

Position Paper
***Clean Air to Support Health and Wellbeing
in Built-Up Environments***

Gaynor Heading PhD,
Sandra Baxendell PhD

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V1.0

1 Background

Clean air is essential to support health and wellbeing and reduces the risk of serious diseases from air pollution. Air pollution is directly linked to respiratory disease e.g. Chronic Obstructive Pulmonary Disease (an umbrella term including emphysema, chronic bronchitis and asthma), lung cancer, heart disease and other organ damage (WHO 2022). Damage to lungs is cumulative and can commence in pregnancy with exposure to air pollution in the first few years of life affecting children's long-term health (Rani & Dhok 2023). In Australia COPD and Asthma are serious issues. COPD is the fifth leading cause of death (Ivey et al 2024) with at least 7,691 deaths directly linked to COPD in 2022 (AIHW 2024). While COPD is commonly associated with smoking, the prevalence of COPD is increasing due to pollution (Hendryx et al 2019). Air pollution has a direct relationship to hospital admissions (Hertzog et al 2024) including asthma exacerbations and COPD. Poor air quality is also linked to cardiovascular disease outcomes - heart attacks and strokes - and premature death (Hertzog et al 2024). There is an estimated 2.5 million Australians living with asthma with air pollution a risk for many residents. Chronic respiratory conditions affect more than a quarter of the Australian population and have a high economic and health burden (Zurich 2021).

Air pollution is a constant source of concern for people with COPD as poor air quality exacerbates disease and is associated with anxiety and depression (Cao 2023 et al). People with the genetic disorder known as Alpha-1 antitrypsin deficiency (A1AD) develop early onset COPD (genetic lung disease) and have a higher risk of lung damage from poor air quality as they lack the essential protein (Alpha-1 antitrypsin) that protects lungs from irritants and pollutants (NHLBI 2023). Without the protective protein this vulnerable group faces rapid lung decline from air pollution, a shortened life expectancy and a life of isolation trying to avoid poor air quality to protect lungs from further destruction (AlphaNet).

Alpha-1 Organisation Australia (A1OA) supports government policies that address health and wellbeing. A1OA supports the concept of a *National Urban Policy (the policy)* and is pleased to see health and wellbeing included under Objective 5.

Objective 5: Our urban environments and communities promote health and wellbeing. Urban areas must support healthy, active lifestyles through access to green and blue spaces, high-quality housing, and active transport options. Integrating green and blue networks, ensuring equitable access to recreational areas, and prioritising high-quality housing can enhance the health and wellbeing of urban residents. (Commonwealth of Australia 2024)

Well-designed human settlements should include safe access to green and blue spaces, more recreational areas, more footpaths and walkable links between areas to keep pedestrians off main roads which are a dangerous source of pollution (Forehead 2020). Walkability is a core human settlement design element and has links to improved health and reduced respiratory disease (Baobeid et al 2021).

2 Discussion

Objective 5 in *the policy* includes several components that support health and wellbeing, however, the policy can be strengthened by considering **clean air in all built-up areas**. Clean air supports equity of access and safe use of space (walkability) in all built-up areas in cities, suburbs, regional, rural and remote towns. Walkability is important for everyone including people with A1AD, asthma and COPD, and other health issues particularly when exercising / daily walking has been prescribed by doctors.

The policy can be enhanced by addressing clean air, walkability and a stronger focus on inclusion (equity of access). *The policy* focus should be expanded to include all built up areas i.e. cities, urban, regional and rural towns that at times are all subject to poor air quality e.g. in winter from domestic wood burners, fire pits, fire-reduction burns and cane burning which impact air quality. If it remains focused on cities and suburbs a separate policy is required to support clean air outside of these places and spaces i.e. a separate policy supporting health and wellbeing for people living in a built environment in regional and rural Australia.

In Australia, residential wood burning/heating is the largest source of pollution in many built-up areas with even short-term exposure closely associated to all-cause mortality (Borchers-Arriagada et al. 2024). While reducing residential wood-smoke may be perceived to be challenging due to government fragmentation and some community pushback, government policies can support change to cleaner heating and cleaner air as demonstrated by ACT's move to phase out wood heaters (ACT Government 2024). During winter and other smokey events people with A1AD, COPD and other illnesses can't leave their homes to enjoy green and blue spaces, venture into their gardens or engage in outdoor exercise. They don't have the luxury of opening a window for many months during the cooler weather and remain prisoners in their own homes during winter denying them equity of access. While wood heater replacement programs are urgently required, supported by a phase-out government-supported strategy, the ACT's 2045 phase-out date is too long to address preventable deaths and health risks.

