

POSITION STATEMENT

One Health

2023

Preamble

Human health is ultimately dependent on the health of the planet and its ecosystem. When allowed to thrive, the planet and its ecosystems provide humans with food, water, medicines, regulates the climate, and protects against pests and diseases.

The One Health concept recognises the link between human, animal, and environmental health. A One Health approach to policy, legislation, programs, and research is where multiple disciplines work collaboratively to improve public health outcomes and strive for a more sustainable planet.^{1,2}

A One Health approach can be applied to health areas such as food safety, climate change, zoonotic disease prevention and control, environmental health, and antimicrobial resistance. Countries should seek to improve all these areas by collaborating between different disciplines for better health prevention, monitoring, and health risk mitigation.

Indigenous cultures including Aboriginal and Torres Strait Islanders have known, valued, and practised the important connection to the environment and all living things for millennia. Aboriginal and Torres Strait Islanders should have a central role in developing One Health policies. Connection to Country is a key determinant of health for Aboriginal and Torres Strait Islander peoples, and their expertise in caring for country is crucial to achieve better One Health outcomes. The AMA acknowledges the similarities between the One Health concept and Connection to Country.

1. General principles

- 1.1. The AMA recognises the importance of a One Health approach to protecting public health.
- 1.2. A One Health approach should be applied at all policy levels (including local, regional, federal, and global) in all disciplines to avoid jurisdictions working in silos. Important stakeholders include government departments and agencies, educational and research bodies, Aboriginal and Torres Strait Islander communities, non-government organisations, and industry bodies.
- 1.3. Leadership from Aboriginal and Torres Strait Islander communities is required at all aspects of One Health policy and implementation.

- 1.4. The AMA supports the One Health principles upheld by the One Health Quadripartite partners, developed by the One Health High-Level Expert Panel.³

2. The role of the Australian Government

- 2.1. The Australian Government should develop a One Health National Strategy that outlines a multidisciplinary approach to achieving One Health objectives:
 - (a) the strategy should outline a governance mechanism, including roles and accountabilities of a One Health approach to decision making at local, regional, national, and global levels. This includes specific action plans for the health, environment, water, food and agriculture sectors, and government organisations.
 - (b) the strategy should identify gaps in existing structures and provide advice on how to mainstream One Health approaches into existing structures, policies, and programs.
 - (c) adequate resources for implementing a One Health approach should accompany the strategy
 - (d) the strategy should also include a framework for monitoring and identifying beneficial outcomes of a One Health approach.
- 2.2. Australia should have an overarching surveillance framework that includes disease monitoring and reporting across human, animal, and environmental health. This framework should feed into a global One Health surveillance network.
- 2.3. The AMA supports a 'health in all policies' approach. As each Parliamentary Bill or legislative instrument requires a Statement of Compatibility with human rights, Bills should also consider and address the impact on the health of humans, animals, and the environment.
- 2.4. Australian Centre for Disease Control:
 - (a) It is imperative the Australian Centre for Disease Control (CDC) adopt a One Health approach to its operations and report annually on how it is applying One Health.
 - (b) To achieve this, the Australian CDC should be multidisciplinary and incorporate a range of experts in agricultural, veterinary, and environmental professions in addition to biological sciences.
 - (c) The Australian CDC should incorporate a One Health department that works to protect human, animal, and environmental health. This department should work collaboratively with local and international environmental, animal, and human health organisations to collect and share data in a timely manner on diseases that have the potential to transmit to humans.
 - (d) The Australian CDC should also lead on Australia's response to antimicrobial resistance (see section 6).

3. One Health in the medical profession

- 3.1. Doctors have an important role in advocating for and implementing a One Health approach within the health system.
- 3.2. Doctors have an important role in the stewardship of health care resources, ensuring that the care they provide is appropriate, sustainable, and responsible for their patients and the planet.⁴
- 3.3. Doctors may implement a One Health approach into their clinical practice by:
 - (a) considering how the interaction with the patient's environment may be impacting on their health, such as obtaining a holistic history of the patient including whether they have encountered animals, or if there are any relevant events that could be contributing to poor health (for example, a heat wave)
 - (b) continuing to build a knowledge base on zoonotic disease risk and management, and report notifiable cases to the relevant authorities to improve disease monitoring and outbreak response.

