

## How can I reduce my current exposure to dioxins?

About 90 percent of New Zealanders' current exposure comes from food. People can reduce their exposure by reducing the amount of animal fat they eat (but it is not recommended that all fat be eliminated because a moderate amount is part of a healthy balanced diet). Not smoking and not burning rubbish, particularly plastics or driftwood, all help to reduce exposure.

Previous studies of the New Zealand population show that dioxin levels have dropped by as much as 70 percent in the ten years from the late 1980s. This will continue to decline.

## What if I was exposed to dioxin at Paritutu, New Plymouth?

You should consult your usual health practitioner if you have concerns about your health.

There is a special health service for people who were exposed to dioxins from the former Ivon Watkins Dow factory in Paritutu, New Plymouth. You may be eligible for this service if you lived or worked at or near this factory between 1962 and 1987, and you are entitled to publicly funded services in New Zealand.

### Where can I get more information?

You can get more information about dioxin exposure and its health effects, and the Health Support Service for Dioxin Exposed People from the Ministry of Health.

Our contact details are:

Ministry of Health  
PO Box 5013  
Wellington

Telephone: 0800 288 588

Email: [emailmoh@moh.govt.nz](mailto:emailmoh@moh.govt.nz)

Website: [www.moh.govt.nz/dioxins](http://www.moh.govt.nz/dioxins)

# Dioxin and Health

## What are dioxins?

Dioxins are a group of chemicals. Research shows that some dioxins have adverse health effects.

## How can I be exposed to dioxins?

Dioxins are formed naturally and by some industrial processes. Cigarette smoke also contains small amounts of dioxins. For most New Zealanders, about 90 percent of dioxin exposure is through food. This is mainly from animal fats like meat, dairy products, eggs, and fish. Small amounts of exposure can also occur from breathing in dioxin, skin absorption, and inadvertently eating or drinking contaminated soil or dust.

## How can dioxins affect my health?

There have been many studies about dioxin but there is a lot that we do not know about how dioxin affects people. For example, we do not know how much dioxin affects a person or how long a person has to be exposed for before they are affected. Animal studies show cancer, immune, reproductive, and developmental effects but the evidence of non-cancer effects in people is limited.

The most well studied dioxin is called 2,3,7,8-tetrachlorodibenzo-*p*-dioxin (TCDD). In animal research, dioxin seems to be a strong promoter (helps it along) and weak initiator (starter) for the development of cancer. This means that cancer development following dioxin exposure may depend on other causes of cancer like tobacco use.

The Institute of Medicine of the National Academy of Sciences in the United States of America regularly reviews the evidence about dioxin exposure and health. It makes a list of conditions that it accepts as being associated with dioxin exposure. It accepts the following conditions as being associated with exposure: four rare cancers (Hodgkin's disease, non-Hodgkin lymphoma, chronic lymphocytic leukaemia, and soft tissue sarcoma) and a severe acne-like skin condition (chloracne).

There is some evidence that dioxin exposure is associated with cancers of the respiratory system, prostate cancer, multiple myeloma, early onset transient peripheral neuropathy, porphyria cutanea tarda, Type II diabetes, hypertension, AL amyloidosis, and spina bifida in offspring. Many of these diseases are also associated with things other than dioxin exposure.

## Is there a medical test for dioxin exposure?

People can have their blood serum tested to see how much dioxin it contains today.

This test is not recommended. Serum dioxin tests cannot predict if you will develop a disease, or the outcome of a disease that a person currently has. It cannot accurately tell you what your past exposure was. A person who had a high level of exposure in the past may have a serum dioxin test which shows low or minimal levels of dioxin now. The amount of dioxin in a person's body naturally decreases over time. How fast it decreases over time depends on many things including how old the person was when they were exposed, weight gain or loss, etc.

## Are there any treatments for dioxin exposure?

There is no generally accepted treatment to get rid of dioxins. Everyone has some dioxins in their body but levels in the general population are decreasing.