



Asthma Australia Pre-Budget Submission 2024–25

November 2023



ABOUT ASTHMA AUSTRALIA

Asthma Australia is a for-purpose, consumer organisation which has been improving the lives of people with asthma since 1962.

Asthma is an inflammatory condition of the airways, which restricts airflow and can be fatal. There is no cure, but most people with asthma can experience good control of their condition.

Asthma affects 1 in 9 Australians, or 2.7 million people.¹ It has various degrees of severity (mild to severe) and affects people of all ages, from childhood to adulthood. Asthma can appear at all ages and stages of life.

Asthma Australia's purpose is to help people breathe better so they can live freely. We deliver evidence-based prevention and health strategies to more than half a million people each year. To ensure people can access effective treatments and best practice healthcare for their asthma, we work directly with people with asthma, their family and friends, health professionals, researchers, schools and governments. This way, we can ensure people with asthma are supported with education and access to high-quality information and care where they live, work and play in all stages of life.



Budget Proposals

The Asthma Australia submission focuses on the following funding proposals for consideration in the 2024-25 Budget:

Proposal	Investment
1. A national rollout of the AirSmart public education campaign to reduce the health impacts of air pollution	The Australian Government contribute: Option 1 \$12,767,760 (including television); or Option 2 \$6,481,760 (excluding television) over two years for a national roll-out of Asthma Australia’s AirSmart public education campaign to reduce the impacts of poor air quality.
2. Increasing access to local air quality information. Fund a low-cost air quality sensor pilot program as the first step towards ensuring all Australian communities have access to air quality information.	Costs to be determined in consultation with states and territories as a part of the National Clean Air Agreement based on population size and the most appropriate technology for each jurisdiction.
3. Addressing indoor and outdoor air quality by supporting people with asthma on low incomes to install cleaner and more efficient forms of heating, cooling and cooking in their homes.	The Powering Australia initiative should be expanded to include financial assistance to replace and install electric appliances and include owners of rental properties to encourage them make these replacements. An amount comparable to other Powering Australia initiatives.
4. Support housing standards and retrofits that reduce exposure to airborne hazards	Australian Government Home retrofit programs be designed and funded to provide protection against local conditions and climate change risks including indoor air quality improvements such as sealing draughts and ensuring adequate ventilation. These programs should prioritise social housing dwellings, people on low incomes and people with chronic conditions that put them at greater risk of adverse health impacts, such as asthma.
5. Medical Research Future Fund (MRFF) childhood asthma investment round	A targeted round of MRFF investment in childhood asthma of \$50m to address the most common and highest burden chronic disease in children up to the age of 14 years.



Introduction

Asthma Australia wants people to live in communities where they are supported to live healthy lives and can breathe clean air. Asthma Australia welcomes the opportunity to detail funding priorities for the 2024-25 Budget that will benefit the 1 in 9 Australians who have asthma and people who are at risk of developing asthma. In addition to these individuals, asthma affects carers for people with asthma, the families, communities, schools and workplaces of people with asthma, our healthcare system and the broader economy.

Asthma Australia supports increased investment in preventive health and primary health care to reduce the prevalence and impact of chronic disease and reduce the burden on the health system and broader community.

To further reduce this burden and improve the lives of people living with asthma, we are proposing funding measures to implement a national AirSmart campaign, invest in low-cost technology that can improve the air quality of the homes people with asthma live in, invest in asthma research and commit to address climate impacts on health.

Asthma in Australia

Asthma is one of the most common chronic conditions in Australia, with high prevalence rates by international comparison. Around 2.7 million Australians have asthma.² Asthma affects people of all ages.

Asthma prevalence in Australia is increasing. In 2022 Asthma was the 8th leading contributor to the overall burden of disease in Australia, having risen from 9th place in 2018 and 10th place in 2011. Asthma is the leading cause of burden of disease for people aged 5–14 years,³ which has been the case since Australia's burden of disease was reported. This asthma burden places children at disadvantage in terms of their potential health and social participation.

Asthma can both be caused and exacerbated by conditions related to the warming climate, which means asthma outcomes will worsen as climate change impacts increase. People with asthma experience poorer health outcomes and quality of life.⁴ People with asthma may live for a long period of time with its associated disability, and experience reduced participation in paid employment, education, care responsibilities, sports and social events.

