

One Health

Policy Position Statement

Key messages:

Existing and emerging threats to health are increasingly occurring at the interface of humans, animals and ecological systems. One Health is a recognised approach to optimise prevention and management of these risks, enabling collaboration across sectors, disciplines and communities. This policy seeks to outline a series of principles and tangible actions, including governance actions, recognising that human health and wellbeing is inextricably linked to the health of animals and plants within a shared ecosystem.

Key policy positions:

- Support and promote development of One Health governance structures with equitable representation of all disciplines, sectors and community organisations and PHAA members relevant to the operationalisation of One Health both locally and regionally.
- Collaborate with other relevant Special Interest Groups (SIGs) in the PHAA, animal and human health, agriculture and environment, food, and nutrition, Aboriginal and Torres Strait Islander, and Political Economy of Health sectors to develop joint policies and activities.
- 3. Support integration of One Health approach within an Australian Centre for Disease Control and Prevention (CDC) involving intersectoral and transdisciplinary collaboration, communication and coordination of zoonotic and emerging infectious diseases from animal reservoirs, environment and non-communicable diseases.
- 4. Identify and support the development of education and training in One Health in Australia, New Zealand, and the Asia Pacific region.
- Priority areas include Antimicrobial Resistance stewardship, food security and safety, zoonosis and emerging infectious diseases, and fostering incorporation of the One Health approach in teaching curriculums, workforce development and research priorities.

Audience:

Federal, State and Territory Governments, policymakers and program managers, PHAA members, media. Other relevant stakeholder groups involved in agriculture, animal health and environmental management.

Responsibility:

PHAA One Health Special Interest Group

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September 2022

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PHAA affirms the following principles:

- 1. Operationalisation of One Health is required to address increasing threats at the interface between human, animal, and ecosystem health, nationally, regionally, and globally.
- Australia's national public health, environmental, industry and agricultural policies exist in a
 global context and must recognise the direct and indirect effects on human health from
 changes driven by human activity that are taking place across the ecosystem at a range of
 scales.

PHAA notes the following evidence:

- 3. Humans, animals, and ecosystems are under increasing threat from emerging infectious diseases (EIDs), antimicrobial resistance (AMR), and non-communicable diseases. These threats pose significant risks to health and wellbeing, social structures, food safety and security and economic stability nationally, regionally, and globally. ¹⁻³
- 4. Zoonotic diseases originate in animals and spread to humans, and account for over 50% of EIDs. Many zoonoses are linked to wildlife species, with wildlife acting as a source or a reservoir for infection for other wildlife or domestic animal species. These can then act as intermediate hosts and the source of human infection. ^{4, 5}
- 5. Threats at the human/animal/ecosystem interface are driven by many factors, in particular anthropogenic climate change, land use change, loss of biodiversity and environmental damage. Socio-economic, political, evolutionary and other environmental determinants are also contributing factors. 8
- 6. One Health recognises the close relationship and interdependence of the health of humans, domestic and wild animals, plants, and the wider environment, providing a collaborative, multisectoral and trans-disciplinary approach to health. This improves and promotes well-being and sustainability, optimising preparedness and response to threats at the interface of human, animal and ecosystems. ⁹
- 7. Equitable cooperation across disciplines, sectors, and communities is crucial to achieve optimal benefits from their combined and diverse experience, knowledge, and resources to address shared problems. This is of particular importance in management of zoonoses and EIDs, AMR, and food safety and security^{10, 11} and can also improve outcomes in non-communicable diseases. ¹²
- 8. A One Health approach is recognised as essential within the governance and operations of national and regional CDC's for example as evident in the African, European and USA CDC's.

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- These interconnections and vulnerabilities have been illustrated particularly in the area of disease emergence, with the COVID-19 pandemic highlighting the need for an integrative and systemic approach to health.
- 10. Both globally¹ and nationally, ¹³ strategies to combat AMR acknowledge the need for collaborative, multisectoral and trans-disciplinary action.
- 11. Food security is a global public good and the task of securing food and nutrition requires a One Health approach. Maintenance of food safety and security are of increasing importance in the face of increased population growth and the impacts of climate change and accompanying extreme weather events, including drought, floods and bushfires. This is of particular concern in developing countries, causing under-nutrition and micro-nutrient deficiencies. ¹⁰ In Australia, long term modelling points to increased stress on agricultural industries and probable increasing prices of grain and meat. This points to need for diversification and adaptation to ensure future food security and sustainability of agricultural industries. ¹⁴
- 12. The incidence of zoonotic food-borne illness (FBI) has increased dramatically in Australia over the past 10 years with rates 10 times the rate in the USA. Over half the estimated 4.1 million cases of food- borne gastroenteritis each year were caused by zoonotic pathogens, which accounted for about 90% of the 5,900 hospitalisations each year (due to FBI) and 18 of the 21 estimated deaths. Furthermore, zoonotic causes of non-gastrointestinal FBI result in a further estimated 16 deaths each. The major sources of contamination are meat, particularly chicken meat, and eggs. ¹⁵
- 13. In 2021, the heads of the World Health Organisation (WHO), Food and Agricultural Organisation (FAO), World Organisation for Animal Health (OIE) and the United Nations Environmental Program (UNEP) responded to the need to operationalise One Health by the formation of the One Health high-level expert council (OHHLEP). ^{16, 17} This move was supported by the G20 leaders in *The Rome Declaration*, recognising the need to strengthen global health responses to achieve Sustainable Development Goals. Within this, a One Health approach was seen as essential to attaining Universal Health Coverage. ¹⁸
- 14. Implementing this policy would contribute towards the achievement of UN Sustainable
 Development Goal 3 Good Health and Wellbeing.

