

HEALTHY PLANET, HEALTHY PEOPLE

Doctors protecting
our future.

WHY ACTION IS NEEDED

2015 was the warmest year on record at **0.87°C** above norm

OVER 1100 **23%** of all deaths worldwide caused by environmental factors (WHO)

ONE IN 9 Australian children has asthma – increasing pollens related to climate change can worsen asthma

400,000 deaths per annum globally due to climate change

GREATER THAN \$11 BILLION annual Australian health cost of air pollution

15 **\$13.8 BILLION** annual financial burden of physical inactivity on the Australian economy

OF THE **>75%** of known fossil fuel reserves to remain unused if global warming to be limited to 2°C **20%** accountable deaths from outdoor air pollution in Australia

16 **30000** estimated Australian deaths attributable to air pollution each year **274**

warmest years on record occurred since 2001

150-200 MILLION people expected to relocate by 2050 due to climate change

excess deaths attributable to heatwave preceding Victoria's Black Saturday Fires

WHO WE ARE

Doctors for the Environment Australia (DEA) is the only organisation of medical professionals in Australia solely focused on promoting good health through care of the environment.

We are GPs, surgeons, physicians, anaesthetists, psychiatrists, paediatricians, public health specialists, academics, medical students and researchers. We bring together an extraordinary level of leadership and expertise drawn from every branch of medicine. All our members are volunteers who strongly support the objectives of DEA.



Professor David Shearman AM

Human health and the environment are inextricably linked – there's just no getting away from it

Professor David Shearman AM,
co-founder and Honorary Secretary

Since forming in 2001, we have been guided by our vision '**Healthy Planet, Healthy People**'. We use compelling scientific evidence to demonstrate the important health benefits of clean air and water, biodiverse natural places, stable climates and sustainable health care systems.

We raise the alarm and act when public health is threatened by environmental problems such as climate change, air pollution, fossil fuel impacts and deforestation.

Our activities are diverse. We engage with our fellow medical colleagues, politicians, the media and the wider community; hold briefings with leading policy makers; present

information at parliamentary inquiries; speak at community forums; write comment articles; provide expert opinion to journalists; publish peer-reviewed studies and write position papers; and even line up for community fun runs to promote our vision.

DEA's work is supported by a national Scientific Advisory Committee of acknowledged scientific experts, including Australian of the Year award recipients and a Nobel laureate. As doctors, our professional integrity is of paramount importance.

We are independent from political parties and corporate donors.

This is the '**Critical Decade**' for tackling climate change, and there has never been a more important time for collective action.

DEA's leadership skills, knowledge, commitment and professionalism are needed more than ever.

WHY DEA?



**Prof Kingsley Faulkner, AM
MBBS, FRACS**
**Chair, Doctors for the
Environment Australia.**
**Past President, Royal
Australasian College of
Surgeons.**
**Past Chair, Australian Council
on Smoking and Health**

As a medical doctor whose boyhood was spent on a vulnerable farm in Australia's south west corner, whose initial studies were in agriculture, and whose pivotal year was as a young doctor with the RFDS in the Pilbara confronting the tragedy of Wittenoom and asbestos, I had an early introduction to the impacts of the environment and industrial hazards upon agriculture and health.

As a concerned advocate on smoking and health for over 30 years, I have also experienced the power of scientific evidence, persuasion and determination to achieve substantial health outcomes.

I was drawn to DEA as it is a respected and effective medical organisation, which uses evidence based science and coordinated advocacy to raise awareness about the environmental challenges to health.

There is no doubt DEA is needed at this critical juncture in history. The pathways we choose will impact humanity's health for millennia.

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Professor Kingsley Faulkner, AM



**Dr Karen Kiang, MD, MPH,
DTM&H, FAAP**
**DEA Climate Change and
Victorian Committee member**

I initially trained in both adult and paediatric medicine in the US, then focused my career in international child health and refugee and asylum seeker health after moving to Australia.

A Masters of Public Health unit on Climate Change and Health connected the dots about the close link between environment and health, especially when I realised that almost 90% of deaths and disability from climate change occur in children.

