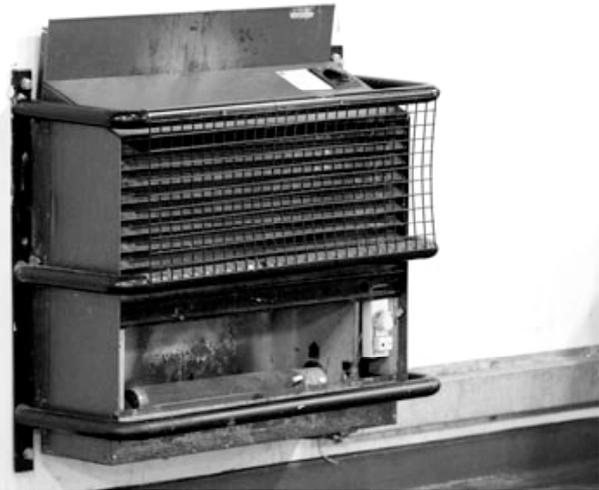


Unflued Gas Heaters in School Classrooms

So what's the big deal?

Every day that you send your child into a classroom with an unflued gas heater operating...

... you are poisoning them.



- Heaters mandated by the Department of Education and Training (DET) are **unflued**, meaning that:

- heaters burn gas to produce heat
- they have no flue or chimney
- the combustion products are released into the classroom rather than pumped outside.

“*Would you park a running car in a kids' classroom with the exhaust directly in the classroom?*”

~ Len Ferrari,
independent air quality expert

- Unflued gas heaters produce a number of pollutants as a result of combustion. Pollutants that can harm your health include nitrogen dioxide, carbon monoxide, carbon dioxide and formaldehyde. Unflued gas heaters also produce water vapour that can indirectly affect health by increasing the growth of moulds and dust mites.
- Unflued gas heaters are **not used in schools in Victoria, South Australia, Queensland, the ACT and Western Australia** (whilst in Tasmania it is not a common form of heating in schools).
- Replacement of unflued gas heaters in cold-climate regions like the Blue Mountains and the Southern Highlands is particularly urgent because healthy heating is an important component of classroom environments. In cold and rainy conditions, children are being exposed to fumes from unflued gas heaters upwards of 30 hours per week.

By retaining the unflued gas heating system in all classrooms and other areas of the school, DET is guilty of a massive failure in the duty of care by exposing school students and staff to unsafe air quality

“*It's extraordinary when you have the DET continuing with its heating policy while NSW Health advises people not to have unflued gas heaters in their homes — it's a massive contradiction.*”

~ Ray Williams, Member for Hawkesbury

What are the facts?

- Unflued gas heaters in NSW classrooms produce noxious by-products (nitrogen dioxide, carbon monoxide, carbon dioxide, formaldehyde) directly into the air our children breathe.
- South Australia decided five years ago to remove unflued gas heaters from all state schools, while in Western Australia they were phased out by the end of 2009. Victoria made the decision in the 1970s to ensure students were protected from gas heater fumes.
- A government study undertaken at Blackheath Public School in 2008 found that 30 per cent of the classroom areas tested returned nitrous oxide levels above World Health Organization (WHO) guidelines.
- The Blue Mountains has a 40 per cent greater rate of asthma than the NSW average, according to Sydney West Area Health Service. And putting that in perspective, Australia has the third highest incidence of respiratory disease in the world.
- The NSW Health Department recommends to home users that: “If gas is your preferred heating fuel, purchase a flued heater.”

Nitrogen dioxide: Children may suffer more often from cold symptoms or asthma attacks. Can cause irritation of the respiratory tract, shortness of breath, fatal swelling of the lungs, exacerbated asthma, and more frequent and more severe respiratory illness. People with asthma/respiratory diseases already are particularly susceptible.

Carbon monoxide: Can cause headaches or loss of concentration, flu-like symptoms and chest pain, and high exposure can be fatal. Health effects can occur at the time of exposure or be delayed. Some people are more susceptible than others, especially children.

Carbon dioxide: Can cause headaches and may cause changes in respiratory patterns.

Formaldehyde: Affects the skin, eyes and lungs; is a nasal carcinogen, can cause wheezing and coughing, fatigue, skin rash and severe allergic reactions.

Where's the science?

