



Contaminants in Nunavut

What is a Contaminant?

Some forms of contaminants are made by humans, and some contaminants are found naturally in the environment. Depending on what they are, where they are found, and how much there is of them, certain substances can cause harm.

A contaminant is too much of any substance where it does not belong.

Types of Contaminants

Metals: You may hear these referred to as “heavy metals.” They include things like mercury, cadmium and lead. High doses are toxic to most living things.

Radionuclides are radioactive forms of various atoms. Most radionuclides occur naturally at very low concentrations. High concentrations are dangerous.

Persistent Organic Pollutants (POPs) are manufactured chemicals. They are often a result of pesticides, industrial waste or burning garbage. POPs include PCBs.

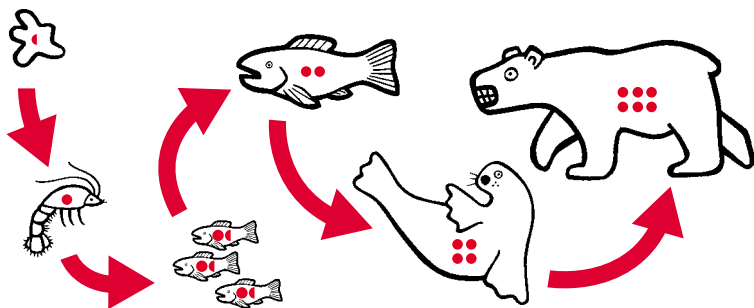
Biomagnification Moving through the Food Chain

We are just beginning to understand all the factors that influence contamination levels in wildlife. We do know that some contaminants (POPs) do not break down readily in nature. When eaten these substances stay in the bodies of animals and humans.

They are persistent. POPs do not dissolve in water but they are attracted to fats and oils in which they can dissolve. They are fat-soluble.

When animals eat persistent, fat-soluble contaminants, they stay in the fat or certain organs such as the liver or kidney. As an animal continues to eat contaminants they will build up in the body over time.

When animals use other animals as food, these animals can build up high levels of contamination. They consume all the contaminants that have built up in the body of the prey over its lifetime. The concentration of contaminants magnifies at each step along the food chain, this is called Biomagnification.



What are PCBs?

PCB stands for polychlorinated biphenyls. PCBs were invented in 1929 and manufactured until the 1970s. They were widely used in the manufacture of electrical components, paint sealants and asphalt. PCBs are persistent – they last a long time in the environment and are hard to get rid of. PCBs are now banned in North America. However some other countries still use them.

A total of 122 countries agreed to phase out the group of chemicals that include PCBs. Canadian aboriginal groups helped lead the effort that produced the international treaty.

INAC helps manage and support Nunavut's natural resources – this includes the environment. For more information contact:

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Where do Contaminants Come From?

Pollution is a problem around the world and pollution from one area of the world can easily travel to other areas. Many contaminants found in Nunavut have never been used in the North and some have never even been used in Canada.