I joined DEA to work with a community of like-minded, passionate people. I've learned how to approach politicians and policymakers and how to mobilise much larger groups of people.

Climate change and child health are particularly important to me as the mother of a 6 year old boy, to whom I want to leave a safer and healthier world.

FROM DOCTOR TO CHANGE AGENT

Following our mission:
**protecting health
through care of the
environment.**

*It's about your
health. Unfortunately
I have some bad
news...*

This is the last thing anyone wants to hear from their doctor. However scientific evidence shows more and more people are experiencing illness from preventable environmental factors.

The quality of our air, water and soil is being degraded. The health of our planet itself is in danger and we rely on it to keep us healthy.

The Lancet in 2009 described climate change as **"the biggest global health threat of the 21st century"**.

In Australia, from major cities to regional and remote communities, everyone is affected. The young, the elderly and those with pre-existing disease are particularly vulnerable from extreme weather events, heat stress, asthma and food poisoning.

*It's about your
health. Fortunately
I have some good
news...*

Doctors make daily management decisions based on the best available evidence. In the case of climate change the evidence is irrefutable and demands action.

The medical profession has a proud history of influencing public policy to protect and improve health. This has occurred with multiple policy directions in the past, such as tobacco control.

The real bottom-line of climate change is its risk to human health and quality of life

World Health Organization (WHO)
Director-General Margaret Chan

The same principles of duty of care and leadership mandate action on climate change.

DEA is proud of our many successes so far. However the next few years are absolutely critical, not only to avert a climate change disaster at home and globally but to also improve health.



Dr David King, GP and DEA Management Committee member during a patient consultation.

As the Lancet published in 2015, **"Tackling climate change could be the greatest global health opportunity of the 21st century"**.

If we act now, there is every chance that we will succeed.

OUR FOCUS



Climate change

Climate change affects health through extreme weather events; air quality degradation; spread of infectious diseases; threats to food and water supply; socio-economic effects; displacement of persons; and impacts on mental health.

DEA is the pre-eminent Australian medical organisation to raise awareness of the health threats; to work towards preventing unmanageable climate change; and to highlight the health benefits of minimising further damage.

DEA's comprehensive report **No Time for Games: Children's Health and Climate Change** highlights our children's particular vulnerabilities to climate change.



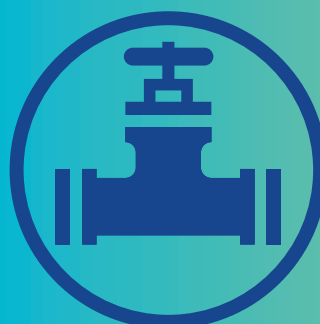
Coal as a health hazard

Coal combustion currently generates around 80 per cent of Australia's electricity, resulting in Australia having one of the most carbon intensive electricity supplies in the world.

Our coal industry uses vast amounts of water and emits dangerous air pollutants including particulate matter, sulphur dioxide, nitrogen oxides, mercury and arsenic.

The true cost of electricity generated from coal is great. Coal pollution causes heart and lung disease, cancer, premature death and contributes over \$2.6 billion to Australia's health bill every year.

DEA has been at the forefront of action to limit the health hazards of our coal industry, and we continue to highlight its hidden financial, health and environment burden on the wider community.



Risks from unconventional gas

DEA was the first medical organisation to raise the alarm in Australia concerning the health risks from gas extracted using unconventional methods.

DEA has presented information to many parliamentary committees and has called for tighter monitoring and regulation of the industry.

There is a real risk of adverse public health impacts resulting from coal seam gas, shale gas and tight sands gas operations.



Biodiversity

Biological diversity of species, and the ecosystems they form, underpins our health. More than half of all medicines are derived from nature.

DEA works to prevent destruction of biodiversity from land clearing, deforestation, agriculture, pollution, ocean acidification and climate change.



Divestment

Just as health conscious organisations and investors no longer invest in the tobacco industry, DEA actively encourages institutional and personal investors to sever links with fossil fuel industries.