Approximately 400 people die each year in Australia due to asthma⁵ and there were 351 deaths due to asthma in 2021.⁶ Asthma mortality⁷ and hospitalisations⁸ in Australia are high by international standards. Hospitalisations due to asthma are costly: on average, each emergency department presentation for asthma costs \$443, an uncomplicated hospital admission costs \$2,591 (approximately 1.5 hospital days) and a complicated admission costs \$5,393 (approximately three hospital days).⁹ A 2015 report on the Hidden Cost of Asthma found that asthma cost the healthcare system \$1.2 billion, there was a cost of \$1.1 billion in lost productivity, and the burden of disease amounted to a cost of \$24.7 billion.¹⁰

The home environment

The home environment is particularly important for people with asthma and allergies, who are sensitive to substances we all breathe. These substances are referred to as 'triggers' because they can trigger asthma or allergy symptoms. Indoor air pollution from heating with gas or wood heaters and using gas cooktops produces a range of pollutants and can worsen indoor air quality, and exposure to mould and dampness can lead to a range of health problems. Exposure to these triggers can cause asthma flare-ups and contribute to the development of asthma.¹¹

In 2022, Asthma Australia undertook a nationally representative survey of 5,041 people to understand what asthma triggers people are exposed to in their homes, whether they take action to reduce triggers in their homes, and whether any barriers prevent people from addressing triggers. The



resulting Homes, Health and Asthma in Australia report found that homes are not healthy places for all Australians, particularly for people with asthma or allergies. One quarter of Australians (24%) are not happy or are unsure about the air quality inside their homes. Among people with asthma and allergies, three in ten reported that their symptoms are worse after spending time in the home.¹²

Changing weather patterns due to climate change have reinforced the importance of housing in providing protection from cold, heat and other extreme weather events.¹³ Governments across Australia in regions that have experienced torrential rain and floods, have recognised the impact of this on people's homes including the increased risk of mould in homes. No amount of mould is considered safe for health¹⁴ and people with asthma, allergies and other breathing conditions are more at risk from contact with mould.¹⁵

Housing is a key social determinant of health and particularly important for people with asthma as housing conditions influence an individual's asthma symptom control and risk of developing asthma. The type of energy used in homes contributes to the health of the indoor environment. Harmful energy sources include gas and wood, both of which emit harmful pollutants that can trigger asthma symptoms and its development as well as cause other serious health conditions.

Asthma Australia is calling on the Parliament of Australia to hold an inquiry on Homes, Health and the Environment to inquire into the elements of a healthy home and the benefits of a healthy home as a social and cultural determinant of health in Australia. The inquiry would consider the health and population groups that are most impacted by living in poor quality or sub-standard housing, actions and mechanisms to improve the health of homes, and the factors outside the home, such as air pollution and impacts from climate change, that impact households. This is a matter of everyone having the right to be safe and healthy in their home, and for the Australian Parliament to lead and act on this issue.

Asthma, climate change and air quality

Climate change is inextricably linked with air quality. With asthma affecting 1 in 9 Australians, or 2.7 million people, this means people with asthma are one of the largest population groups vulnerable to the risks associated with climate change.

The emissions which contribute to climate change also reduce air quality, which can cause people to develop asthma and trigger symptoms or exacerbations in people with asthma. These adverse impacts on asthma are also caused by a number of threats which are increasing as a result of climate change, including bushfire smoke, ground level ozone and pollen. Reducing emissions will therefore improve air quality in the short and long term.

Many people with asthma recognise they are particularly impacted by the effects of climate change. Asthma Australia surveyed over 12,000 people during the catastrophic 2019–20 bushfires about the impacts they experienced as a result of exposure to bushfire smoke.¹⁶ When asked what the government, Asthma Australia or other organisations could do to reduce the impact of poor air quality on their day-to-day life, more than 1,000 respondents provided open text responses that linked the bushfire smoke crisis with climate change. Common suggestions included taking action to mitigate climate change and supporting individuals and communities to respond to bushfire smoke, for example by providing people with air purifiers and implementing building improvement programs to prevent smoke from entering homes, commercial buildings and schools.

