

Exposure to Second Hand Smoke

Policy Position Statement

Key messages: Second-hand tobacco smoke comprised of exhaled mainstream and side-stream smoke, contains chemical carcinogens and other toxic materials potentially in higher concentrations than inhaled by people who smoke.

Key policy positions:

1. Elimination of occupational exposure to tobacco smoke, adoption of regulations to prevent smoking in other public spaces, and protecting children from exposure to second-hand smoke are public health priorities.
2. Legislation to reduce and/or eliminate exposure to tobacco smoke in all public spaces, including all working areas and partly enclosed and outdoor public places where children are likely to be, is urgently needed.
 - a. To reduce exposure to second-hand smoke, PHAA advocates for: jurisdictional health awareness/promotion campaigns, an implemented National Code of Practice or regulatory approach, jurisdictional action ensuring no smoking on any health service grounds, and working to phase out smoking in prisons.

Audience: Federal, State and Territory Governments, policymakers and program managers, PHAA members, media.

Responsibility: PHAA Alcohol, Tobacco and Other Drugs Special Interest Group

Date adopted: September 2022

Citation: Exposure to Second Hand Smoke: Policy Position Statement [Internet]. Canberra: Public Health Association of Australia; 1997, updated 2022. Available from: <https://www.phaa.net.au/documents/item/2481>

Exposure to Second-Hand Smoke

Policy position statement

PHAA affirms the following principles:

1. Inhaling tobacco smoke affects both people who smoke, and non-smokers. The process of smoking produces three different types of tobacco smoke:
 - a. Mainstream smoking (directly inhaled by the smoker through burning tobacco)
 - b. Exhaled mainstream smoke (breathed out by a smoker)
 - c. Side-stream smoke (smoke that drifts from the burning end of a cigarette)(1)
2. Australia is party to the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC) which reads (Article 8):

“Protection from exposure to tobacco smoke

- 1. Parties recognize that scientific evidence has unequivocally established that exposure to tobacco smoke causes death, disease and disability.*
 - 2. Each Party shall adopt and implement in areas of existing national jurisdiction as determined by national law and actively promote at other jurisdictional levels the adoption and implementation of effective legislative, executive, administrative and/or other measures, providing for protection from exposure to tobacco smoke in indoor workplaces, public transport, indoor public places and, as appropriate, other public places.” (9)*
3. The National Preventative Health Taskforce recommends elimination of second-hand smoke from all workplaces and crowded public places.(10) The National Preventive Health Strategy 2021-2030 recognises that no level of exposure to second-hand tobacco smoke is considered safe.(11) There is clear evidence of the effectiveness of policy and legislation to create smoke free environments, as well as public support for creating them.(1, 4)

PHAA notes the following evidence:

4. Second-hand tobacco smoke is the combination of exhaled mainstream smoke and side-stream smoke. It contains many chemical carcinogens and other toxic materials, in some cases in concentrations 30 times higher than in mainstream smoke inhaled by the smoker.(2) Compared to mainstream smoke, side-stream smoke contains greater amounts of ammonia, benzene, carbon monoxide, nicotine and some carcinogens per milligram of tobacco burned.(3) However, because side-stream smoke is mixed with air before being inhaled, people exposed generally do not receive the same concentration of toxic chemicals as people who smoke draw the tobacco smoke directly into their lungs.
5. Second-hand smoke is a highly toxic, highly carcinogenic airborne contaminant to which there is no safe level of exposure. It is an important and avoidable factor contributing to a number of diseases in both adults and children.
6. Adverse effects of second-hand smoke include increased risks of:
 - a. In adults – cardiovascular disease, respiratory disease and lung cancer;