DEA has been at the forefront of the divestment movement. One of our many actions has been to co-produce with the Climate and Health Alliance a pivotal report, **Investing in Health**. This publication outlines why health professionals and organisations should divest from fossil fuel industries on health and financial grounds.



Health systems savings

Our healthcare system is a major fossil fuel consumer and waste generator. Decreasing the environmental footprint of the health system can simultaneously achieve significant healthcare quality and financial benefits.

DEA doctors research, publish and present to healthcare communities on ways to reduce their environmental footprint, whilst also influencing their own work practices.



Air pollution

About 3000 Australian deaths per year are attributable to air pollution, as well as considerable illness with the resultant health cost estimated to be over \$11 billion annually.

DEA actively advocates for enforcing stronger national standards of airborne particle levels that cause both lung and heart diseases.

All communities should be protected from air pollution irrespective of size and location.

DEA has highlighted the significant health impacts from air pollution in countless presentations to community forums and policy makers.



Renewable energy

Expansion of renewable energy industries will assist the urgently needed transition from fossil fuels, whilst immediately improving health for communities, saving lives and promoting jobs and economic growth.

DEA encourages the development of renewable energy sources through parliamentary submissions and community resources and support.



Forests as health resources

Forests are environmental buffers that purify and protect our water sources, soils, air and biodiversity, and affect climates. Globally, forests store around 300 billion tonnes of carbon in live and dead vegetation biomass and soil, however this can be rapidly released into the atmosphere by clearing and logging activity. There is now strong evidence that old growth forests are worth more in monetary terms when left alive than when destroyed.

DEA has worked to protect and highlight the importance of old growth forests nationally including Tasmania's Tarkine area, Victoria's East Gippsland and Central Highlands regions and the forests of the south west.



Active transport

Physical inactivity is a major risk factor for obesity and chronic diseases such as diabetes and cardiovascular disease, and it is estimated to add an annual financial burden of \$13.8 billion to the Australian economy. Walking, cycling and public transport have the dual benefits of increasing physical activity whilst decreasing the use of polluting vehicles.

DEA works to highlight the co-benefits for health, local environments and carbon emissions from increased active transport.

MAKING A DIFFERENCE

NATIONALLY

- DEA plays an important role in educating and advocating for better health outcomes through policies around climate change, pollution and environmental degradation.
- Our annual scientific conference, iDEA, draws eminent speakers and hundreds of delegates from across the nation.
- We present widely at community and medical forums, conferences, seminars, and within the medical curriculum.

- DEA's website has an extensive list of policies, position statements and helpful resources. It also gives the background to our parliamentary submissions and our many interactions with politicians, the media and community.

QUEENSLAND

- DEA supports communities and concerned GPs by highlighting the evidence of the legitimate health risks from the rapid, poorly regulated expansion of the unconventional gas industry.
- We have added our voice to calls for a Royal Commission to undertake a full independent inquiry into the human impacts of the unconventional gas industry.
- Members have written

submissions and are actively involved in local advocacy work on the health threats of the expanding coal industry in south-east Queensland and the proposed Galilee Basin.

- We have submitted to the Great Barrier Reef Strategic Assessment, urging a moratorium on coal and gas development to prevent further reef destruction.

NEW SOUTH WALES

- DEA analyses the evidence and informs the public and politicians about the health dangers of air pollution from the coal industry in the Newcastle / Hunter Valley region which has some of Australia's most polluting coal mines.
- We were the first medical organisation to raise health concerns about the expanding unconventional gas industry at both NSW and federal inquiries, with DEA members also presenting at countless community forums.

VICTORIA

- DEA was the first Australian medical organisation to legally challenge a proposed new coal fired power plant abutting the town of Morwell due to concerns about the health impacts for local people and climate change.
- We supported the Anglesea community by highlighting the serious health hazards from their local coal industry, contributing to pressure for its closure which occurred in 2015.
- We worked tenaciously to raise awareness of the potential health risks from a proposed unconventional gas industry, resulting in a permanent ban in 2016.