In 2023, Asthma Australia undertook a nationally representative survey involving 2,022 respondents to understand what priorities people in Australia want the Federal Government to address in the National Health and Climate Strategy.¹⁷ Two-thirds of respondents live with asthma or another chronic health condition.



Some of the key findings were:

- 70 per cent of Australians think governments should act to protect people whose health is vulnerable to climate change.
- 91 per cent of people with asthma are worried about the impacts of climate change; 71 per cent of people with asthma are concerned about increased air pollution as a climate change impact; and 69 per cent are concerned about more frequent and severe natural disasters.
- One quarter of people surveyed said climate change has already impacted their health. Among those people, breathing issues were the most common impact (49%) followed by poor mental health (39%) and hay fever (39%).

Asthma Australia acknowledges the work of the Australian Government and Department of Health and Aged Care in developing the National Health and Climate Strategy and the collaborative engagement that has occurred through this process. Asthma Australia is actively engaged in plans to address emissions from inhalers as a part of the National Health and Climate Strategy. This is by initiating a process that brings together a range of stakeholders to examine ways the healthcare sector and consumers can improve asthma management and reduce emissions from inhalers.

Federal Budget Priority Areas

Asthma Australia thanks the Australian Government for the ongoing commitment to addressing the burden of disease due to asthma by continuing funding for the Asthma Management Program. This funding will enable Asthma Australia to continue the work of improving the lives of people with asthma in Australia.

The key area where further work is required is in asthma prevention to reduce morbidity and mortality, support improved quality of life and reduce demand on Australia's health care system. This has become even more important with the impacts of climate change that are increasing the risks for people living with asthma and placing others at even greater risk of developing asthma.

The importance of respiratory health has been highlighted through the COVID-19 pandemic, the 2019–20 bushfire smoke crisis and 2021 floods. The Bureau of Meteorology declared in September that El Niño and a positive Indian Ocean Dipole (IOD) are underway, which means warmer and drier conditions will be more likely over spring and summer. A positive IOD contributes to greater fire risk over southeast Australia in spring, while El Niño contributes to elevated fire risk over both spring and summer.¹⁸ The likelihood of conditions that will impact people's health, particularly from bush fire smoke, means that investing in measures that improve the safety of people's homes and gives them access to reliable information, will not only assist but save lives.

In addition to the declaration of an El Niño by the BOM, the Australasian Fire Authorities Council (AFAC) released their Seasonal Bushfire Outlook for Spring 2023 which identified that Australia's climate influences have shifted significantly since last spring, contributing to an increased risk of bushfires across Australia. The forecast of warmer and drier conditions in these areas present increased risk of fire this season.¹⁹

Ensuring we are addressing asthma risk factors and giving people the tools to make lasting changes to live healthy lives is vital. It is particularly important to ensure people with asthma on low incomes receive the support they need to live in healthy home environments.

A focus for Asthma Australia is on addressing air pollution given the significant impacts poor air quality has on exacerbating and developing asthma. Air pollution is second only to tobacco use as a cause of death from non-communicable diseases globally, and the United Nations recognises air pollution as one of five risk factors for noncommunicable diseases, alongside unhealthy diet, tobacco use, harmful use of alcohol and physical inactivity.²⁰ Exposure to environmental hazards (such as poor air quality,



bushfires and thunderstorms) is both a risk factor for the development of asthma and a trigger for asthma symptoms in people who have asthma.²¹

People should be empowered and provided with information to make informed choices about their health when it comes to air quality. This is so they engage in their daily activities understanding and knowing what the air quality conditions are, no matter where in Australia they live.

As climate change progresses and extreme weather events increasingly drive people to seek refuge in their homes, housing conditions and the absence or removal of internal health triggers become ever more important. With the harms of gas energy becoming increasingly well known, it is important that people are guided away from replacing gas heaters with wood heaters, which risks increasing pollution and damaging health. Homes utilising efficient and cleaner forms of energy can help improve both indoor and outdoor air quality and contribute to climate change mitigation. Electrification provides higher energy efficiency and reduced consumer costs than either gas or wood.²²

Asthma Australia's AirSmart public education campaign and proposal on air quality monitoring focus on empowering the community to access information about air quality to understand how it impacts their health, while also recognising we must improve the availability of air quality information.

