What is bromodichloromethane?

Bromodichloromethane is a colorless, nonflammable liquid. It will dissolve in water, but it quickly evaporates into air.

Most bromodichloromethane is formed as a byproduct when chlorine or chlorine-containing chemicals are added to drinking water to kill bacteria.

Small amounts are formed naturally by algae in the oceans. Only small quantities of bromodichloromethane are produced in the United States. The small quantities that are produced are used in laboratories or to make other chemicals.

How can I be exposed to bromodichloromethane?

The most likely way you are exposed to bromodichloromethane is from chlorinated water supplied to homes, work, and public places. You can be exposed to very small amounts by drinking the water, inhaling the vapors released from the chlorinated water during showering and bathing, and through your skin during water-related activities such as washing dishes, bathing, showering, and swimming in a chlorinated pool. These very low levels are unlikely to cause harm.

How can bromodichloromethane affect my health?

A small number of studies have examined possible relationships between exposure to bromodichloromethane and harmful health effects in people. However, most of the people were also exposed to other chemicals, so bromodichloromethane exposure may not be the only reason for the reported health problems.

Studies in lab animals have found liver damage, kidney damage, and decreases in immune response. Bromodichloromethane can also cause an increase in early pregnancy miscarriages and decreases in birth weight in animals. These effects found in animals happened at levels much higher than what humans normally would be exposed to in their homes or their everyday environment.

The levels of bromodichloromethane found naturally in the environment are lower than levels known to cause health problems.

Agency for Toxic Substances and Disease Registry
Division of Toxicology and Human Health Sciences
How can bromodichloromethane affect children?

The health effects of bromodichloromethane exposure in children are not known. However, it is expected that children exposed to high levels would experience the same health problems as adults.

Can bromodichloromethane cause cancer?

Large intestine, kidney, and/or liver tumors were found in lab animals exposed to high levels of bromodichloromethane. These levels are higher than levels usually found in the environment.

The Department of Health and Human Services considers bromodichloromethane to be reasonably anticipated to be a human carcinogen (causing cancer in humans). The U.S. Environmental Protection Agency (EPA) considers it to be a probable human carcinogen.

Can I get a medical test to check for bromodichloromethane?

Bromodichloromethane can be measured in blood, exhaled air, and urine. Doctor’s offices do not routinely offer these tests.

Increased bromodichloromethane levels in your blood or urine can show that you have recently been exposed. However, this does not predict if you will have health problems from bromodichloromethane.

How can I protect myself and my family from bromodichloromethane?

Most people don’t need to take any special steps to avoid bromodichloromethane in their daily lives.

If you know that there is a high level in your water, you can take shorter baths or showers. Whenever possible, you can also open bathroom windows or use ventilation fans while bathing. