increases in many illnesses, infections and premature deaths — perhaps 60,000 every year in the United States (Joel Schwartz, USEPA) and almost 2 million worldwide (World Health Organization).

If you can smell it, you are being exposed.

Wood smoke exposure can lead to infection and fatigue. During cancer your immune system may be suppressed, making you more vulnerable to infection.

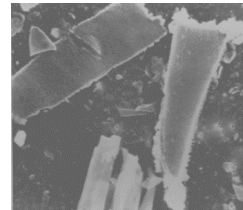
- Wood smoke has been shown to carry bacteria and viruses directly into the lung's moist environment where they can replicate. Infections can incubate over the next 48 hours or longer.
- **Breathing wood smoke for one hour lowers lab animals ability to fight infection by 25 to 40%** by disabling the macrophages that gobble up bacteria and viruses in the lung (J.T. Zelikoff, New York University Medical Center).
- Infection could cause a slower recovery or postponement of vital drugs for your treatment. Avoiding wood smoke helps you avoid infections.
- Wood smoke is especially rich in some of the same carcinogens found in tobacco, but it is chemically active in the body 40 times longer than cigarette smoke (Lachocki, Pryor, et al – Louisiana State University).
- Wood smoke is 12 times more likely to cause cancer than the same amount of tobacco smoke (J. Lewtas-USEPA).
- Wood smoke is also rich in dioxins and PCBs (Lawrence Livermore Lab).

Wood smoke is rich in tiny toxic dagger-shaped particles called PM2.5 (particulate matter smaller than 2 ½ microns); 90% of wood smoke is less than one micron. It has

been shown to carry combustion toxins into the body, where they circulate in the blood stream. Urine tests the following day carry markers for wood smoke (Dills, Zhu, Kalman, University of Washington). See picture below.

Avoid

- **Wood or Fire Logs**
- **Incense**
- **Candles**
- **Tobacco**
- **Solid Fuel BBQ's and Wood Burning Restaurants**



Pollution events initiated locally — in your room, on your street, in your town — create intense pollution, right in your breathing zone. When solid matter is burning, dangerous particulate and gas levels are filling your micro-environment. The solid object is disappearing and is transformed into PM2.5, which is impossible to clean up entirely.

Smart Choices: use unscented products, avoid perfume and toxic fabric softeners. Use ventilation fan when cooking. Close car vents when you are around a smoking vehicle. Allow more space around your car for dispersion. If you heat with wood, consider using another source of heat at this time.

You might be surprised to learn that 50 to 70% of outdoor wood smoke PM2.5 levels seep directly into homes — even non-burning homes. In smoky neighborhoods, homes have been shown to have the same

amount of indoor PAH (polycyclic aromatic hydrocarbons) as 5 cigarettes smoked inside a house at a non-wood burning time of year (Ott, Stanford University). Wood smoke peaks at midnight in many communities. New wood stoves are being offered as a solution. They may produce less particulate matter than fireplaces or old wood stoves, but their output is more carcinogenic (US EPA).

While burning and fires can be relaxing, keep in mind that it is the toxics that make it so: carbon monoxide causes blood vessels to constrict and creates a false sense of well-being. Breathing toluene from wood smoke — like sniffing glue — can get you high.

Asking people not to smoke was once thought to be rude. Now we know it is O.K. **It is also O.K. to ask:**

- your neighbors to reduce their burning at this time.
- family and friends not to smoke around you or to burn wood when you visit.
- your hostess not to burn candles or incense.
- whether any burning will occur at events to which you are invited.

