One Health practitioners seek to collaboratively address shared challenges to the health of people, domestic animals, and wildlife. One Health is a living concept in Canada’s North, where Inuit are strongly connected to the land and wildlife, and these connections are critical to their health, food security, and culture. However, arctic ecosystems are undergoing marked changes (climatic and anthropogenic), and these changes may be occurring so rapidly that they exceed the ability of Arctic indigenous peoples and wildlife to adapt, necessitating more effective and rapid means to translate research into action. One Health is not just a framework for surveillance or research, but also for action in a resource-limited environment for scientific research and public health programming. We propose a framework for prioritizing One Health issues that considers the following questions: 1) Does the pathogen in wildlife represent a risk to human health? 2) Does the pathogen have potential to adversely affect wildlife populations of conservation concern? 3) Is the pathogen perceived as a threat to people who rely on the health and sustainability of the wildlife resource? Successful actions within a One Health framework have in common a perception of risk (i.e. perceived threat), there is something practical that can be done about it (perceived feasibility), and there is support from stakeholders at multiple levels (i.e. communities, policy-makers, and researchers), generally tied to a perceived benefit. We review programs that have been implemented in the Canadian North to help manage One Health issues, including food-borne parasites in harvested wildlife and disease transmission and injury from free-ranging dogs. We suggest future needs for surveillance, diagnostics, and community-based research to address disease transmission at the human/animal/environmental interface in northern and Indigenous communities in Canada.

References

Jenkins et al., "Wildlife parasitology in a One Health world", Trends in Parasitology, accepted