

Wood heater smoke is not safe



- **Wood heaters significantly pollute the air** that we breathe despite **only 1 in 10** Australian households using wood heaters as their main source of heating.^{1,2}
- Smoke from wood heaters contains many toxic gases and large amounts of **fine particulate matter (PM_{2.5})**, which are **harmful to human health**.²



- Wood heaters significantly contribute to air pollution in **regional, rural and urban areas**.
- In **Sydney and Melbourne**, wood heaters are the **top contributor** to man-made PM_{2.5} pollution, **higher than either traffic or industry sources**.^{3,4}
- In greater metropolitan Sydney, the highest levels of PM_{2.5} pollution from wood heaters are in **areas where most people live** and lead to an estimated **100 deaths per year**.²

What is PM_{2.5}?

- When wood is burned, fine particulate matter (PM_{2.5}) is produced.⁵
- This type of pollutant is so small that when it is breathed in it can travel deep into your lungs and directly enter your blood.⁶
- Your body responds to the threat from PM_{2.5} by activating its immune and defence systems, which can immediately make existing health problems like asthma or heart diseases worse.
- PM_{2.5} can affect all systems of the body, with exposure being linked to the development or worsening of heart disease, lung diseases, diabetes, cancer,^{7,8} changes in brain function⁹ and lower birth weight in babies.¹⁰

What is the solution?



- There is **no safe level of air pollution**.^{11,12} However, there are actions we can take to reduce the harmful effects of wood smoke pollution.
- Even heaters that meet the latest **Australian standards can produce a lot of pollution** when not operated correctly (for example in a home setting).¹³ However **education campaigns** promoting correct operation **on their own** have had **little success** in improving air quality.
- The best way to reduce pollution from wood heaters is to **replace them with cleaner forms of heating**, such as **reverse cycle air conditioning**.

About: The Centre for Air pollution, energy and health Research (CAR) is a NHMRC Centre for Research Excellence in Australia. It is the only group of its kind nationally to bring together researchers focusing on the impacts of air pollution and new versus traditional forms of energy on our health. Our vision for a healthier community is the driving force behind our research.

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References: See: <https://www.car-cre.org.au/wood-heater-smoke-factsheet>

For more information: Read CAR's position paper: "Reducing the health impacts of wood heaters in Australia" available at: https://www.car-cre.org.au/_files/ugd/d8be6e_a27f05a82f8c47378ffa9dcbac6cc04.pdf

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