Cancer Council | **KNOW WORKPLACE CANCER**

There may be hazards where you work that could increase your risk of developing cancer. This factsheet discusses occupational hazards related to Environmental Tobacco Smoke (ETS).

Key messages
- ETS is the combination of side-stream and mainstream smoke.
- ETS is known to cause cancer in humans.
- Workers who inhale ETS have the same type of risks to their health as smokers do.
- To eliminate exposure to ETS put in place the recommended controls.
- Refer to Safe Work Australia's Guidance note on the elimination on environmental tobacco smoke in the workplace.

What is environmental tobacco smoke (ETS)?
Burning tobacco products produces two types of smoke; side-stream smoke (smoke released from the tip of the cigarette) and mainstream smoke (smoke exhaled by the smoker). The combination of these two types of smoke is called ETS and is also known as second-hand smoke. Passive smoking is the inhalation of ETS. ETS is a carcinogen, meaning it is known to cause cancer as it contains around 7000 chemicals, 69 of which are known to cause cancer on their own. There is no safe level of exposure to ETS. ETS has been shown to be harmful even at low levels, including in outdoor areas.

ETS and cancer
ETS increases your risk of experiencing short-term health problems, including headaches and irritation of the eyes, nose and throat. The risk of serious long-term health issues are also increased; these include:
- lung cancer
- diseases of the heart and blood vessels
- possibly stroke
- nasal sinus cancer
- breast cancer
- chronic obstructive pulmonary disease (COPD).

ETS has been linked to adulthood asthma, poorer mental health and a cause of early death.

In 2004-2005 about 141 Australian deaths were due to inhaling ETS. Around 500 adults were admitted to hospital due to complications caused by ETS in 1998.

Your cancer risk from ETS varies depending upon:
- the length of exposure
- the concentration of toxins in the ETS
- how 'old' the ETS is
- the size of the space
- the ventilation rate

- the number of cigarettes being smoked at the same time by different people in the same area
- if you are a smoker or non-smoker as non-smokers are more sensitive to damage. However, ETS is harmful to both smokers and non-smokers.

Why ETS is harmful
Side-stream smoke is made at lower temperatures than mainstream smoke. As a result it contains a higher amount of some toxins compared to the smoke inhaled by the smoker. Some of the toxins in ETS are smaller than those inhaled by the smoker. This means the smoke can go deeper into the lungs and is more toxic. Half of the chemicals in the smoke can still be in the air five to six hours after it was first created. Old side-stream smoke could be 12 times more toxic than the smoke a smoker inhales. Therefore smoking should never occur in enclosed workspaces even if no one is around.

Benefits of a smoke free workplace
Besides following work health and safety obligations, a smoke-free workplace also results in large benefits to the employer.

A smoke-free work place can:
- improve employee health
- increase productivity of workers (fewer / no smoking breaks)
- reduce sick leave / holidays due to illnesses linked to smoking and passive smoking
- decrease the number of staff retiring earlier than expected
- reduce cleaning and maintenance costs
- reduce fire hazard risk
- create a healthy business image
- support current smokers to cut down and quit
- result in a decrease in uptake among younger workers.

Effective controls
All Australian workplaces must follow work health and safety laws. These vary slightly between states and territories, but the duty of care for employers and responsibilities of workers across Australia is similar:
- Employers are required to ensure the health and safety of their workers at their workplace.
- Employers are required to ensure the health and safety of other people due to the work carried out.

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Environmental Tobacco Smoke (ETS)

- Employers have a duty to control the risks associated with work.
- Workers must take reasonable care of their own health and safety.
- Workers must not negatively affect the health and safety of other people.
- Workers must follow any reasonable instruction and workplace health and safety policies, of which they have been notified.

For information regarding the laws or regulations in your state or territory, please use the links supplied on the landing page under 'useful resources'.

There are also environments that must be smoke free. The Occupational Safety and Health Regulations 1996 (page 60) outlines that employers, employees and the self-employed are not to smoke in indoor workplaces (including vehicles). If caught, the person responsible and the person in control of the workplace can be fined or prosecuted.

