



Environmental Health Research Group Newsletter March 2023

Reminder of our Research!

This is a collaborative project between communities of the Northwest Territories and Yukon and Professors Brian Laird, Kelly Skinner, and Heidi Swanson from the University of Waterloo. The aim of the project is to study the links between the environment, country foods, and health in participating communities. This work provides knowledge on contaminant exposure in the communities, and promotes the use of country foods in order to improve nutrition. We are also now working on related projects to follow-up on other questions from community members and leaders on ways to improve food security, water quality, and how climate change impacts these issues.



What did we do over the last few months?

- In February 2023, we met with community members and leaders in Old Crow (YT), Jean Marie River (NT), Sambaa K'e (NT), and K'asho Got'ine (NT) to share the most recent results from the project. During these presentations, we:
 - Returned results on links between participants' contaminant levels and the foods they had reported eating.
 - Listened to community members and leaders on current priorities and concerns about contaminants and health.

What will we do in the next few months?

- We hope to travel to each of the remaining Dehcho and Sahtú communities to continue sharing results on the links between contaminant levels and the foods participants reported eating.
- We work with representatives from Deline, Tulita, K'atl'odeeche, Deh Gah Got'ie, Ka'a'gee Tu First Nation, and West Point First Nation to schedule results meetings in each of their communities.
- We will continue studying the links between the environment, country foods, contaminants, and health in the Northwest Territories and Yukon.



What is Hexachlorobenzene (HCB)?

HCB is a type of pesticide/fungicide that was banned by the Stockholm Convention in 2001. Most people are exposed to HCB from the foods they eat. HCB does not break down easily in the environment and can accumulate in animals and people. At high levels of exposure, HCB can harm the liver.

What has been learned?

- 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 appears 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. Other traditional foods, like certain caribou and moose organs, were linked with having higher levels of HCB.
- The health benefits of traditional foods continue to generally outweigh contaminant risks.