Asthma Australia's 2024-25 Pre-budget Submission places an emphasis on air quality with the increasing recognition of the impacts air quality in all settings has on the health of people with asthma and due to environmental and climate change impacts. We are seeking investment in the AirSmart public education campaign to provide the information, tools and strategies people need to minimise or avoid exposure to unhealthy air; investment in measures which improve community access to local air quality information; financial support for people with asthma on low incomes to improve the air quality in their homes; and measures to support housing that is resilient to hazards and extreme weather events.

We also want to work towards further implementing models of health care that focus on adaption to climate change and prevention to address the impacts of asthma in the community. This can be achieved by investing in technology that improves the air quality in and liveability of people's homes, while also addressing the impacts of climate change.

We are also seeking a targeted round of MRFF investment in childhood asthma of \$50m to address the most common chronic disease in children up to the age of 14 years.



Proposal 1: A national rollout of the AirSmart public education campaign to reduce the health impacts of air pollution

There is a gap in Australian public health messaging around the impacts of air pollution which disproportionately affect the health and wellbeing of people with asthma. Asthma Australia has taken the lead on developing and piloting a public education campaign and air quality app called 'AirSmart'.

AirSmart fills the need for community education and guidance around air quality which was revealed by the 2019–2020 bushfire smoke crisis. This need was recognised by the Royal Commission into National Natural Disaster Arrangements and the Final Report of the NSW Bushfire Inquiry following the 2019–20 bushfires. The need for access to air quality information and guidance will only increase as climate change continues to increase the frequency and severity of events causing poor air quality.

AirSmart was developed with the guidance of a panel of environmental and public health experts, including from the University of Sydney and the NSW Department of Planning and Environment. AirSmart was piloted in communities across southern NSW, ACT, and regional Victoria over a six-week period in July and August 2022. The pilot was evaluated and showed strong indications that Australians want access to local, responsive air quality information and tools. Engagement in the campaign, as shown by over 16,000 app downloads and 23,000 website views in just six weeks, suggests that air quality is an important issue for many Australians.

AirSmart includes an air quality public health campaign which raises awareness about air quality and promotes the AirSmart app as a source of air quality information:

- **The public health campaign** aims to raise community awareness about poor air quality, and how to interpret health advice, so people can protect themselves against exposure to air pollution and the associated health impacts. This evidence-based educational initiative is an Australian-first, using a mix of traditional and digital media channels to reach the full community. The creative process behind the AirSmart campaign included consumer research and was guided by environmental, public health and social marketing experts. The campaign includes 15 and 30 second television commercials, a radio commercial, social and digital assets, a website, billboards, and an app.
- **The AirSmart app** is a consumer tool for accessing local, real-time air quality information and related health advice. Asthma Australia used human-centred design principles to design the AirSmart app. The AirSmart app provides consumers with localised 'real-time' air quality, and strategies to avoid or minimise poor air quality exposure. The app also provides personalised notifications and health advice at specific air quality levels to provide consumers with specific daily advice about the most effective protection.

Given the bushfire predictions for summer 2023/24 and the urgency to provide Australians with access to air quality information and guidance, AirSmart provides a solution to reduce the impact of poor air quality on impacted populations.

Asthma Australia is seeking funding contributions from all governments – state, territory and federal – towards a national AirSmart campaign. The investment requested in this proposal would fund a national campaign. If additional funding was received from states and territories, this would enable increased investment during air quality emergency incidents and ongoing advertising and promotion through the year.

Asthma Australia is providing two proposed options for funding for activating AirSmart in the months of November and December in jurisdictions including Sydney, Regional NSW, Regional Victoria, Brisbane, and Regional Queensland, with television the main difference which will impact reach delivery and recall of campaign.



INVESTMENT REQUESTED: The Australian Government contribute: Option 1 \$12,767,760 (including television); or Option 2 \$6,481,760 (excluding television) over two years for a national roll-out of Asthma Australia’s AirSmart public education campaign to reduce the impacts of poor air quality.

Option 1 - INVESTMENT REQUESTED: \$12,767,760 over two years

Activating the AirSmart public education campaign in jurisdictions with high bushfire alert in summer 2024/25 including television.

