

Arsenic in Lake Water Around Yellowknife

News Type:

GNWT Advisories

YELLOWKNIFE (August 1, 2017) – The NWT Chief Public Health Officer is advising residents of the Northwest Territories about precautions they can take to avoid exposure to elevated arsenic levels found in some small lakes around sites of past industrial activity, such as Giant and Con Mines.

Based on available data, a map has been developed showing levels of arsenic found in lake water. Public health advice may be adjusted as more information becomes available from ongoing or future monitoring or research activities.

Map of Arsenic Concentrations Measured in Water Bodies in the Yellowknife Area (August 1, 2017)

(Click here for [PDF Version](#))

[View larger map](#)(link is external)

How to use the interactive map:

To zoom in and out, click on the “+” and “-” buttons found on the left side of the map.

To view the legend, click on the “>>” found on the left side of the map.

To see concentration level of arsenic on a specific lake, click on the coloured circle. This will also show you the longitudinal and latitude coordinates of the lake.

Please note to the best of our knowledge lakes without dots have not been tested.

Yellowknife River and Cameron River have been regularly tested for arsenic for many years and have always been shown to be well below drinking water guidelines. It is safe to swim and fish in these rivers; however it is recommended not to drink untreated water anywhere.

Date Sources:

1. Mike J Palmer, Galloway JM, Jamieson HE, Patterson RT, Falck H, and Kokelj SV. The concentration of arsenic in the lake waters of the Yellowknife area; Northwest Territories Geological Survey, NWT Open File 2015-06 25p.

2. Adam J. Houben, Rebecca D'Onofrio, Steven V. Kokelj, and Jules M. Blais. Factors affecting elevated arsenic and methyl mercury concentrations in small shield lakes surrounding gold mines near the Yellowknife, NT, (Canada) region. PLOSOne. 2016. <http://dx.doi.org/10.1371/journal.pone.0150960>(link is external).
3. Thienpont, J. (2017). University of Ottawa. Unpublished data.
4. Miramar Northern Mining Ltd. (2017). Surveillance Network Program Reports – Water License MV2007L8-0025. <http://www.mvlwb.ca/Registry.aspx?a=MV2007L8-0025>(link is external)
5. GNWT Environment & Natural Resources (2017). Unpublished data.
6. Environment & Climate Change Canada (2017). Unpublished data.

<p><i>Lakes with green points:</i></p> <p>Arsenic levels are below Health Canada's drinking guidelines. It is recommended not to drink untreated water from any lake. However, these lakes are considered safe for swimming and fishing.</p>	<p><i>Lakes with yellow points:</i></p> <p>Arsenic levels are above Health Canada's drinking water guidelines; however, occasional exposure does not pose a significant risk for arsenic-related health effects. It is recommended not to drink untreated water from any lake. These lakes are considered safe for swimming and fishing.</p>	<p><i>Lakes with orange, red or purple points:</i></p> <p>Arsenic levels are elevated (52 parts per billion and above). Water should not be consumed from these lakes. It is also recommended to avoid fishing, swimming, and harvesting berries, mushrooms and other edible plants within this zone. However, walking through this area does not pose a health hazard.</p>
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- [Questions and Answers - Arsenic Levels in Lakes around Yellowknife](#)
- [Map of Arsenic Concentrations Measured in Water Bodies in the Yellowknife area](#)
- [Arsenic in the Environment Around Yellowknife](#) (Brochure)
- [Canadian Drinking Water Guidelines](#)(link is external) (Health Canada)
- [Drinking Water in the NWT](#)(link is external)
- [Mackenzie Valley Review Board](#)(link is external)

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