The Safe Work Australia's Guidance note on the elimination on environmental tobacco smoke in the workplace outlines how workers exposure to ETS in the workplace can be controlled. A summary of recommended controls is outlined in Table 1. A combination of controls should be used.
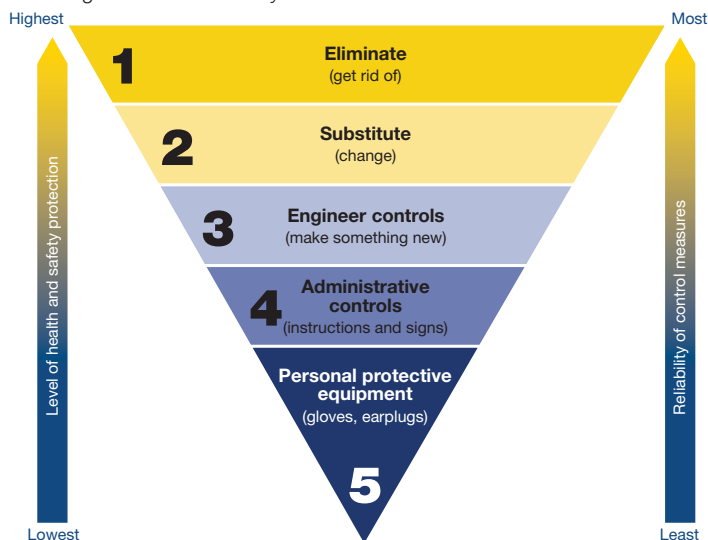
If adequate control measures are not in place, anyone working around ETS is at increased risk of developing health problems, including cancer.

To follow work health and safety laws employers should **eliminate or reduce** exposure to identified hazards using the hierarchy of control (Figure 1) and implement a risk management process. Workers should always be involved in this process to correctly detect hazards and put in place control measures that suit the workplace. Training workers on the hazards present in the workplace and the procedures used to manage them is also a work health and safety requirement.

Table 1. Summary of ETS exposure control measures

ACTIVITY	CONTROL
Banning smoking in the workplace	This should include indoor areas, in vehicles, enclosed and partially enclosed areas and outdoor areas where smoke can drift into the workplace.
Having in place a written no-smoking/ETS policy	An ETS policy should be developed that includes education on tobacco control methods and safe work practices. This will explain how and why ETS needs to be managed. It is also an effective tool in reducing smoking among employees and is an important step to becoming a smoke-free workplace. A sample ETS policy is available at Department of Health WA's, Supporting a smoke free workplace – a policy implementation guide, page 15.
Provide cessation (quit) support and programs	To encourage employees to quit, a supportive environment is required. Employers can provide information resources, self-help materials, encourage employees to use the Quitline (13 78 48), QuitCoach or My Quit-Buddy. Additionally workplace quit programs can be offered to employees. For more information about workplace programs (or cessation information), contact your state or territory Cancer Council 13 11 20.
Designated smoking areas	Designated smoking areas must be outdoors well away from doorways, windows and ventilation ducts e.g. at least 5 metres from doorways and windows and 10 metres from ventilation ducts, to reduce drift to other areas of the workplace. Outdoor levels of ETS can be similar to those of indoor concentrations, under certain conditions, when people are smoking. Designated smoking areas in indoor areas of the workplace is prohibited by law even if ventilated. The use of the designated smoking area can be restricted to certain times e.g. award meal breaks. It is recommended smoking be prohibited in all work areas.
Signage	Using signs with standard symbols indicate to the staff and visitors that workplace areas are non-smoking. You can order this signage online from your state government's tobacco compliance department.

Figure 1. The hierarchy of risk control

1. Eliminate (get rid of)
2. Substitute (change)
3. Engineer controls (make something new)
4. Administrative controls (instructions and signs)
5. Personal protective equipment (gloves, earplugs)

Level of health and safety protection: Highest — Lowest
Reliability of control measures: Most — Least

For any concerns related smoking at your workplace, contact:

- the workplace supervisor or management (if you are an employee)
- your workplace health and safety representative or Union representative
- state and territory work health and safety regulators
- Safe Work Australia

How do I detect cancer early and reduce my risk?

If you think you may have been exposed to a cancer-causing agent, it is important to speak with your doctor. To find out what you can do to create a workplace that supports healthy choices to help reduce cancer risk, contact Cancer Council 13 11 20 or visit www.cancer.org.au

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