4. Human health in environmental policy

- 4.1. Environmental factors, including air and water quality; biodiversity; temperatures; and extreme weather events, have significant health impacts and all sectors have a role to play in environmental protection.
- 4.2. Protecting biodiversity and implementing ecosystem restoration and conservation programs are essential to protect human health.
- 4.3. These programs should include land and sea management leadership from Aboriginal and Torres Strait Islander communities. Indigenous Ranger and Protected Area programs should be adequately funded and governed through community-controlled organisations.
- 4.4. The state of ecosystems and biodiversity should be assessed for their influence (including risks and benefits) on health.
- 4.5. In addition to the important role of protecting the environment, the AMA believes that environmental policy planning should consider One Health impacts.
 - (a) National Environmental Standards should include consideration of a One Health approach through Health Impact Assessments for projects and proposals.
- 4.6. Urban planning should use a One Health approach to guide healthy individual behavioural choices while protecting the environment. This includes ensuring that urban areas have green and blue spaces, active transport, and are sustainable and resilient to extreme weather events and environment degradation exacerbated by climate change.

5. Climate change and health

- 5.1. Climate change is a health emergency, with clear scientific evidence indicating severe impacts for humanity now and into the future.
- 5.2. Climate change mitigation, adaptation and resilience actions benefit from a One Health approach, as climate change impacts human, animal, and environmental health.
- 5.3. The AMA supports the development of a National Health and Climate Strategy, which should include a One Health approach to coordination and decision-making and a clear implementation plan.
- 5.4. Informed by the Intergovernmental Panel on Climate Change (IPCC) Synthesis report and the proposed United Nations Climate Solidarity Pact Acceleration Agenda, the AMA supports:
 - (a) Australia reaching net zero greenhouse gas emissions by 2040
 - (b) no new fossil fuel (coal and gas) projects in Australia
 - (c) ending the ability for fossil fuel companies to donate to political parties
 - (d) transitioning fossil fuel subsidies to renewable energy.

6. Antimicrobial resistance (AMR)

- 6.1. The AMA recognises that AMR is one of the most serious global One Health threats of the 21st century, undermining healthcare systems and food safety and supply, and resulting in millions of deaths.
- 6.2. AMR threatens human, animal, and environmental health and requires a national, integrated, and unified approach.
- 6.3. The Australian CDC should ensure Australia's response to AMR is coordinated and multifaceted, building on the successful work already underway by integrating existing initiatives and programs into a cohesive One Health response, and linking with various international, state and territory initiatives.
- 6.4. See the AMA's report: [Antimicrobial resistance: the silent global pandemic](#) for more detail.

7. Food and water security

- 7.1. Factors that influence food and water security such as biodiversity, environmental sustainability, poverty, and climate change, must be considered under a One Health approach.
- 7.2. It is vital that communities already vulnerable to food and water insecurity are supported by governments, industry, and the wider community to ensure equitable access to these essential things.

- 7.3. The AMA supports the Australian and New Zealand Food Regulatory System incorporating One Health considerations to ensure food security.
- 7.4. The AMA believes that consumers should be able to compare food products based on their environmentally sustainable status.

8. Education and research

- 8.1. The One Health concept is not well established in Australian policy. There needs to be increased awareness of the benefits of a One Health approach, and training and education, across the human health, animal, and environmental sectors.
- 8.2. The One Health concept should be more consistently covered in the medical curriculum.
- 8.3. Government should invest in One Health research and incorporate evidence-based One Health approaches into policies, programs, and services.

Background

One Health

The One Health concept recognises that human, animal, and environmental health are inextricably linked.

For example, communicable disease prevalence and incidence is influenced by the environment, human, and animal health. Pathogens such as bacteria, viruses, and parasites can transmit from animals to humans, causing disease in both (termed zoonotic disease). Zoonotic disease outbreaks are increasing in frequency and are influenced by climate change, environmental destruction, urbanisation, human encroachment on natural habitats, global trade, and travel.^{5,6} Habitat degradation and environmental stressors can increase human contact with wildlife and the environment, including new pathogens.⁷ There are approximately two novel viruses infecting humans each year (in addition to existing viruses).⁸ Despite this, surveillance of pathogen trends in the environment is lacking.⁹

An example of a One Health approach is sharing data on zoonotic disease incidence and prevalence across affected disciplines, such as veterinary science, agriculture, and health, to ensure disease monitoring and response is timely and effective. In addition to surveillance of existing anthropogenic diseases, surveillance of pathogens and antimicrobial existence in the environment would be beneficial to track organisms with potential to move to humans and animals. This would involve ecologists, environmental scientists, and evolutionary biologists.¹⁰

