

Environmental Health Research Group Newsletter Spring (May 2019)

Reminder of our Research!

This is a collaborative project within several communities in the Northwest Territories, Yukon and northern Ontario with the aim of investigating the levels of contaminant exposure in participating communities. Dr. Brian Laird and our team measure contaminants and nutrients in human samples. This work is the initial phase to provide knowledge on contaminant exposure in the communities and promote the use of country foods in order to improve nutrition. In parallel, we are now working on projects to answer concerns we have heard from community members and leaders during consultation meetings regarding initiatives to improve food security and on the relationship between water, human wellbeing and climate change.



What did we do in the last few months?

- We analysed mercury in additional segments of hair for participants in the Sahtú and Dehcho (NWT) who agreed to the biobank. The result letters were sent to participants in May.
- Lab analysis is ongoing for **Old Crow (YK)**. We should receive all the results later this summer.
- Fort Albany (ON) joined the project, which we are initiating with the collaboration of Mushkegowuk Council.

What will we do in the next few months?

- Prepare for our participation in two on-the-land camps for knowledge sharing: Water knowledge Camp and Nío Nę P'ęnę' Regional Stewardship and Resilience Project. These camps are in the Sahtú region in August 2019 and are planned in collaboration with the Sahtú Renewable Resources Board.
- We are investigating exposure determinants for some contaminants.
- We will continue to work with the Dene, Gwich'in, and Cree people on environmental challenges.

What are the Results so far?

The main results of the NWT project can be found online: <u>https://uwaterloo.ca/human-exposure-and-toxicology-research-group/research</u>

Other recent results we have found:

- Arsenic levels indicate that arsenic emissions from historic gold-mining activities in other parts of the NWT have not translated to increased human exposures in the Dehcho and Sahtú regions.
- Polycyclic aromatic hydrocarbons (PAHs) levels in the Dehcho and Sahtú are below clinical levels associated with adverse health outcomes but appeared higher than observed for the general Canadian population.