

# The facts on woodsmoke

During winter, parts of Tasmania have some of the dirtiest air in Australia. This is a fact which none of us should be proud of. However as individuals we can do something about it. This flier deals with the main contributors to air pollution in urban Tasmania which is scientifically proven to be woodsmoke (Source: 'State of the Air' Community Summary', 1991-2001, Department of the Environment and Heritage).

Apart from the stench, visual impact and low visibility caused by this smoke, it is also a threat to the health of many Tasmanians.

## Health risks from woodsmoke

The major evidence of health risk comes from overseas studies, in the United States and in New Zealand, from valleys similar to the Tamar Valley. Measurements that have been done on the particle levels have shown clear evidence that it causes flare-ups of asthma, increased admissions to hospital for lung disease and increased risk of dying of a lung disorder.

For people suffering from asthma, for example, when they breathe in smoky air, it chokes them up. They feel short of breath, they have a cough, they may get wheezy or feel tight in the chest. For many people that might just be a nuisance, but some with more serious asthma may even be needed to be admitted to hospital for treatment. Sadly, for some of those who have a very, very severe respiratory condition, the woodsmoke can tip the balance and they can die from the extra burden of exposure to woodsmoke. (Source: Dr Jim Markos, Chairman of the Tasmanian Branch of the Australian Lung Foundation)

## Passive woodsmoke

The dangers of passive smoking from cigarettes is well documented. Unfortunately it is a similar case with woodsmoke. If a neighbour has a woodheater that is operated badly then the affects are immediately obvious. You can see it, you can smell it, and it will often taint the washing you have left out to dry. However, even more disturbing is that whether you have a woodheater or not, you are still exposed to chemicals (BTEX) associated with woodsmoke. This is a preliminary finding of research carried out by the CSIRO in 2003.

The research seems to indicate that while indoor levels of BTEX are generally higher than outdoor levels, there is no significant difference between houses with or without woodheaters. Exposure levels appear to be universal throughout the community and are higher in winter than in summer. The clear message is that all of us are affected regardless of whether we have done the right thing or not. As Dr Jim Markos says:

"Because of government legislation if you're a non-smoker, you can avoid breathing in other people's cigarette smoke.

But if you're a non-woodburner, you can't avoid woodsmoke if you live in affected areas. As an individual you are powerless to do anything except move to another area.

I do tell people with lung disease to do the 'great winter escape' if they can afford it."

## Tips for cleaner woodheating

The message is clear. If we are to reduce air pollution from woodheaters we must look toward cleaner heating methods.

This is how many professionals rank heating, in terms of which causes the least air pollution:

- electric heating (particularly in Tasmania where our electricity is generated from renewable resources)
- gas
- pellet heating
- woodheating (used correctly)
- open fires.

### Here are some tips that appear on the Launceston Air Quality website:

*When wood is completely burned, you are left with carbon dioxide and water vapour, which are emitted into the air, leaving an ash residue. To obtain complete combustion, the following conditions are necessary in your woodheater:*

- Good, seasoned firewood
- Sufficient heat or temperature for combustion
- Sufficient air flow to provide oxygen for combustion
- Sufficient mixing of air and hot combustion gases to promote complete burning
- Sufficient time to allow complete burning.

*If there is a lack of any or all of the above, incomplete burning will occur. You can tell if you have enough heat, air and mixing if the coals are glowing brightly and there are bright swirling flames. Dark, smouldering fuel and a lot of smoke in the firebox indicates incomplete burning. Incomplete combustion will lead to the generation of toxic pollutants, such as particles and carbon monoxide, and also means you are wasting money.*

*Modern woodheaters are designed to warm the air before it enters the firebox. This stops the firebox from cooling and assists with the complete combustion of the wood. If your woodheater is old you may not be able to stop it from smoking and may need to replace it with a less polluting alternative.*

[www.launceston.tas.gov.au/airquality.php](http://www.launceston.tas.gov.au/airquality.php)

## Further information

For further information on woodsmoke talk to Aurora on

**1300 13 2003**  
or visit [www.auroraenergy.com.au](http://www.auroraenergy.com.au)