The World Health Organization (WHO) is a member of a “Quadripartite” partnership with the Food and Agriculture Organization of the United Nations (FAO), the World Organization for Animal Health (OIE), and the UN Environment Program (UNEP) to progress One Health policies.¹¹ In 2021, the importance of implementing a One Health approach was recognised through the Rome Declaration at the Global Health Summit, endorsed by G20 Health Ministers.¹² A One Health High-Level Expert Panel (OHHLEP)

was created by the partnership to provide expert support and advice for One Health initiatives.¹³ The following One Health principles are upheld by the One Health Quadripartite partners, developed by the One Health High-Level Expert Panel:

- *equity between sectors and disciplines*
- *sociopolitical and multicultural parity (the doctrine that all people are equal and deserve equal rights and opportunities) and inclusion and engagement of communities and marginalised voices*
- *socioecological equilibrium that seeks a harmonious balance between human–animal–environment interaction and acknowledging the importance of biodiversity, access to sufficient natural space and resources, and the intrinsic value of all living things within the ecosystem*
- *stewardship and the responsibility of humans to change behaviour and adopt sustainable solutions that recognise the importance of animal welfare and the integrity of the whole ecosystem, thus securing the well-being of current and future generations*
- *transdisciplinarity and multisectoral collaboration, which includes all relevant disciplines, both modern and traditional forms of knowledge and a broad representative array of perspectives.*¹⁴

Similar concepts exist that assess the health status of the Earth holistically as an influence on human health. Planetary Health is a field with some overlap with One Health, such as the environmental impacts on human health (e.g. climate change) and the social determinants of health. However, Planetary Health does not address animal health or zoonotic disease.¹⁵ Similarly, the Planetary Boundaries Framework assesses the suitability of Earth systems for humanity.¹⁶

Connection to Country

Connection to Country is a term used by Aboriginal and Torres Strait Islander people to express the deep cultural and spiritual relationships with the land, seas, skies, and all living things. Caring for country fosters this relationship and acknowledges that a cared for environment will care for you.¹⁷ One Health policies and programs can greatly benefit from Aboriginal and Torres Strait Islander leadership and expertise. Caring for Country programs in land and sea management have proven benefits for the health and wellbeing of Aboriginal and Torres Strait Islander people and for the health of the environment.^{18,19} Indigenous Ranger and Protected Area programs combine traditional techniques with modern science approaches to protect ecosystems.²⁰ For example, Aboriginal burning practices can prevent large bushfires.²¹

The role of Australian governments

Currently, there is inadequate coordination across jurisdictions and sectors to achieve a One Health approach in Australia. As One Health does not fit into a specific discipline, it requires leadership from the Australian Government and involvement from all levels of jurisdictions.

Examples of current One Health approaches in Australia include the Department of Foreign Affairs and Trade's Indo-Pacific Centre for Health Security, which includes One Health as a core principle for health security. This Centre provides support to the international Quadripartite partnership.²² Additionally, Australia has a One Health master plan for AMR.²³ The Communicable Diseases Network

Australia includes zoonotic diseases into their remit, however animal health professional representation is limited.²⁴

Health in all policies

Health in all policies (HiAP) acknowledges that human health and health equity is influenced by more than the health system itself.²⁵ Environmental, social, cultural, and commercial determinants of health should be considered in policies, sectors, and services that influence the following sectors; environment, agriculture, the economy, finance, transport, housing, urban planning, and education.²⁶ HiAP and One Health are complementary concepts in that they promote intersectoral action for mutual benefit.

The Australian CDC

The Australian CDC is in progress to be established in early 2025 and will be a national body that aims to improve the preparedness, response, and resilience to public health emergencies, including pandemics.²⁷ The USA CDC has a One Health Office which works to protect human, animal, and environmental health.²⁸ Internationally, the Office builds partnerships with human, animal, and environmental health organisations and works with the Quadripartite on Global Health Security.²⁹ The AMA recommends a similar structure be established under the Australian CDC.

One Health in the medical profession

A One Health approach can represent a form of preventive health whereby a healthy planet reduces the likelihood of human disease and injury, thus reducing health care system demand.

Conversely, the health care system can have a significant impact on the health of the planet. Australia's health care system represents a significant portion of greenhouse gas emissions and creates substantial waste.³⁰ Improving environmental sustainability within the Australian health care sector will bring benefits for human health and additional efficiencies for the sector.³¹

Health professionals currently apply aspects of One Health to their clinical practice. For example, doctors report infectious disease cases of importance to the State and Territory health authorities. This data is collated at a Federal Level to monitor trends, considering the potential for, and responding to, disease outbreaks, via the National Notifiable Diseases Surveillance System.³² This will continue under new structures once the Australian CDC is established.