Item	2024–25	2025–26
Media placement	\$6,100,000	\$6,405,000
App development and maintenance	\$39,800	\$42,000
Evaluation and consumer research	\$30,000	\$32,000
Project management costs	\$57,960	\$61,000
TOTAL	\$6,227,760	\$6,540,000

Option 2 - INVESTMENT REQUESTED: \$6,481,760 over two years

Activating the AirSmart public education campaign in jurisdictions with high bushfire alert in summer 2024/25 excluding television.

Item	2024–25	2025–26
Media placement	\$3,055,000	\$3,207,750
App development and maintenance	\$39,800	\$42,000
Evaluation and consumer research	\$20,000	\$21,000
Project management costs	\$46,960	\$49,250
TOTAL	\$3,161,760	\$3,320,000



Proposal 2: Increasing access to local air quality information

A key finding from the 2021 State of the Environment report was that better information could reduce the impact of poor air quality.²³ The report recognised that communities need real-time, local air quality information during periods of poor air quality.

However, many communities around Australia do not have access to local air quality information because there are not enough air quality monitoring stations. Regional and rural populations commonly lack local air quality monitoring facilities, which can be particularly problematic during bushfires if people in these communities are disproportionately affected by smoke from nearby fires. However, even in metropolitan areas, air quality monitoring stations span many suburbs, meaning localised peaks of air pollution are neither detected nor reported on.

Air quality monitoring stations provide highly accurate information, however, they require suitable locations and can be expensive to establish and run. In contrast, low-cost air quality sensors provide air quality data at a good level of accuracy. Additionally, there is more flexibility in placement as the sensors can be affixed to premises such as schools or council buildings. Some sensors require a data connection while others have built in communications.

Responsibility for air quality is shared by the federal and state and territory governments, with states and territories having prime responsibility for monitoring and managing air quality. All governments are required to help maintain and improve air quality and deliver on actions through the National Clean Air Agreement, which includes as one of four strategic approaches:

Better knowledge, education and awareness are essential requirements to inform policy decisions and to help empower communities and individuals to better deal with air pollution. Knowledge, improved through information sharing and research, is critical to plug existing data gaps, identify future trends and help focus efforts in managing air quality, and explore innovative measures to address air pollution. The Agreement's initial work plan also includes a two-year plan for reforms to improve the National Pollutant Inventory.²⁴

The National Clean Air Agreement work plan for 2021-23 includes projects on nationally consistent public air quality information and health advice. This project has a framework agreed by jurisdictions and providing guidance on low-cost sensors measuring air pollution to the public led by NSW and SA.²⁵

The Commonwealth Government should fund a low-cost air quality sensor pilot program as an important step towards ensuring all Australian communities have access to air quality information. The proposed pilot program would enable state and territory environment agencies responsible for air quality monitoring and reporting to trial low-cost sensors. It would also increase understanding of how these sensors can be integrated into the existing monitoring networks and how information can be shared with the public.

Investing in increasing access to local air quality information would act on the recommendations of the Royal Commission into Natural Disaster Arrangements and the State of the Environment Report, as well as progressing the National Clean Air Agreement work plan. This information is critical to ensure that people vulnerable to the health impact of air pollution exposure are able to protect themselves and their families.



INVESTMENT REQUESTED: Fund a low-cost air quality sensor pilot program as the first step towards ensuring all Australian communities have access to air quality information. Costs to be determined in consultation with states and territories as a part of the National Clean Air Agreement based on population size and the most appropriate technology for each jurisdiction.



Proposal 3: Addressing indoor and outdoor air quality by supporting people with asthma on low incomes to install cleaner and more efficient forms for heating, cooling and cooking in their homes

The 2022-23 Federal Budget had a significant focus on climate change and moving to cleaner technologies to provide power to the community including through the Powering Australia initiative.

