



# Environmental Health Research Group Newsletter April 2024

## Reminder of our Research!

University of Waterloo scientists (including Brian Laird, Mylene Ratelle, Kelly Skinner, and Heidi Swanson) partnered with communities of the Northwest Territories and Yukon for funding from the Northern Contaminants Program (NCP). Our goals are to:

- Study the links between the environment, traditional foods, and health in participating communities.
- Provide communities with knowledge on local contaminant exposures and sources.
- Address follow-up questions from community members on the safety of foods, water quality, and climate change.



## Over the past 4 months, Brian Laird and MSc student Ashlyn Simpson...

- Worked with Elders and knowledge holders for translation of results.
- Met with community members and leaders in Old Crow, K'atl'odeeche, Ka'a'gee Tu, Jean Marie River, and Deh Gah Gotie First Nation to:
  - Return results on links between participants' contaminant levels and the foods they had reported eating.
  - Listen to community members and leaders on current priorities and concerns about contaminants and health.
- Applied for funding to follow-up on the priorities we heard about over the past year



## Over the next four months, we will...

- Continue working with knowledge holders to translate results into Dene and Gwich'in languages.
- Update the communication materials with feedback from communities.
- Share new communication materials with partnered communities as they come available.



## What has been learned so far?

- Contaminant health risks for participants were low. Almost everyone's contaminant levels fell below the health guidelines for mercury, cadmium and lead.
- Levels of mercury in hair appear to change over the seasons. Hair mercury levels were highest in the early fall and lowest in the spring.
- Eating some traditional foods, like whitefish and lake trout, was linked with lower levels of the heavy metal lead. Eating lake trout, northern pike, and waterfowl, were linked with higher levels of mercury, PCBs, and some other chemicals. The strength of these links were different in different regions.
- The health benefits of traditional foods generally outweigh contaminant risks.



## What Is Lead?

Lead is a heavy metal that is found naturally in the environment but can also be released by some human activities.

Lead is found in several products, including some types of batteries, ammunition, fishing sinkers.

Using lead shot can increase levels of lead in traditional foods. It is safer to use steel, bismuth, or iron shot.