

---

## Where is arsenic found?

*In the environment, arsenic cannot be destroyed, it can only change its form.*

- Arsenic is found naturally at low levels in the water of many NWT rivers and lakes, and in the soil.
- Toxic by-product (e.g. arsenic trioxide) from past gold mining activities at Giant and Con mines which resulted in additional arsenic in the local environment.
- Fish, berries, and some mushrooms are other sources of arsenic. Most arsenic in fish is in a form that is less harmful to humans.\*
- Other foods such as rice, rice-based cereals, and seaweed.
- Wood preservatives, to make it resistant to rotting and decay. Arsenic-treated wood was phased out in 2004 but it is still used in some industrial applications.
- Cigarette smoke.

---

## What are the possible health concerns?

*Short-term overexposure (a brief exposure to an extremely high level) to inorganic, toxic form of arsenic*

- Vomiting, abdominal pain and diarrhea.
- Numbness and tingling of hands and feet.
- Muscle cramping and death may also occur in extreme cases.

*Long-term exposure (exposure over months, years)*

- Can cause bladder, kidney, liver, lung and skin cancer.
- Other skin problems include skin lesions (wounds), changes in the color of the skin, and hard patches on the palms and soles of feet.
- May harm the nervous system and may affect learning in children.
- May contribute to cardiovascular disease and may affect lung function.

---

## How to reduce your exposure to arsenic?

- NWT's Chief Public Health Officer has recommended to avoid harvesting berries, mushrooms or other plants in areas impacted by industrial activities, and to avoid fishing and recreational water activities in lakes with documented high arsenic levels as part of a precautionary public health advisory (<http://www.hss.gov.nt.ca/en/newsroom/arsenic-lake-water-around-yellowknife>).
- If you have an infant, breastfeed if you can. Feed a variety of cereals to your infant, not only rice-based.
- Do not burn older pressure-treated wood (manufactured before 2004) and avoid using it for home projects.
- Have children wash their hands after they play on or around older wooden play structures or decks. If you own the equipment or deck, apply a sealant or coating every one to two years.

---

\*If you ate seafood 2-3 days before your urine sample was collected, your result may show an elevated level of arsenic, but the form of arsenic in seafood is not considered to be a health concern because it is in a less toxic form.

For more information: [http://www.hss.gov.nt.ca/sites/hss/files/resources/contaminants-fact-sheets-arsenic-compounds\\_1.pdf](http://www.hss.gov.nt.ca/sites/hss/files/resources/contaminants-fact-sheets-arsenic-compounds_1.pdf)