Human health and the environment

Anthropogenic stressors to the environment (such as land use, biodiversity loss, climate change, and pollution) risk environmental, animal, and human health.³³ For example, 25 per cent of all infectious diseases and 50 per cent of zoonotic infectious diseases emerging in humans globally are associated with agricultural drivers since 1940. It is expected this will increase as demand for food production increases with an increase in the human population.³⁴

Biodiversity is a major driver of planet, environmental, and human health. Biodiversity of different species fosters a healthy ecosystem, while genetic biodiversity within species impacts the likelihood for species to adapt to changing environments.³⁵

Biodiversity loss is a major concern for human health. A loss in biodiversity can directly impact food and water sources, and air quality. Further, scientific breakthroughs such as new medicines are discovered through studying biodiversity.³⁶ Maintaining and improving biodiversity prevents the emergence of pests and diseases that impact on human health.³⁷ Biodiversity loss is increasing rapidly due to land-use change, habitat loss, invasive species, over-exploitation of resources, and climate change.³⁸ Internationally, approximately 40,000 species are expected to be at risk of extinction in the near future.³⁹ In Australia, the same issues are threatening each ecosystem, 19 of which are showing signs of collapse or near-collapse.⁴⁰ Australia has the highest rate of extinctions in the world, and we have lost 40 per cent of Australian forests since European arrival.⁴¹ Currently, human health from this aspect is reliant on under-resourced and under-valued conservation research and programs with minimal collaboration with public health systems.

In January 2021, the [final report](#) of the independent review of the Environment Protection and Biodiversity Conservation (EPBC) Act 1999⁴² concluded that the EPBC Act is outdated and requires reform to stop it being a barrier to holistic environmental management. The report recommended the development of legally enforceable National Environmental Standards, which government agreed to. Further, at a Federal level under the EPBC Act, the environment minister cannot intervene on a proposal unless it has a significant impact on nine matters of national environmental significance (none of these include health issues), even if there are other negative environmental impacts. This is because primary responsibility for the environment lies with the States and Territories. For example, the Minister would not have the power to regulate on matters of air quality.⁴³ While health is considered in some aspects of the Department of Climate Change, Energy, the Environment and Water work, there is an opportunity to improve outcomes through better collaboration under a One Health approach.

Urban planning is another factor that would benefit from a One Health approach, by ensuring that urban areas have green and blue spaces, sustainable, and active transport. These factors make it easier for individuals to make healthy behavioural choices while protecting the environment. Urban planning also needs to incorporate resilience to extreme weather events and environmental degradation exacerbated by climate change.⁴⁴ This includes planning in the context of flood plains and coastal areas.

Climate change and health

Climate change exacerbates existing environmental issues and has detrimental impacts on human health. For example, climate change causes:

- high mortality and morbidity from heat stress
- injury and mortality from increasingly severe weather events
- increases in the transmission of vector-borne diseases
- food insecurity resulting from declines in agricultural outputs
- high incidence of mental ill health.⁴⁵

The Intergovernmental Panel on Climate Change (IPCC) sixth report reinforces the need for urgent action to mitigate the extreme and compounding health impacts of climate change.⁴⁶ The UN

Secretary General Antonio Guterres in his speech presenting the IPCC report proposed a Climate Solidarity Pact Acceleration Agenda, which includes several calls, for example:

- *leaders of developed countries must commit to reaching net zero as close as possible to 2040*
- *no new coal and the phasing out of coal by 2030 in OECD countries and 2040 in all other countries*
- *shifting subsidies from fossil fuels to a just energy transition*
- *ending all international public and private funding of coal.*⁴⁷

To minimise the impact of climate change, Australia's current target is to reach net zero greenhouse gas emissions by 2050.⁴⁸ There are a range of Australian Government strategies that aim to achieve this.⁴⁹ For example, the Safeguard Mechanism aims to obligate facilities to manage their net emissions if they exceed the Safeguard threshold for Scope 1 (i.e. direct) emissions.^{50,51}

However, in Australia at the time of writing, there are 29 proposed new coal mines which will create 12.8 billion tonnes of emissions over their lifetime.⁵² As of March 2023, there were 116 new coal, oil, and gas projects currently in the approval process. Annual emissions from these projects are expected to be almost three times Australia's 2021-22 emissions (490 million tonnes).⁵³

Fossil fuel companies make large contributions to political parties.^{54,55} This creates a conflict of interest where there is potential for climate change action and policies to be influenced by commercial and vested interests. Some political parties have committed to denying contributions from the tobacco industry and the AMA believes the same should apply to the fossil fuel industry. The AMA advocates for climate change policy to be scientifically evidence-based and free from political interference.

