

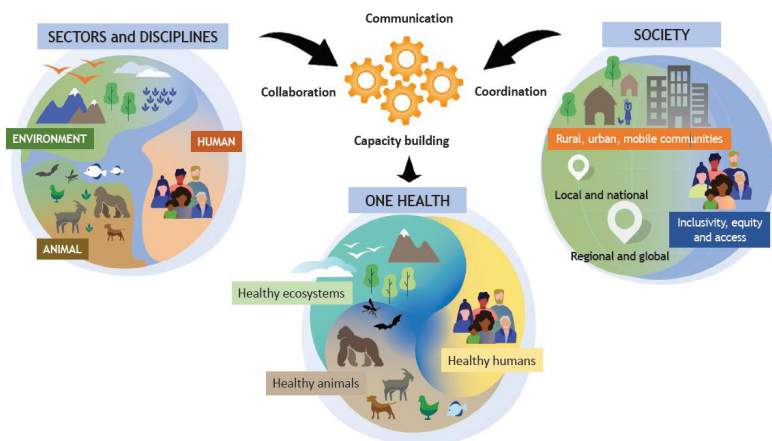


One Health

One Health is defined as a collaborative, multisectoral, and transdisciplinary approach—working at the local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants, and their shared environment.¹

What is One Health?

One Health is a systematic approach that emphasizes the interconnectedness of human, animal, and environmental health. It recognizes that actions and conditions in one domain can have significant impacts on the others. By promoting collaboration among stakeholders across these three domains, One Health aims to optimize health outcomes for humans, animals, and the shared environment.



<https://www.who.int/news/item/01-12-2021-tripartite-and-unep-support-ohhlep-s-definition-of-one-health>

What are common One Health issues?²

One Health issues include emerging, re-emerging, and endemic zoonotic diseases, neglected tropical diseases, vector-borne diseases, antimicrobial resistance, food safety and food security, environmental contamination, climate change and other health threats shared by people, animals, and the environment. For example:

- **Antimicrobial-resistant germs** can quickly spread through communities, the food supply, healthcare facilities, and the environment (soil, water), making it harder to treat certain infections in animals and people.
- **Vector-borne diseases** (e.g. Lyme disease, West Nile virus) are on the rise with warmer temperatures and expanded mosquito and tick habitats.
- **Diseases in food animals** (e.g. Avian influenza, Salmonella) can threaten supplies, livelihoods, and economies.

- The **human-animal bond** can help improve mental well-being.
- **Contamination of water** used for drinking, recreation, and more can make people and animals sick.

What is the One Health approach?

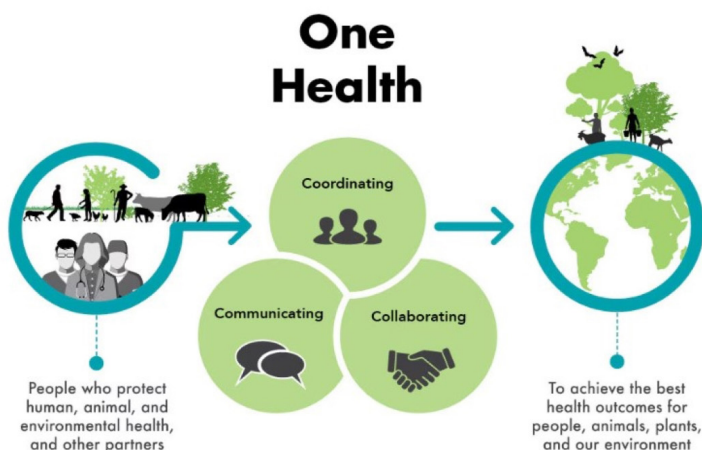
One Health is an interdisciplinary approach that encompasses aspects of public health that focus on the determinants of health, including social, economic, and political factors that can either support or hinder overall well-being. However, the scope of One Health extends beyond public health to incorporate the resilience of animals and the environment, which are influenced by their physical surroundings and human-created societal and economic pressures. By adopting a One Health approach, it becomes possible to identify and implement effective and meaningful solutions to enhance the health and well-being of humans, animals, and the environment within the existing social, economic, and political frameworks.

comprehensively tackle the scientific and social challenges we face.



One Health in Alberta

- Implement a **Non-Thesis Master's in One Health** program at UCalgary aimed at equipping both new and established professionals with the knowledge, skills, and tools necessary to tackle current and future health challenges effectively.
- Build a **One Health Institute at UCalgary** that serves as an innovative, integrated and agile collaborative for transforming education, training, research and community engagement. This institute will focus on advancing human, animal and environmental health across Alberta and the nation.
- Creation of the **Antimicrobial Resistance (AMR) - One Health Consortium** in partnership with nine post-secondary institutions in Alberta, and several other government agencies, industry partners, and health organizations. This initiative focuses on antimicrobial use and resistance research, policy, training, outreach, and commercialization.
- Host an annual international **AMR virtual seminar series** created in collaboration with a pan-Alberta panel of experts. This series provides participants with a comprehensive understanding of AMR and the holistic solutions required to address the challenge.



<https://www.cdc.gov/one-health/about/index.html>

Why is One Health important?

The current global challenges encompass a wide range of issues due to gaps in communication, collaboration and coordination. Embracing a One Health approach is crucial to effectively address these interconnected and complex challenges. By leveraging diverse expertise across the three domains, we can develop innovative solutions to

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References

1. "One Health." Infection Prevention and Control Canada. (n.d.). <https://ipac-canada.org/one-health>.
2. "About One Health." CDC One Health. U.S. Centers for Disease Control and Prevention, February 29, 2024. <https://www.cdc.gov/one-health/about/index.html>.