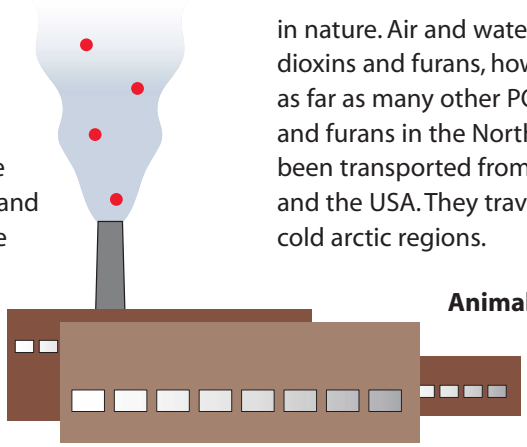
Indian and Northern Affairs Canada
Affaires indiennes et du Nord Canada

NORTHWEST TERRITORIES CONTAMINANTS FACT SHEETS

Dioxins and Furans

People in the Northwest Territories are becoming more aware of contaminants in the environment. Two of these contaminants are dioxins and furans. They are part of the POPs, or persistent organic pollutants, contaminant group. This fact sheet will describe what dioxins and furans are, where they come from, and what this means to the health of people who eat traditional food in the Northwest Territories.



Dioxins and furans last a long time and can come from far and near.

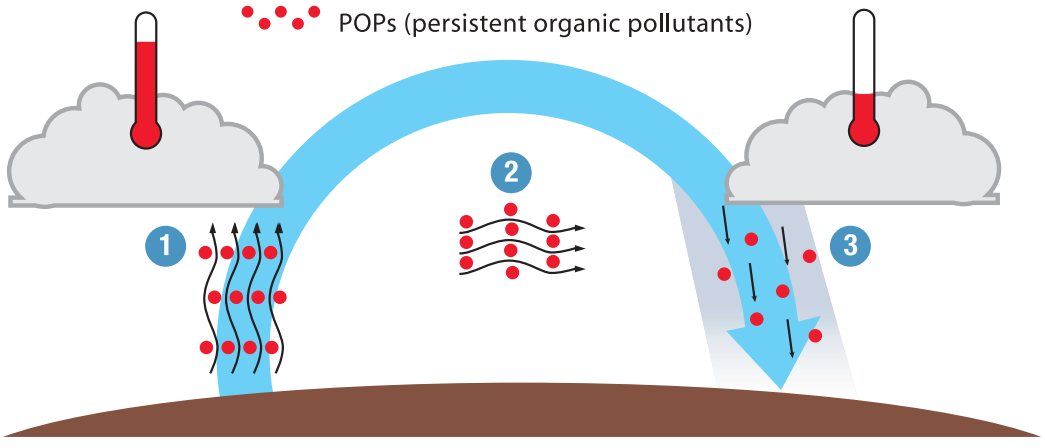
Dioxins and furans are produced as by-products of several industrial processes, and are also released when garbage or medical waste is burnt. Dioxins and furans are persistent – meaning they last a very long time in nature. Air and water currents can spread dioxins and furans, however they do not travel as far as many other POPs. Some of the dioxins and furans in the Northwest Territories have been transported from incinerators in Canada and the USA. They travel until they settle in cold arctic regions.

Animals that are naturally lean do not accumulate many dioxins and furans.

Dioxins and furans can be absorbed by plants, wildlife and people, and are usually stored in fat. Animals that eat only plants and are naturally lean, do not accumulate many dioxins and furans. But animals (predators) that use other animals for food (prey) are higher on the food chain and can build up dioxins and furans. This is called biomagnification.

Effects of dioxins and furans on human health are not easy to identify.

In people, it is much harder to tell what dioxins



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

and furans do. Studies have shown the possibility of subtle effects on neurological and physical development, as well as the immune system. It is difficult to isolate effects from dioxins and furans versus effects from PCBs.

Dioxins and furans have been classified as likely carcinogens (cancer-causing agents), but recent research suggests that dioxins and furans can also prevent some cancers. You have a greater risk of getting cancer from smoking than from dioxins and furans.

People are taking action against dioxins and furans.

Partly due to concerns about dioxins and furans, standards for incinerator air emissions have become stricter since the 1980s. Current studies indicate that emissions of dioxins and furans have taken a large drop.

Because of growing concern about health and environmental effects of dioxins and furans and other persistent chemicals, a United Nations treaty was finalized in 2000. A total of 122 countries agreed to phase out the group of chemicals that includes dioxins and furans. Canadian Aboriginal groups helped to lead the effort that produced the international treaty.

Better controls on the industrial plants producing the majority of the dioxins and furans reaching the North are expected. In the Northwest Territories, old military sites with dioxin and furan contamination are being cleaned up.

Good News...

Traditional foods are safe to eat!

Even though some very low levels of dioxins and furans may be present, they are not a cause for concern in the Northwest Territories. Traditional foods are some of the healthiest foods available.

To avoid exposure to dioxins and furans you can:

- Avoid breathing smoke from burning garbage.

Did you know...

Dioxins are a group of over 100 chemicals. Furans are another group of chemicals that behave similarly to dioxins. This is why they are often discussed together.

For more information please contact:

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