In 2022-23, fossil fuel subsidies were at \$11.1 billion.⁵⁶ A large proportion of Australia's fossil fuel resources are exported for use in other countries. The Australian Government should implement an urgent transition of fossil fuel subsidies to renewable energy, while ensuring Australia's energy requirements are met. This should include support for fossil fuel workers to transition to other areas of work, to prevent the health and social impacts of losing income.

Antimicrobial resistance (AMR)

Antimicrobial resistance (AMR) is a natural phenomenon that occurs when microorganisms change in ways that render antimicrobials less effective. Human-driven activities such as the overuse of antimicrobials and climate change is accelerating the emergence and spread of resistant pathogens.

Antimicrobials are readily used in human health, food, agriculture, and veterinary practices. The livestock and fisheries industries are increasingly using antibiotics for prophylactic, therapeutic, and growth-promotion purposes. Antibiotics can spread into the environment through run-off which creates the opportunity for mutations and AMR.⁵⁷

AMR can have significant impacts. For example, patients may require multiple treatments, or treatments may not be effective at all, resulting in severe illness or death. AMR places a significant burden on global and national food, veterinary, and health systems.

Antimicrobials are used in several disciplines, and AMR impacts several disciplines. Therefore, a One Health approach is required to prevent and reduce AMR prevalence. Currently, Australia's AMR

initiatives are not well coordinated, and public awareness of AMR and antimicrobial stewardship is lacking. The Australian CDC is the ideal national body to improve AMR initiatives.

See the AMA's research report: [Antimicrobial resistance: the silent global pandemic](#) for more detail.

Food and water security

Food insecurity occurs when people have difficulty or are unable to access appropriate amounts of nutritious food.⁵⁸ It is more prevalent in disadvantaged communities and can result in a range of health conditions, such as malnutrition, iron deficiency anaemia, mental health issues, and type 2 diabetes.⁵⁹ Water insecurity (or scarcity) occurs when people are unable to access the water they require for living essentials such as hydration, hygiene, and growing food. Water insecurity also impacts already disadvantaged communities.⁶⁰

Plants and animals are a human food source, and therefore their health is important to human health. For example, a loss in biodiversity can limit the amount of nutrients available to humans, which may cause nutrient deficiencies.⁶¹ 75 per cent of crops depend on pollinators.⁶² Further, pathogens in food can cause food poisoning, and food can transmit pathogens and chemicals, making it a vehicle for disease outbreaks.⁶³ The environment can drastically change the suitability of agricultural and husbandry practices, particularly if there are weather events such as floods, bushfires, and drought.⁶⁴ Fossil fuel extraction/mining and combustion, and some agricultural practices, can take a large amount of water from reservoirs and release chemicals into the environment, limiting clean water supply for communities.^{65,66}

A One Health approach to food and water security would entail improved monitoring and surveillance of risks in the environment with potential to cause human disease. This includes protecting the environment and mitigating the impacts of climate change and biodiversity loss to assist in ensuring there are healthy, diverse food sources available.

See also:

[AMA submission to the Department of Health and Aged Care – consultation on the role and functions of an Australian Centre for Disease Control - 2022](#)

[Climate change and human health – 2004, revised 2015](#)

[Environmental sustainability in health care - 2019](#)

[Doctors' role in stewardship of healthcare resources - 2023](#)

[Antimicrobial resistance: the silent global pandemic](#)

Reproduction and distribution of AMA position statements is permitted provided the AMA is acknowledged and that the position statement is faithfully reproduced noting the year at the top of the document.