The Australian Government's National Housing and Homelessness Plan (the Plan) Issues Paper recognised the relationship between climate change, housing and health, however, only recognising the impacts of disasters on housing availability. Asthma Australia emphasised the importance of a broader understanding of the relationship between climate change, housing and health which recognises the role of housing conditions in mediating climate change health impacts.²⁶

Asthma Australia recognises the importance of improving home energy efficiency to reduce energy costs and greenhouse gas emissions. Energy efficiency measures can also improve health outcomes. A key part of reducing emissions and the significant issue of indoor air quality and people's health, is addressing the means by which people heat and cool their home and the methods they use to cook. The effects of these issues may be particularly acute for people who rent or live in social housing as they may have limited means or agency to make necessary improvements to their homes.²⁷

The home environment is particularly important for people with asthma and allergies, who are sensitive to substances we all breathe. These substances are referred to as 'triggers' because they can trigger asthma or allergy symptoms. A number of triggers can be found in Australian homes, some of which can also increase the risk of a person who doesn't have asthma developing the condition. Indoor air pollution from heating with gas or woodfire heaters and cooking with gas cooktops produces a range of pollutants and can worsen indoor air quality. Exposure to these pollutants can trigger asthma flare-ups and contribute to the development of asthma.²⁸

Asthma Australia recently undertook a nationally representative survey to look at homes, health and asthma in Australia, which was completed by 5,041 people. The survey asked participants about heating their homes. The preferred heating methods were reverse cycle air and central, which are the most efficient options and provide cooling in the warmer months. However, nearly half (43%) of respondents reported they do not currently have their preferred form of heating at home. One in five respondents (22%) rely on portable electric space heaters (22%), 13% used wood heaters, 8% use flued gas heater and 7% use unflued gas heaters. Of those who don't have their preferred source of heating, the most common barrier to switching was the cost of replacing their heating system (43%), followed by not being able to make the changes they would like to due to not owning the property (32%).

The most common type of cooking was gas (48%) followed by electric (41%). Only 7% had an induction cooktop or a combination cooktop.²⁹

Introducing financial support for low-income households to replace inefficient methods of household heating and cooking would address health impacts associated with poor indoor and outdoor air quality, assist low-income households to address cost of living pressures and reduce greenhouse gas emissions. As noted, this is particularly important for people in situations where they are unable to make these changes due to cost or not owning their home. These factors have been recognised in the Government's funding for community batteries and solar. The Powering Australia initiative should be expanded to include financial assistance to replace and install cleaner forms of heating, cooling in people's homes and include owners of rental properties to encourage them to make these replacements.



INVESTMENT REQUESTED: The Powering Australia initiative should be expanded to include financial assistance to replace inefficient heating and cooking with electric appliances and include owners of rental properties to encourage them make these replacements. An amount comparable to other Powering Australia initiatives.



Proposal 4: Support housing standards and retrofits that reduce exposure to airborne hazards

Asthma Australia recommends that policy measures to update housing standards and retrofit existing homes to increase hazard resilience also reduce exposure to airborne hazards, including hazards caused by climate change.

Climate change is increasing the frequency and levels of outdoor airborne hazards such as bushfire smoke, dust storms, thunderstorm asthma and ground level ozone.³⁰ However, homes in Australia are typically leaky, meaning airborne hazards can easily enter many homes.³¹ It is also important to ensure homes can be ventilated when outdoor conditions are favourable. Ventilation disperses outdoor pollution that has entered a home and pollution generated indoors; it also prevents aeroallergens such as mould and dust mites.³²

Housing standards and modifications therefore need to both improve the airtightness of homes to limit the infiltration of outdoor air pollution and allow adequate ventilation to reduce the growth and accumulation of airborne hazards in the home when ambient air quality is good. The balance between these considerations may vary between regions and it should reflect local conditions and climate change risks. It is critical that governments support retrofitting of existing homes, as well as improving housing standards, prioritising people with asthma and others who are highly vulnerable to climate change health impacts. Government programs to retrofit housing should cover social housing dwellings and people on low incomes.

Asthma Australia's submission to the National Housing and Homelessness Plan (the Plan) Issues Paper recommended that it should recognise the need to retrofit existing homes, prioritising people with asthma and others vulnerable to climate change health impacts. Home retrofit programs should be designed and funded to provide protection against local conditions and climate change risks and may include indoor air quality improvements such as sealing draughts and ensuring adequate ventilation. These programs should prioritise social housing dwellings and people on low incomes.

