ENVIRONMENTAL CONTAMINANTS: METALS

QANUILIRPITAA? 2017 HEALTH SURVEY

MERCURY is mainly released by industries and travels to the Arctic, where it accumulates in animals at the top of food chains (ex. beluga meat/*nikku* and big lake trout).

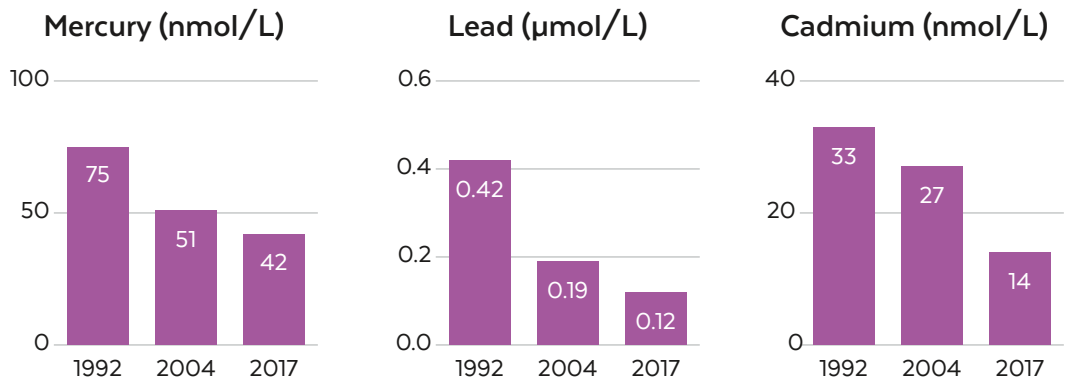
LEAD mainly originates from lead ammunition (shot and bullets). People may be exposed to lead when eating meat harvested with lead ammunition, as well as through cleaning of firearms.

CADMIUM is used in many products, including batteries and plastics, and it accumulates in some plants. Tobacco smoking is the most significant source of cadmium in humans.

Excessive exposure to mercury and lead may have negative impacts on brain development, memory and motor functions. Unborn babies and young children are especially at risk because their brains and bodies are growing. Also, chronic exposure to cadmium may damage the kidneys and bones.

KEY FINDINGS

Blood levels of mercury, lead and cadmium **HAVE DECREASED** over the last decades, but remain higher than down south.



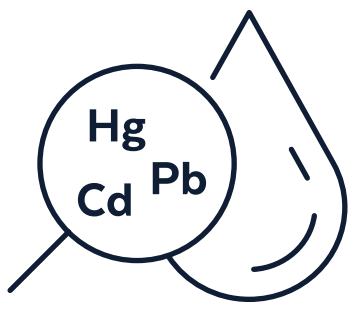
Blood **MERCURY** and **LEAD** levels were higher among **OLDER NUNAVIMMIUT**, but blood **CADMIUM** levels were higher among **YOUNGER NUNAVIMMIUT**.

57%

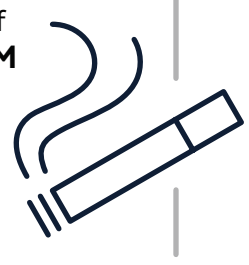
Half of **CHILDBEARING AGE WOMEN** still had blood **MERCURY** levels above Health Canada guidelines.

Using **LEAD AMMUNITION** and **CLEANING GUNS INDOORS** were associated with higher levels of lead in the blood.

Blood **MERCURY** levels were higher in residents of the communities of Hudson Strait, likely due to beluga meat consumption.

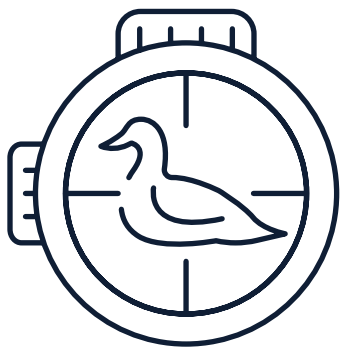


Higher blood levels of **LEAD** and **CADMIUM** were found in people who **SMOKE** or are exposed to **SECOND-HAND SMOKE**.



WHAT CAN BE DONE?

Country food is the **BEST FOR HEALTH**; here are some tips to avoid contaminants.



Mercury and lead testing for **PREGNANT WOMEN AND DURING MEDICAL FOLLOW-UPS FOR CHILDREN** is being implemented in Nunavik. Tailored recommendations are provided based on results. For example, for mercury:

- Favour country foods that are low in mercury (most country foods!) and temporarily avoid those high in mercury (beluga meat/*nikku* and big lake trout).

Use **LEAD-FREE AMMUNITION**.

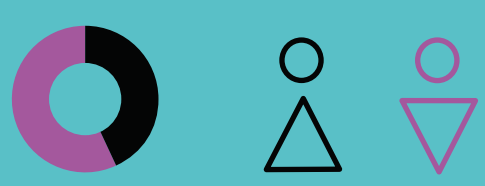
- **SHOT**: use **STEEL** shot which is available from Nunavik stores. If lead shot is used, remove all shot from the meat before cooking and eating.
- **BULLETS**: avoid using lead-based bullets. If lead bullets are used, remove at least 10 cm of meat around the bullet's wound channel.

Promote a **SMOKE-FREE** environment for all. **AVOID SMOKING**; seek support if needed.

CLEAN FIREARMS OUTSIDE. If in a shed, clean the area where the firearms were handled. Make sure children do not play with ammunition or casings.

Regional organizations are committed to working with the communities to reduce exposure to contaminants, especially to promote healthy pregnancies and children.

Qanuilirpitaa? 2017 is a population health survey carried out in Nunavik from August to October 2017. A total of 1 326 Nunavimmiut aged 16 and over from all 14 villages participated in this survey.



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NUNAVIK 2017

For more information:
nrbhss.ca/en/health-surveys

Nakurmiik to all Nunavimmiut who contributed to this important health survey!