- b. In children – Sudden Infant Death Syndrome (SIDS), bronchitis and other respiratory infections, worsening of asthma, middle ear disease (otitis media) and respiratory symptoms (e.g. coughing or wheezing);(1, 4) and impaired lung function. Exposure may also increase children’s risk of lung cancer and atherosclerosis in later life.(5, 6)
 - c. Reproductive and perinatal effects include lower birth weight in unborn babies (where the mother was exposed).(3)
 - d. Exposure to second-hand smoke may also be associated with a range of other conditions including cancers, such as nasal sinus cancer, although evidence of causality is currently inconclusive and additional research is needed.
 - e. A person’s risk of suffering from diseases related to second-hand smoke increases with higher concentrations of smoke and longer periods of exposure.(3, 5)
7. Even short term exposure to second-hand tobacco smoke can adversely affect the health of non-smokers.(1, 7)
 8. Second-hand smoke had been designated as a known human carcinogen by the US Environmental Protection Agency, the US National Toxicology program, and the International Agency for Research on Cancer, and as an occupational carcinogen by the US National Institute for Occupational Safety and Health.(3, 8)
 9. The Australian Government has placed bans on smoking in all Commonwealth buildings, aircraft, buses and coaches registered under the Federal Interstate Registration Scheme, all airport buildings operated by the Federal Airports Corporation and on all domestic flights and international flights operating in domestic airspace.
 10. All States and Territories have banned smoking in indoor workplaces and public places, and some have extended bans to encompass alfresco dining areas and popular outdoor leisure and cultural settings. All jurisdictions have banned smoking in cars carrying children. Smoking is still permitted, by some States/Territories in some indoor settings, such as prisons, mental health facilities, and the ‘high roller’ rooms of casinos; and in the outdoor areas of some popular recreational settings such as pubs, clubs and sporting grounds.
 11. Electronic cigarettes (e-cigarettes) aerosolise nicotine and produce a vapour that emulates that of cigarettes but purportedly has fewer traditional toxins than second-hand smoke.(12, 13) There is evidence that mainstream and second-hand smoke/vapour from e-cigarettes contain chemical carcinogens and other toxic materials similar to those produced from smoking tobacco.(14-16) Although it is unlawful to sell e-cigarettes in Australia, these products are freely available for purchase over the internet. There is a need to educate and raise awareness about the harms of these products. Restrictions that apply to tobacco products should also be applied to these and other emerging products that cause harm or have the potential to cause harm from second-hand inhalation.
 12. Implementing this policy would contribute towards the achievement of [UN Sustainable Development Goal 3 – Good Health and Wellbeing](#).

PHAA seeks the following actions:

13. Elimination of occupational exposure to tobacco smoke and e-cigarette vapour, including the adoption of regulations to prevent smoking and e-cigarette use in public spaces, and protecting children from exposure to second-hand smoke and/or vapour is a public health priority.
14. Australian legislation to reduce and/or eliminate tobacco smoke in all public spaces, including all working areas and partly enclosed and outdoor public places where children are likely to be, and that e-cigarettes are covered by the same legislation and approach.
15. The implementation of a National Code of Practice or regulatory approach to reduce second-hand smoking and exposure to e-cigarette vapour, jurisdictional health awareness/promotion campaigns and action to ensure no smoking on any health service grounds, and to complete the phase out of smoking in prisons in all jurisdictions.
16. An increase in advocacy for the elimination of occupational exposure to indoor tobacco smoke in all remaining work settings where smoking is still permitted, such as prisons, mental health services, casino 'high roller' rooms, pubs and clubs in some States and Territories, noting its significance as an important health and safety at work issue.(3, 5)
17. Advocacy for the adoption of regulations to prevent smoking in other public outdoor spaces where these have not yet been adopted, including alfresco dining, leisure and cultural settings/venues.
18. Advocacy to protect children from exposure to second-hand smoke, whether in cars or other locations, for example in the home or playgrounds.
19. All jurisdictions conduct health awareness and promotion campaigns that address the need:
 - a. For all people to avoid tobacco smoke, particularly in enclosed and partly-enclosed spaces, to eliminate the risk of health problems caused by second hand smoking;
 - b. For children to be protected from tobacco smoke exposure, including in the car and home – the hazard in the home requires greater public education so that people who smoke recognise the risk to which they expose members of their family; and
 - c. For all workplaces, crowded (or enclosed and partly enclosed) public places and restricted outdoor places to be completely smoke free and e-cigarette vapour free.
20. The Commonwealth should extend the coverage of the Guiding Principles for Smoke-free Public Places and Workplaces Legislation and example provisions developed by the National Public Health Partnership, to cover a National Code of Practice or regulatory model for use in States and Territories that unequivocally prohibits all exposures to tobacco smoke in public spaces, workplaces and open space especially where children may be present. Such a code should ensure that employers are held responsible for exposure of workers to tobacco smoke.
21. All jurisdictions should act to ensure that there is no smoking on any health service grounds.
22. All jurisdictions, including Western Australia and the Australian Capital Territory, should work to phase out smoking in prisons, whether by prisoners or staff.

