Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

## NORTHWEST TERRITORIES CONTAMINANTS FACT SHEETS

# DDT

Contaminants

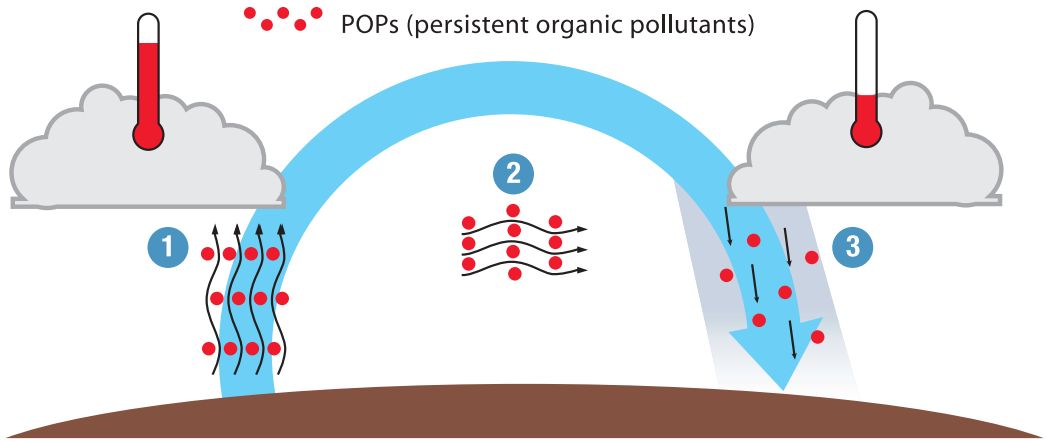
People in the Northwest Territories are becoming more aware of contaminants in the environment. One of these contaminants is DDT, or dichloro-diphenyl-trichloroethane. It is part of the POPs, or persistent organic pollutants, contaminant group.

This fact sheet will describe what DDT is, where it comes from, and what this means to the health of people who eat traditional food in the Northwest Territories.

**DDT is a human-made pesticide.**

DDT is used for controlling insects which cause serious tropical diseases such as malaria. Its ability to kill insects was discovered in 1939. The United States used to spray millions of tons of DDT every year to protect crops from insects.

In the North, DDT was sprayed to control mosquitoes around communities and military sites in the 1950s and 1960s. Studies found that soil around some of the old military sites that stored and used DDT was contaminated.




1. In warm temperatures POPs evaporate
2. POPs move in air by winds to colder places such as the North
3. In cold temperatures POPs condense and fall to earth

Canada

DDT was banned in North America in the early 1970s, but countries in Asia, Africa and South America still use it for tropical disease and insect control.

**DDT lasts a long time and travels long distances.**

Although DDT has saved many lives, and is a proven way to control some diseases, many environmental and health issues have arisen from its use. DDT is a persistent chemical – meaning it lasts for a long time in nature. Air and water currents can spread DDT over great distances. On warm days, it can slowly evaporate into the air and travel for long distances until it reaches cooler temperatures in arctic regions.

**Animals that are naturally lean do not accumulate much DDT.**

DDT can be absorbed by plants, wildlife and people. It is mostly stored in fat. Animals that eat only plants and are naturally lean do not accumulate much DDT. Animals (predators) that eat other animals (prey) are higher on the food chain and can build up DDT. This is called biomagnification.

**DDT can pose risks to the health of people and the environment.**

When DDT was being used in the 1970s, birds of prey were laying eggs with shells so thin that they would break when the mothers sat on them.

It is also believed that DDT can disrupt hormones and development in animals. In laboratory studies, DDT has been linked to liver cancer and adrenal gland problems in rats, and was found to affect the nervous system and reproduction.

# Did you know...

**Levels of DDT have decreased since the 1970s.**

Generally, levels of DDT in the environment have dropped in the last 10 years. Levels in some fish decreased greatly within the first six years that DDT use was banned in North America. Levels have now stabilized. Studies of seabird and falcon eggs show much less DDT now. Studies of seal blubber also indicate decreases in DDT levels.

# Good News...

**Traditional foods are safe to eat!**

Even though some very low levels of DDT may be present, traditional foods are some of the healthiest foods available. Health advisories related to DDT have never been issued in the Northwest Territories.

To avoid exposure to DDT you can:

- Avoid eating too much animal fat, such as blubber.
- Eat smaller and younger fish.

The long-term effects of DDT on humans are not known. At levels much higher than are found in arctic peoples, it is believed to cause cancers. DDT has also been shown to affect the human nervous system. It has been detected in human fat, blood and milk all over the world, but it is not harmful to humans at such low levels.

**Every year there is less DDT used worldwide.**

Because of growing concern about health and environmental effects of DDT and other chemicals like it, a United Nations treaty was finalized in 2000. A total of 122 countries agreed to phase out the group of chemicals that includes DDT. Canadian Aboriginal groups helped lead the effort that produced the international treaty. Many countries are now supporting research into new alternative ways to controlling malaria without using DDT. In the Northwest Territories, old military sites with DDT contamination are being cleaned up.

## For more information please contact:

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