References

- ¹ World Health Organization (2023) *One Health*. Retrieved 28/04/23 from <https://www.who.int/europe/initiatives/one-health#:~:text=One%20Health%20is%20an%20approach,animal%2Dhuman%2Denvironment%20interface>.
- ² Steele, S et al (2022) *A vision of a One Health system for Australia: on the need to rethink our health system*. MJA. Retrieved 28/04/23 from <https://www.mja.com.au/journal/2022/217/9/vision-one-health-system-australia-need-rethink-our-health-system>
- ³ One Health High-Level Expert Panel (OHHLEP, 2022) *One Health: a new definition for a sustainable healthy future*. PLOS Pathogens. Retrieved 27/04/23 from <https://doi.org/10.1371/journal.ppat.1010537>
- ⁴ Australian Medical Association (2023) *Position statement on doctors' role in stewardship of healthcare resources 2023*. Retrieved 26/06/23 from <https://www.ama.com.au/articles/position-statement-doctors-role-stewardship-healthcare-resources-2023>
- ⁵ CSIRO (2022) *Strengthening Australia's Pandemic Preparedness*. Retrieved 23/04/23 from <https://www.csiro.au/pandemic>
- ⁶ Centres for Disease Control and Prevention (2021) *Zoonotic diseases*. Retrieved 23/04/23 from <https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html>
- ⁷ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 26/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ⁸ CSIRO (2022) *Strengthening Australia's Pandemic Preparedness*. Retrieved 23/04/23 from <https://www.csiro.au/pandemic>
- ⁹ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 23/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ¹⁰ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 23/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ¹¹ World Health Organization (2022) *UN Environment Programme joins alliance to implement One Health approach*. Retrieved 26/04/23 from <https://www.who.int/news/item/18-03-2022-un-environment-programme-joins-alliance-to-implement-one-health-approach>
- ¹² European Union (2021) *Rome Declaration*. Retrieved 26/04/23 from https://global-health-summit.europa.eu/rome-declaration_en
- ¹³ One Health High-Level Expert Panel (2021) *Annual report 2021*. Retrieved 25/04/23 from https://cdn.who.int/media/docs/default-source/one-health/ohhlep/ohhlep-annual-report-2021.pdf?sfvrsn=f2d61e40_10&download=true
- ¹⁴ One Health High-Level Expert Panel (OHHLEP, 2022) *One Health: a new definition for a sustainable healthy future*. PLOS Pathogens. Retrieved 27/04/23 from <https://doi.org/10.1371/journal.ppat.1010537>
- ¹⁵ Ruiz de Castañeda, R et al (2023) *One health and planetary health research: leveraging differences to grow together*. The Lancet. Retrieved 25/04/23 from [https://doi.org/10.1016/S2542-5196\(23\)00002-5](https://doi.org/10.1016/S2542-5196(23)00002-5)
- ¹⁶ Steffen, W (2015) *Planetary boundaries: guiding human development on a changing planet*. Science. Retrieved 25/04/23 from <https://www.science.org/doi/10.1126/science.1259855>

- ¹⁷ National Indigenous Land and Sea Strategy (2022) *Caring for Country Factsheet*. Retrieved 22/09/2023 from <https://www.ilsc.gov.au/wp-content/uploads/2022/05/Caring-For-Country-Factsheet.pdf>
- ¹⁸ Schultz, R and Cairney, S (2017) *Caring for country and the health of Aboriginal and Torres Strait Islander Australians*. Retrieved 22/09/2023 from <https://www.mja.com.au/journal/2017/207/1/caring-country-and-health-aboriginal-and-torres-strait-islander-australians>
- ¹⁹ Australian Institute of Health and Welfare (2022) *Determinants of health for Indigenous Australians*. Retrieved 22/09/23 from <https://www.aihw.gov.au/reports/australias-health/social-determinants-and-indigenous-health>
- ²⁰ Country Needs People (2023) *Country Needs People – protecting nature, transforming lives*. Retrieved 22/09/23 from <https://www.countryneedspeople.org.au/>
- ²¹ Schultz, R and Cairney, S (2017) *Caring for country and the health of Aboriginal and Torres Strait Islander Australians*. Retrieved 22/09/2023 from <https://www.mja.com.au/journal/2017/207/1/caring-country-and-health-aboriginal-and-torres-strait-islander-australians>
- ²² Indo-Pacific Centre for Health Security, *One Health*. Retrieved 25/04/23 from <https://indopacifichealthsecurity.dfat.gov.au/one-health>
- ²³ Australian Government (2022) *One Health master action plan for Australia's National Antimicrobial Resistance Strategy – 2020 and beyond*. Retrieved 25/04/23 from <https://www.amr.gov.au/resources/one-health-master-action-plan-australias-national-antimicrobial-resistance-strategy-2020-and-beyond>
- ²⁴ Steele, S et al (2022) *A vision of a One Health system for Australia: on the need to rethink our health system*. MJA. Retrieved 25/04/23 from <https://www.mja.com.au/journal/2022/217/9/vision-one-health-system-australia-need-rethink-our-health-system>
- ²⁵ World Health Organization (2023) *Promoting Health in All Policies and intersectoral action capacities*. Retrieved 28/06/2023 from <https://www.who.int/activities/promoting-health-in-all-policies-and-intersectoral-action-capacities>
- ²⁶ Australian Medical Association (2022) *Social determinants of health – 2020*. Retrieved 28/06/2023 from <https://www.ama.com.au/articles/social-determinants-health-2020-1>
- ²⁷ Department of Health and Aged Care (2022) *Australian Centre for Disease Control*. Retrieved 22/04/23 from <https://www.health.gov.au/our-work/Australian-CDC>
- ²⁸ Centers for Disease Control and Prevention (2022) *CDC's One Health Office: What We Do*. Retrieved 22/04/23 from <https://www.cdc.gov/onehealth/what-we-do/index.html>
- ²⁹ Centers for Disease Control and Prevention (2020) *One Health Office Fact Sheet*. Retrieved 22/04/23 from <https://www.cdc.gov/onehealth/who-we-are/one-health-office-fact-sheet.html>
- ³⁰ Malik, A et al (2018) *The carbon footprint of Australian health care*. *The Lancet*. Retrieved 28/06/23 from [https://doi.org/10.1016/S2542-5196\(17\)30180-8](https://doi.org/10.1016/S2542-5196(17)30180-8)
- ³¹ Australian Medical Association (2019) *Environmental sustainability in health care – 2019*. Retrieved 28/06/23 from <https://www.ama.com.au/position-statement/environmental-sustainability-health-care-2019>
- ³² Department of Health and Aged Care (2023) *National Notifiable Diseases Surveillance System (NNDSS)*. Retrieved 30/6/23 from <https://www.health.gov.au/our-work/nndss>
- ³³ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 20/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ³⁴ Rohr, J et al (2019) *Emerging human infectious diseases and the links to global food production*. *Nature Sustainability*. Retrieved 20/04/23 from <https://www.nature.com/articles/s41893-019-0293-3>
- ³⁵ World Health Organization and Secretariat of the Convention on Biological Diversity (2015) *Connecting Global Priorities: biodiversity and human health*. Retrieved 22/06/23 from <https://www.who.int/publications/i/item/connecting-global-priorities-biodiversity-and-human-health>