WESTERN AUSTRALIA

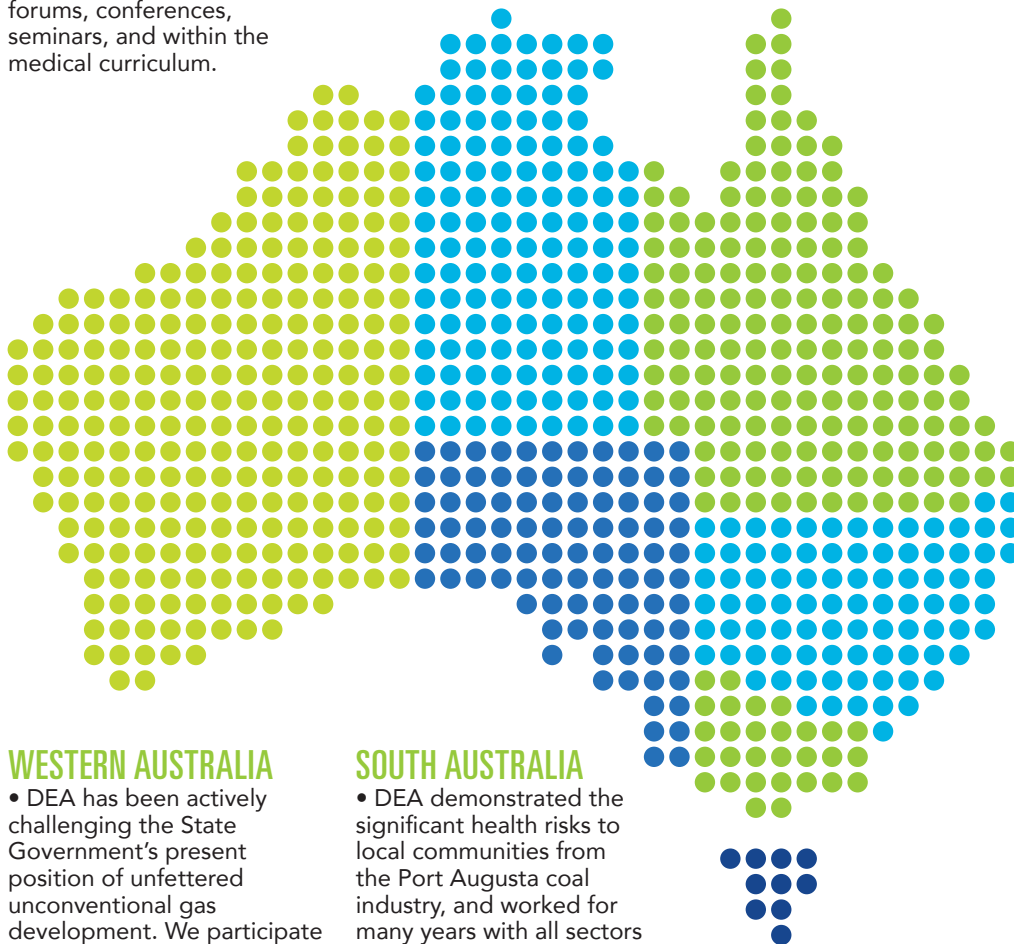
- DEA has been actively challenging the State Government's present position of unfettered unconventional gas development. We participate in community events, write letters, feature on talkback radio and outline to politicians the evidence supporting a moratorium on this industry.
- We have been highlighting the potentially serious health risks associated with the Perth Freight Link road project.

SOUTH AUSTRALIA

- DEA demonstrated the significant health risks to local communities from the Port Augusta coal industry, and worked for many years with all sectors of government and the Repower Port Augusta alliance towards shutting down the operations.
- We are now actively campaigning for Port Augusta to become the renewable energy capital of Australia – creating jobs and improved health outcomes.

