



CHLORDANE

ENVIRONMENTAL HEALTH – CONTAMINANTS FACT SHEETS

WHAT DO WE KNOW ABOUT CHLORDANE?

Chlordane is a persistent organic pollutant (POP). It is made by humans and does not occur naturally in the environment. Chlordane is a pesticide that was used on farms, lawns, gardens and in homes. Chlordane is a mixture of over 140 similar chemicals.

In 2003, chlordane was banned in Canada and cannot be imported. However, chlordane that is produced elsewhere in the world can travel long distances in the air and settle in Canada. It is very stable and lasts a long time in the environment.

POPs levels become higher in animals as we move up the food chain. This process is called biomagnification

(see *Contaminants Overview fact sheet* – <http://www.hss.gov.nt.ca>). Aquatic food chains are usually longer than land food chains, which is why marine mammals tend to have the highest levels of POPs. POPs levels also tend to be higher in older animals due to a process called bioaccumulation (see *Contaminants Overview fact sheet* – <http://www.hss.gov.nt.ca>).

POPs do not dissolve very well in water. When POPs enter water, they will stick to sediments instead. This means that water contains very low levels of POPs and we do not need to be concerned about POPs in the water.

HOW DOES CHLORDANE AFFECT HUMAN HEALTH?

If a person is exposed to POPs, many factors will determine whether any harmful health effects will occur and what the type and severity of those health effects will be. These factors include the dose (how much), the duration (how long), the route or pathway by which you are exposed (breathing, eating, drinking, or skin contact), the other chemicals to which you are exposed, and your individual characteristics such as age, gender, nutritional status, family traits, life-style, and state of health.

The main source of exposure to chlordane is by eating foods that contain small amounts.

When a person is exposed to high amounts of chlordane, the nervous system, digestive system and liver may be affected.

ARE TRADITIONAL FOODS SAFE TO EAT?

Traditional foods provide many essential nutrients that can lower the risk of chronic diseases. Marine mammals tend to have the highest levels of POPs, particularly in the fatty

tissues. However, most people do not need to be concerned about contaminated-related effects from traditional food consumption. Generally, the benefits of eating traditional foods outweigh the risks from contaminant exposure.