Clean air should also be considered by all Federal Government departments when developing policies dealing with liveable spaces and the built environment, which would demonstrate that clean air, health and wellbeing are national priorities. To ensure that *the policy* supports equity of access, all sub-communities' needs should be considered as all sub-communities need clean air e.g. those with and without health issues. This means that all cities and "other human settlements" i.e. all built-up areas should be the focus of *the policy*, not just urban cities and suburbs as built-up areas in regional and rural Australia face similar issues regarding air quality, particularly in winter due to domestic wood heater use.

The use of domestic wood burners, fire pits, fire-reduction burns and cane burning create seasonal hazards for people in built-up areas. These and other polluting sources have been well-documented as major poor air quality contributors (Hertzog et al 2024). As noted by the

Australian Government, all levels of government have an important role to play in Australia's air quality (Emmerson 2021). However, despite the National Clean Air Agreement and air quality standards, many local governments do not appear to support clean air as most allow domestic wood burners and fire pits, despite banning incinerators. Local councils need to do more to support liveable, walkable, healthy communities and have policies - and stronger responses to reports of wood-burning pollution affecting neighbourhoods - that reflect national air quality ambitions. As there is no safe level of air pollution (Mark 2022) governments need to immediately take a stronger stance.

2.1.1 Strategies to Support Clean Air

- a) Incorporate a focus on clean air in *the policy* which will allow equitable access to green and blue spaces and use by the whole community, without fear of health damage from air pollution / poor air quality.
- b) Broaden *the policy* to include all built-up areas across Australia, including regional and rural towns, as all citizens have an equal right to clean air and safe access to green and blue spaces.
- c) Community education about air pollution and smoke-exposure risk including a focus on individual and community health risk associated with the use of wood heaters and fire pits.
- d) Ban the sale of fire pits by 2035 and support a wood heater replacement scheme that supports affordable, cleaner domestic heating that will assist phasing out polluting wood heaters. All levels of governments should follow the ACT Government's lead and support the replacement of wood heaters with affordable, efficient heating. However, the phasing-out timeframe needs to be shorter to avoid thousands of unnecessary deaths in the 20+ year phase-out period.
- e) Ban the installation of new or replacement wood heaters.
- f) Mandate the removal of domestic wood heaters before a property is sold (ACT Gov 2024).
- g) Introduce a polluter pay tax for residents who continue to use wood heaters beyond 2030.
- h) Introduce compulsory annual certification of flue cleaning during wood burner phase-out periods.
- i) Introduce legislation making it illegal to sell wood burners and fire pits in built-up areas by 2030.
- j) Offer electricity discounts for a set period when residents have wood heaters removed e.g. for 5 years. Note: most low-income families probably already have subsidised electricity bills and could afford to move to electric heating.
- k) Fining companies / organisations that mislead consumers that wood burning is the most affordable type of domestic heating.
- l) Encourage fire services to use more mechanical clearing (e.g. slashing undergrowth, reducing the fuel load) to reduce bush fire hazard burns.
- m) Amend current legislation that allows cane farmers to burn cane.
- n) Local governments to build more footpaths and community linkages away from main roads.
- o) Ban smoking in outdoor built-up areas.
- p) Reduce vehicle emissions with strong penalties for poorly maintained polluting vehicles.
- q) Replace all non-electric buses with electric buses.

- r) Governments and local councils to move beyond reporting environmental pollution and use the data in a timely way to support cleaner air.

3 Conclusion

All levels of government have a role to play in clean air. Air quality, recreational spaces and walkability have a close relationship to health and wellbeing, and all three need to be prioritized in government policy. As there is no safe level of air pollution for human health, strong laws, enforceable government regulations, standards and policy are required.

Everyone living in built-up areas, regardless of the location of the built environment / human settlement, has a right to health and clean air. *The policy* should include urban, regional and rural built-up areas, supporting social inclusion (equity of access), as many regional and rural towns suffer the same air quality / environmental issues as cities and larger urban areas, and clean air is essential to everyone's health and wellbeing. Expanding the policy this way reduces the need to develop a separate regional and rural policy dealing with health and wellbeing in built-up areas. Air quality should be considered by all levels of government and all government departments (supporting intersectoral collaboration) when developing new policies, supported by appropriate legislation and regulations with standards enshrined in law. With appropriate policies in place and enforced, safer inclusive communities will emerge, regardless of space and location. *The policy* and other government policies can support health and wellbeing and liveable spaces, but *the policy* needs to consider a broader approach to equity and ensure that air quality improvements support inclusion by all, regardless of health status and the location of the built environment.

4 References

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