- ³⁶ World Health Organization (2015) *Biodiversity and Health*. Retrieved 20/04/23 from <https://www.who.int/news-room/fact-sheets/detail/biodiversity-and-health>
- ³⁷ World Health Organization and Secretariat of the Convention on Biological Diversity (2015) *Connecting Global Priorities: biodiversity and human health*. Retrieved 22/06/23 from <https://www.who.int/publications/i/item/connecting-global-priorities-biodiversity-and-human-health>
- ³⁸ World Health Organization and Secretariat of the Convention on Biological Diversity (2015) *Connecting Global Priorities: biodiversity and human health*. Retrieved 22/06/23 from <https://www.who.int/publications/i/item/connecting-global-priorities-biodiversity-and-human-health>
- ³⁹ United Nations (2022) *The Sustainable Development Goals Report 2022*. Retrieved 22/06/23 from <https://unstats.un.org/sdgs/report/2022/>
- ⁴⁰ Cresswell I, Janke T, Johnston E. (2021) *Australia State of the Environment 2021*. Commonwealth of Australia. Retrieved 26/06/23 from <https://soe.dccew.gov.au/biodiversity/environment/ecosystems-and-habitats>
- ⁴¹ Barraclough, K et al (2023) *Why losing Australia's biodiversity matters for human health: insights from the latest State of the Environment assessment*. Medical Journal of Australia. Retrieved 21/06/23 from <https://www.mja.com.au/journal/2023/218/8/why-losing-australias-biodiversity-matters-human-health-insights-latest-state>
- ⁴² Independent review of the EPBC Act (2020) *Final report*. Retrieved 21/04/23 from <https://epbcactreview.environment.gov.au/resources/final-report>
- ⁴³ Department of Climate Change, Energy, the Environment and Water (2021) *EPBC Act – Frequently asked questions*. Retrieved 21/04/23 from <https://www.dccew.gov.au/environment/epbc/publications/factsheet-epbc-act-frequently-asked-questions>
- ⁴⁴ World Health Organization European Region (2022) *Local-level policy recommendations: operationalizing a One Health approach*. Political statement of the WHO European Healthy Cities Network. Retrieved 21/04/23 from <https://www.who.int/europe/publications/i/item/WHO-EURO-2023-7060-46826-68259>
- ⁴⁵ Romanello, M et al (2022) *The 2022 report of the Lancet Countdown on health and climate change: health at the mercy of fossil fuels*. The Lancet. Retrieved 24/04/23 from [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(22\)01540-9/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01540-9/fulltext)
- ⁴⁶ Intergovernmental Panel on Climate Change (2023) *AR6 Synthesis report: climate change 2023*. Retrieved 25/04/23 from <https://www.ipcc.ch/report/sixth-assessment-report-cycle/>
- ⁴⁷ United Nations (2023) *Secretary-General's video message for press conference to launch the Synthesis Report of the Intergovernmental Panel on Climate Change*. Retrieved 20/04/23 from <https://www.un.org/sg/en/content/sg/statement/2023-03-20/secretary-generals-video-message-for-press-conference-launch-the-synthesis-report-of-the-intergovernmental-panel-climate-change>
- ⁴⁸ Prime Minister of Australia (2022) *Australia legislates emissions reduction targets*. Media release. Retrieved 21/04/23 from <https://www.pm.gov.au/media/australia-legislates-emissions-reduction-targets>
- ⁴⁹ Department of Climate Change, Energy, the Environment and Water (2022) *Australia's climate change strategies*. Retrieved 24/04/23 from <https://www.dccew.gov.au/climate-change/strategies>
- ⁵⁰ Clean Energy Regulator (2023) *The Safeguard Mechanism*. Retrieved 21/04/23 from <https://www.cleanenergyregulator.gov.au/NGER/The-safeguard-mechanism>
- ⁵¹ Clean Energy Regulator (2023) *Greenhouse gases and energy*. Retrieved 17/04/23 from <https://www.cleanenergyregulator.gov.au/NGER/About-the-National-Greenhouse-and-Energy-Reporting-scheme/Greenhouse-gases-and-energy>
- ⁵² The Australia Institute (2023) *Coal mine tracker*. Retrieved 18/10/23 from <https://australiainstitute.org.au/initiative/coal-mine-tracker/>