PHAA resolves to:

23. Advocate to the Commonwealth, State and Territory Health Ministers on this policy and seek model legislation to address the issues detailed above.

PHAA Position Statement on Exposure to Second Hand Smoke

24. Work with other leading health agencies in support of action to protect non-smokers, and especially children and workers, from the harmful consequences of second hand smoke and exposure to e-cigarette vapour to ensure better public awareness and education of the associated dangers.
25. Support action to make all prisons smoke free.
26. Support through advocacy, other agencies working on tobacco control and facilities that provide support to those seeking to quit smoking.

Revised September 2022

(First adopted 1997, Revised 2004, 2007, 2010, 2013 and 2017.)

References

1. Cancer Council of Australia. 2008 Position statement: Health risks of passive smoking http://www.cancer.org.au/content/pdf/CancerControlPolicy/PositionStatements/PS-Passive_smoking_Sep08.pdf [cited 2017 12 September].
2. Armstrong BK. Commentary: passive smoking and lung cancer. *Community Health Studies*. 1987;11((1 Supplementary)):6s-8s.
3. US Department of Health and Human Services. The health consequences of involuntary exposure to tobacco smoke: a report of the Surgeon General. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health,; 2006.
4. Scollo M, Winstanley M. Tobacco in Australia: Facts and issues. Melbourne: Cancer Council Victoria; 2016.
5. Olivo-Marston SE, Yang P, Mechanic LE, Bowman ED, Pine SR, Loffredo CA, et al. Childhood exposure to secondhand smoke and functional mannose binding lectin polymorphisms are associated with increased lung cancer risk. *Cancer Epidemiol Biomarkers Prev*. 2009;18(12):3375-83.
6. Kallio K, Jokinen E, Saarinen M, Hamalainen M, Volanen I, Kaitosaari T, et al. Arterial intima-media thickness, endothelial function, and apolipoproteins in adolescents frequently exposed to tobacco smoke. *Circ Cardiovasc Qual Outcomes*. 2010;3(2):196-203.
7. Cancer Council of Australia. 2015 National Cancer Prevention Policy <http://www.cancer.org.au/policy-and-advocacy/prevention-policy/national-cancer-prevention-policy.html> [cited 2017 12 September].
8. National Health and Medical Research Council. The health effects of passive smoking: a scientific information paper. Canberra: National Health and Medical Research Council; 1997.
9. World Health Organization. WHO FRAMEWORK CONVENTION ON TOBACCO CONTROL. Geneva; 2005.
10. National Preventive Health Taskforce. Australia: The Healthiest Country by 2020 - National Preventive Health Strategy - the roadmap for action. Canberra: Commonwealth of Australia; 2009.
11. Department of Health. National Preventive Health Strategy 2021–2030. Commonwealth of Australia Canberra; 2021.
12. Yamin CK, Bitton A, Bates DW. E-Cigarettes: A rapidly growing internet phenomenon. *Annals of Internal Medicine*. 2010;153:607-9.
13. Flouris AD, Oikonomou DN. Electronic cigarettes: miracle or menace? *BMJ (Clinical research ed)*. 2010;340(7739):215.
14. Hess CA, Olmedo P, Navas-Acien A, Goessler W, Cohen JE, Rule AM. E-cigarettes as a source of toxic and potentially carcinogenic metals. *Environmental research*. 2017;152:221-5.
15. Banks E, Yazidjoglou A, Brown S, Nguyen M, Martin M, Beckwith K, et al. Electronic cigarettes and health outcomes: systematic review of global evidence. 2022.
16. Banks E, Beckwith K, Joshy G. Summary report on use of e-cigarettes and relation to tobacco smoking uptake and cessation, relevant to the Australian context. 2020.