

2004-2005 Human Health Risk Assessment (HHRA) Studies

Drinking Water

As part of the HHRA, we have just finished sampling several drinking water sources to obtain Sudbury-specific data on metal levels.

Where does drinking water in Sudbury come from?

Drinking water in the City of Greater Sudbury comes from either surface water or groundwater. The majority of homes are on a municipal supply which means that the water is regularly tested by the City and the Ministry of the Environment. Some homes get their drinking water from private wells or from lakes where they live. This water is not tested by the City. It was necessary to collect samples so that the information could be included in the risk assessment.

Where did we sample?

Samples were collected from the following lakes:

- McCrea
- Clearwater
- Hannah
- Lohi
- Middle
- Pine
- Silver
- McFarlane
- Long
- Raft

Samples were collected from residential wells in the following areas:

- Balfour
- Blezard
- Capreol
- Broder
- Dill
- Falconbridge
- Garson
- Graham
- Hanmer
- Neelon
- Rayside
- Snider
- Waters

What did we collect?

Tap water was collected at each household. It was important that the water collected represented what people in the household are drinking.

What was analyzed?

All drinking water samples will be analyzed for metals.

What will we do with the results?

When all samples have been collected and analyzed the SARA Group will summarize the results for metal levels in drinking water. A confidential copy of the individual results for each household will be provided to the homeowner.

The results will be examined to determine whether there is any immediate human health risk associated with drinking water in the Greater Sudbury area. This will be determined by comparing the results to existing criteria such as the Ontario Safe Drinking Water Act.

These results will then be used as site-specific data as part of the exposure assessment for the HHRA.



Indoor Dust Survey

As part of the HHRA, dust samples from inside houses and local schools in the Sudbury area were collected. Soil samples were also collected from the lawns of these locations, as soil is the most likely source of dust found in homes.

Where did we sample?

Samples were collected at approximately 70 residences and 10 schools across the Greater Sudbury area.

What did we collect?

Dust samples were vacuumed within a measured area using a special calibrated sampler.



Soil samples were collected from the lawn of the house.



What was analyzed?

The dust and soil samples were analyzed for metal levels.

What will we do with the results?

The metal levels in the dust will be used as site-specific data as part of the exposure assessment for the HHRA. The soil metal levels in the garden will be compared to the indoor dust levels to determine whether these are related to each other.