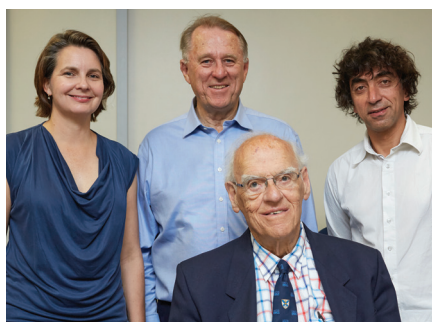
TASMANIA

- DEA has played an active role in the State Government's hydraulic fracturing inquiry, which has resulted in a five-year ban on fracking in Tasmania.
- We work to protect Tasmania's vast biodiversity, forest resources and, in particular, the Tarkine wilderness area.



PROUD TO SUPPORT DEA

The work of Doctors for the Environment Australia is overseen by a National Management Committee and is supported by a Scientific Advisory Committee of distinguished health professionals and scientists.



DEA Management Executive from left:
Dr Eugenie Kayak, Deputy Chair
Prof Kingsley Faulkner AM, Chair
Dr Hakan Yaman, Honorary Treasurer
Prof David Shearman AM, Honorary Secretary



Professor Fiona Stanley
AC, FAA, FASSA

Choosing now to limit further climate change and protect our environment offers a major opportunity to immediately improve the health of our children and to prevent the dire consequences of inaction. Medical professionals have an important role to play in guiding the direction of Australia's health and wellbeing.

If we do nothing, how will our generation, who had the chance to act but failed to do so, justify our inaction?

As a parent, a grandmother and a public health professional with a long career in primary prevention, I strongly urge you to support DEA and the leading work they do to protect health – present and future.

Former Australian of the Year, Professor Fiona Stanley is one of Australia's most respected epidemiologists spending much of her career researching the causes of major childhood illnesses.



Professor Peter Doherty
AC, FAA, FRS

Climate change poses such an unacceptably high risk to public health, it can potentially undo the gains of the past 50 years.

We have a duty of care, for ourselves, our children and all complex life forms to act on this threat. There is no better time to start than now.

Defending the science of climate change and influencing others to as well, is vital to the future of humanity.

Former Australian of the Year, Professor Peter Doherty won the Nobel Prize for Physiology or Medicine in 1996 with Rolf Zinkernagel for their discovery of how the immune system recognises virus-infected cells.

DEA Scientific Advisory Committee:

Prof Stephen Boyden AM
Prof Emeritus Chris Burrell AO
Prof Peter Doherty AC
Prof Michael Kidd AM
Prof David de Kretser AC
Prof Stephen Leeder AO
Prof Ian Lowe AO
Prof Robyn McDermott

Prof Lidia Morawska
Prof Peter Newman AO
Prof Emeritus Sir Gustav Nossal AC
Prof Hugh Possingham
Prof Lawrie Powell AC
Prof Fiona Stanley AC
Dr Rosemary Stanton OAM
Dr Norman Swan

BECOME PART OF OUR VISION

There is a fundamental choice: a sick planet with sick people or a healthy planet with healthy people? DEA is working to protect present and future health. But we are running out of time.

With your help, we can further strengthen the work of our committed, professional medical volunteers so our voice will have an even greater influence where it matters – at the highest political level and within the wider community.

We depend on people like you to support us, to join us, to share our sense of purpose to drive urgent climate change action, and prevent further degradation of our environment.



*We need to ensure our voices and concerns
are listened to and acted on – the health of the
people of our nation depends on it*

Professor Michael Kidd, AM.
Member of DEA's Scientific Advisory
Committee; Former Chair DEA; former
President RACGP; President World Organization
of Family Doctors (WONCA) and Executive
Dean Faculty of Medicine, Nursing and Health
Sciences Flinders University

To find out how you can help DEA work towards a
Healthy Planet, Healthy People please contact us.
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Printed on EcoStar 100% recycled paper
Design: mightyworld

www.dea.org.au

As health professionals we recognise that climate change is a health emergency affecting the lives of Australians and millions of people worldwide - we must act now to protect our health and the health of our children and future generations.

Dr Dimity Williams, GP,
Chair DEA Biodiversity
Committee