The development of the Plan and significant investment in social and affordable housing through the Housing Australia Future Fund present a unique opportunity to ensure that the new homes are both healthy and energy efficient. Equally, existing homes undergoing retrofitting should provide healthy indoor environments. There may not be another opportunity where the policy settings align to influence housing design and investment across all levels of government – state, territory and federal.

INVESTMENT REQUESTED: Australian Government Home retrofit programs be designed and funded to provide protection against local conditions and climate change risks including indoor air quality improvements such as sealing draughts and ensuring adequate ventilation. These programs should prioritise social housing dwellings, people on low incomes and people with chronic conditions that put them at greater risk of adverse health impacts, such as asthma.



Priority 5: Medical Research Future Fund childhood asthma investment round

The Medical Research Future Fund (MRFF) was created in 2015 by the Australian Government to transform health and medical research and innovation to improve lives, build the economy and contribute to health system sustainability. Funding is provided for innovative medical research based on a comprehensive list of principles including funding specific health issue initiatives which are assessed on scientific rigour, where there is both burden and unmet research need.

Lung disease is a significant health issue for Australians: seven million Australians live with a lung disease. While 9% of total disease burden between 2008 and 2017 was attributable to lung diseases and lung cancer,³³ only 2% of total Australian institutional research funds were awarded to research into these same diseases.³⁴ Increased investment in lung and respiratory research is urgently needed to address the substantial and preventable burden on individuals, their families, the healthcare system, and the broader economy.

As a member of the Lung Health Alliance, Asthma Australia, in collaboration with Lung Foundation Australia, Thoracic Society of Australia New Zealand, Cystic Fibrosis Australia and the National Asthma Council Australia, developed a proposal for an MRFF Respiratory Health Mission which was a priority for funding in Asthma Australia's 2023-24 Pre-Budget Submission.

The vision of the Lung Health Alliance's proposed Mission is to prevent lung disease and discover a cure for all Australians with lung disease. The goal of the Mission would be to reduce the avoidable burden of respiratory disease in Australia: reduce deaths; reduce hospital presentations; increase quality of life and reduce the disease burden; and reduce the onset of respiratory disease. In subsequent grant rounds announced by the MRFF, there was approximately \$90m of funding dedicated to respiratory health. However, few grants were announced addressing childhood asthma or childhood respiratory disease, despite the disproportionate burden faced by this group.

In 2022, Asthma Australia launched the National Asthma Research Agenda (NARA)³⁵ which defines the research priorities for asthma according to people who rely on the research for their day-to-day needs - consumers, their families and healthcare professionals. The NARA describes the top 10 research priorities, developed through a rigorous consensus process with end users of asthma research. Priority number one was asthma in children.

Childhood asthma is extremely burdensome and contributes to quality-of-life impacts across the life course. Asthma is the leading cause of disease burden and most common chronic disease in children up to the age of 14 years. Childhood asthma is a unique public health challenge and requires proportionate attention by respiratory health and research leaders, innovators, planners and governments.

Despite this burden experienced by children, there has not been the technological development in the form of new medicine, new device, sustained uptake of healthcare enablers, or novel model of care for this age group in the last 20 years. While there has been some progress in relation to the identification and prediction of life course trajectories in asthma, there is still much to learn about tailoring intervention points, novel evidence-based interventions and discoveries with the potential to terminate the condition. Even though we have seen notable other chronic conditions in childhood achieving lasting disease modification, control and remission, we haven't seen comparable progress in children who are otherwise on course for a lifetime of burden from asthma.

Asthma Australia is calling for a targeted round of MRFF investment in childhood asthma of \$50m with a focus on:

- Translational trials aimed at improving quality of childhood asthma care, health outcomes and quality of life.
- Discovery trials aimed at better understanding longitudinal trajectories of childhood asthma, towards evidence-based therapies that modify disease trajectories.



- Clinical registry partnerships aimed at improved real world clinical evidence and holistic outcomes.
- Environmental exposures and disease pathogenesis.

Evidence suggests that \$1 invested in health and medical research results in \$2.17 in net health benefits.³⁶ Given the disproportionate burden faced by children with asthma, investment in health and medical research with this specific focus has the potential to return net results far in excess of the \$2.17 modelled.

INVESTMENT REQUESTED: A targeted round of MRFF investment in childhood asthma of \$50m to address the most common chronic disease in children up to the age of 14 years.



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