- A 2004 Adelaide University study published in the *International Journal of Epidemiology* recommended unflued gas heaters be banned in classrooms as a public health priority.
- A 2005 Hunter New England Area Health Service study in private schools found so-called low-emission (low-NOx) unflued gas heaters produce high levels of nitrogen dioxide, carbon monoxide and formaldehyde known to cause respiratory problems, headaches, drowsiness and induce asthma attacks.
- Following a 2008 DET study conducted at Blackheath Public School, Len Ferrari — a recognised expert on air quality — found one quarter of the test results were well outside of WHO guidelines, and claimed this 25 per cent non-compliance figure would be conservative.

“There is data available all over the world to say that unflued heaters don't mix very well with good air quality.”

~ Len Ferrari,
independent air quality expert

Why aren't schools doing anything about it?

The current inflexible Department of Education and Training policy specifies the installation of unflued 'low-NOx' heaters in NSW public schools. Despite the concerns of parents, teachers and health professionals, new schools are still being fitted with unflued gas heaters.

Whilst the NSW Teachers Federation and the P&C Federation support the removal of unflued gas heaters, the situation has continued to be unaddressed by the DET for the last five years.

Why isn't the government doing anything about it?

- The Director-General of the DET said:
 - he had been told by the NSW Health Department that the heaters were safe, contradicting the results of a 2004 NSW Health Department study.
 - as a child at school in Britain, "There was snow outside a lot of the time, and the windows were open. We wore a jumper."
- The DET says unflued heaters comply with guidelines set by the Environment Protection and Heritage Council of Australia and New Zealand, as long as one window or door is open on each side of a classroom to allow cross-ventilation.
- The 2005 Hunter New England Area Health Service study recommended that private schools phase out unflued gas heaters, including the so-called 'low-NOx' models. The state government is putting public school children at risk because it deems these findings not applicable to state schools.
- Unflued heaters were installed in many schools last year, including Kelso High School in the Central West, where a teacher was taken to hospital after passing out during class when a malfunctioning heater caused carbon monoxide poisoning.

“It's time the government took the health of teachers and students seriously and stopped installing these unflued gas heaters.”

*~ Bob Lipscombe,
NSW Teachers Federation President*

“This comes down to another example of State and Federal governments underfunding public schools across the state. It is a matter of money.”

~ Gary Zadkovich, Teachers Union vice-president

What's the DET's response?

Parents in the Blue Mountains raised the issue of low-NOx heaters five years ago, and so far the DET's response has been to issue statements claiming the heaters are safe, in contradiction to the NSW Health Department's advice that people only have flued gas heaters in their homes.

The DET's track record

Twenty years ago a statewide campaign exposed the dangers of unflued gas heaters in schools. As a consequence, the DET committed to replacing the old heaters with 'low-NOx' burners. Yet, even today, there are more than 200 schools across Sydney still with high-NOx heaters.

“
Children in public education deserve at least the same standard of care as those in private schools. The ongoing replacement of unflued gas heaters with so-called 'low-NOx' burners is throwing away good money.”

~ John Kaye, Greens MP

Do we need yet another study?

Despite existing Australian and international research showing how dangerous these heaters are, **the DET commissioned a \$2 million study** to test whether the heaters have an adverse impact on children's health. Another study will inevitably put the issue back another twelve months before it's seriously looked at. At this stage, the results won't be known until some time in 2010 and we don't know exactly what the testing covers. There is data available from all over the world to confirm that unflued heaters do not equal good air quality. Meanwhile, the NSW government continues to fit out public schools with gas heaters that are failing to meet World Health Organization standards.

In addition, there is a swathe of concerns about the study. One of the many issues is that, ignoring the Australian standard, the DET bought cheaper New Zealand-made testing equipment. The use of these instruments is not considered best practice anywhere in the world, and Australian experts fear they are not sensitive enough to pick up the minute nitrogen dioxide levels that are associated with increased rates of asthma and other respiratory conditions.

Based on the DET's own estimates it would cost less than the \$2 million price of this new study to immediately fit out all Blue Mountains public schools with safe, flued gas heaters.

What can I do?

- Talk to other parents and educate them about the dangers of unflued gas heating.
- Visit the COUGH (Campaign Opposing Unflued Gas Heating) website and sign the online petition: **www.cough.org.au**
- Come to COUGH committee meetings and lend your skills to the campaign.
- Write to your state member, the DET, and the premier.

“
[State and Federal governments need to] act on a proactive basis on what is a commonsense issue. The heaters are known as 'low-NOx', not 'no NOx', which indicates there is a problem.”

~ Phil Koperberg,
Blue Mountains MP

For more information on the issue, facts and figures, please visit **www.cough.org.au**
or email **info@cough.org.au**