Blood on the Ice: the Need for Culturally Inclusive One Health Surveillance of Anthropozoonoses in the Arctic.

S. J. Romain, BS¹, C. M. Nelson, BS² and M. F. Davis, PhD³
¹University of Toronto Scarborough, Toronto, ON, Canada, ²University of Alaska Anchorage, Odense, Denmark, ³Johns Hopkins University, Baltimore, MD

INTRODUCTION: A zoonotic disease research focus on tropical and temperate climates often overlooks the arctic regions that also host diverse animal-borne pathogens. Indigenous populations in the arctic have close connections with both the land and animals which can put them at risk. Inherent in spiritual, cultural, social, and subsistence activities, time on the land is essential to definitions of health and wellness, a connectedness so elemental that it has been recognized in the UN Declaration on the Rights of Indigenous Peoples(2008).

Subsistence hunting, fishing, herding, and butchering of animals takes place in conditions that are suboptimal for the prevention of zoonotic infection. Given the Arctic’s small, remote populations and often substandard medical care, cases of infection can be overlooked as a consequence (Indigenous One Health in the Arctic: A systematic Literature Review of Circumpolar Zoonoses, Nelson et al., 2014).

METHODS: The One Health Initiative seeks to build multidisciplinary collaborations for the purposes of controlling zoonotic diseases
that include veterinary and medical professionals. By first examining
the Initiative through a medical anthropology framework, then sub-
sequently discussing and considering traditional indigenous knowl-
edge sources on animal behavior and human health, an inclusive
model that would respect and incorporate elements of both models
is developed.

**RESULTS:** The analysis of the One Health Initiative model shows
areas for improvement in cultural sensitivity. By utilizing both the
One Health Initiative and the traditional indigenous methods, a
more successful model can be implemented.

**CONCLUSIONS:** The One Health model of integrated care encom-
passing both human and animal health has real value in these
unusual circumstances and would best be implemented in arctic
communities with the inclusion of indigenous knowledge sources.
New studies would merit consideration to address these disparities
in indigenous health care surveillance, diagnosis, and treatment in
the arctic.