PHAA seeks the following actions:

- 15. Provision of government funding for development of independent One Health governance structures working alongside current health systems to optimise preparedness and response to new and emerging health threats including within an Australian Centre for Disease Control and Prevention.
- 16. Support the development of One Health curricula and advocate for its inclusion into curricula across relevant sectors and disciplines to build capacity within health systems by equipping graduates, practitioners, and policy makers.

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- 17. Support research, collaboration and cooperation among the disciplines and institutions relevant to One Health.
- 18. Support application of the One Health Systems Mapping and Analysis Resource Toolkit (OH-SMART) an interactive process that fosters working across organizational and disciplinary lines when preparing or responding to disease outbreaks or addressing other complex One Health challenges.
- 19. Support incorporation of OH evaluation frameworks (similar to Network for Evaluation of One Health) to demonstrate the benefits of OH collaborations for optimal health.

PHAA resolves to:

- 20. Advocate for the above steps to be taken based on the principles in this position statement.
- 21. Advocate for, and promote operationalisation of One Health in Australia, New Zealand and the Asia Pacific region.
- 22. Advocate for One Health approach incorporated within governance and operations of an Australian CDC using Biosecurity Australia model (https://www.biosecurity.gov.au/) across the States and Territories.
- 23. Facilitate cooperation between individuals and institutions that represent the multiple disciplines relevant to One Health in Australia, New Zealand and the Asia Pacific region.
- 24. Pursue relationships and collaborations with other relevant SIGs within the PHAA, animal and human health, agriculture and environment sectors to develop joint policies, advocacy and action.
- 25. Support the development of research, education and training in One Health in Australia, New Zealand, and the Asia Pacific region.

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References

- 1. World Health Organization, Food and Agriculture Organization of the United Nations and World Organisation for Animal Health. *Taking a Multisectoral, One Health Approach: A Tripartite Guide to Addressing Zoonotic Diseases in Countries*. 2019.
- 2. Machalaba C, Raufman J, Anyamba A, et al. Applying a One Health Approach in Global Health and Medicine: Enhancing Involvement of Medical Schools and Global Health Centers. *Annals of Global Health* 2021; 87: 30. DOI: https://dx.doi.org/10.5334/aogh.2647.
- 3. Berthe. Franck Cesar Jean., Bouley. Timothy., Karesh. William B., et al. *Operational framework for strengthening human, animal and environmental public health systems at their interface* 2018. Washington, D.C: World Bank Group.
- 4. Taylor LH, Latham SM and Woolhouse ME. Risk factors for human disease emergence. *Philos Trans R Soc Lond B Biol Sci* 2001; 356: 983-989. DOI: 10.1098/rstb.2001.0888.
- 5. Cox-Witton K, Reiss A, Woods R, et al. Emerging Infectious Diseases in Free-Ranging Wildlife—Australian Zoo Based Wildlife Hospitals Contribute to National Surveillance. *PLoS ONE* 2014; 9: e95127. DOI: 10.1371/journal.pone.0095127.
- 6. Plowright RK, Parrish CR, McCallum H, et al. Pathways to zoonotic spillover. *Nature Reviews Microbiology* 2017; 15: 502-510. DOI: 10.1038/nrmicro.2017.45.
- 7. World Economic Forum. Global Risks Report 2021. 16th ed.: World Economic Forum, 2021.
- 8. Wildlife Conservation Society. The Berlin Principles on One Health, 2019, https://oneworldonehealth.wcs.org/About-Us/Mission/The-2019-Berlin-Principles-on-One-Health.aspx (2019, accessed 14 July 2021).
- 9. Joint Tripartite (FAO, OIE, WHO) and UNEP Statement: Tripartite and UNEP support OHHLEP's definition of "One Health"
- Gruetzmacher K, Karesh WB, Amuasi JH, et al. The Berlin principles on one health Bridging global health and conservation. *Science of The Total Environment* 2021; 764: 142919. DOI: https://doi.org/10.1016/j.scitotenv.2020.142919.
- 11. One Health Commission. What is One Health?, https://www.onehealthcommission.org/en/why_one_health/what_is_one_health/ (2021, accessed 20 April 2021).
- 12. Centers for Disease Control and Prevention. One Health Basics, https://www.cdc.gov/onehealth/index.html (2021, accessed 15 November 2021).
- 13. Australian Government. Australia's National Antimicrobial Resistance Strategy 2020 and Beyond, https://www.amr.gov.au/resources/australias-national-antimicrobial-resistance-strategy-2020-and-beyond (2021, accessed 29 July 2021).
- 14. Hughes N and Gooday. P. *Analysis of climate change impacts and adaptation on Australian farms*. 2021. DAWE.
- 15. Kirk M, Ford L, Glass K, et al. Foodborne illness, Australia, circa 2000 and circa 2010. *Emerging infectious diseases* 2014; 20: 1857-1864. DOI: 10.3201/eid2011.131315.
- 16. World Health Organisation. One Health High-Level Expert Panel (OHHLEP), https://www.who.int/groups/one-health-high-level-expert-panel/members (2021, accessed 25 April 2022).
- 17. OIE. G20 Ministers of Health reaffirm the urgent need to address global health under a One health approach, https://www.oie.int/en/g20-ministers-of-health-reaffirm-the-urgent-need-to-address-global-health-under-a-one-health-approach/ (2021, accessed 25 April 2022).
- 18. Global Health Summit. The Rome Declaration. . 2021. Rome: G20.