- ⁵³ Dennis, R (2023) *Australia's 116 new coal, oil and gas projects equate to 215 new coal power stations*. The Conversation. Retrieved 13/04/23 from <https://theconversation.com/australias-116-new-coal-oil-and-gas-projects-equate-to-215-new-coal-power-stations-202135>
- ⁵⁴ Australian Electoral Commission (2023) *AEC Transparency Register*. Retrieved 13/04/23 from <https://transparency.aec.gov.au/RegisterOfEntities?clientType=politicalparty>
- ⁵⁵ Kurmelovs, R (2022) *'More money than ever': gas companies made almost \$1m in donations to Labor and Liberals*. The Guardian. Retrieved 13/04/23 from <https://www.theguardian.com/australia-news/2022/feb/02/more-money-than-ever-gas-companies-made-almost-1m-in-donations-to-labor-and-liberals>
- ⁵⁶ The Australia Institute (2022) *Fossil fuel subsidies in Australia 2023*. Retrieved 9/11/23 from <https://australiainstitute.org.au/report/fossil-fuel-subsidies-in-australia-2023/>
- ⁵⁷ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 12/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ⁵⁸ Food and Agriculture Organization of the United Nations (2023) *Hunger and food insecurity*. Retrieved 13/04/23 from <https://www.fao.org/hunger/en/>
- ⁵⁹ Australian Medical Association (2018) Nutrition. Retrieved 11/04/23 from https://www.ama.com.au/sites/default/files/documents/Nutrition_2018_AMA_position_statement.pdf
- ⁶⁰ United Nations (2023) *Water scarcity*. Retrieved 03/07/23 from <https://www.unwater.org/water-facts/water-scarcity>
- ⁶¹ World Health Organization (2015) Biodiversity and Health. Retrieved 20/04/23 from <https://www.who.int/news-room/fact-sheets/detail/biodiversity-and-health>
- ⁶² Barraclough, K et al (2023) *Why losing Australia's biodiversity matters for human health: insights from the latest State of the Environment assessment*. Medical Journal of Australia. Retrieved 21/06/23 from <https://www.mja.com.au/journal/2023/218/8/why-losing-australias-biodiversity-matters-human-health-insights-latest-state>
- ⁶³ World Health Organization (2022) *Food safety*. Retrieved 11/04/23 from <https://www.who.int/news-room/fact-sheets/detail/food-safety>
- ⁶⁴ World Health Organization Europe (2022) *A health perspective on the role of the environment in One Health*. Retrieved 12/04/23 from <https://apps.who.int/iris/bitstream/handle/10665/354574/WHO-EURO-2022-5290-45054-64214-eng.pdf?sequence=1&isAllowed=y>
- ⁶⁵ Thomas, L (2020) *Coal Use and Environment*. Coal Geology, Third Edition. Retrieved 12/04/23 from <https://onlinelibrary.wiley.com/doi/10.1002/9781119424307.ch12>
- ⁶⁶ OECD (2022) *Water and agriculture: managing water sustainably is key to the future of food and agriculture*. Retrieved 12/04/23 from <https://www.oecd.org/agriculture/topics/water-and-agriculture/>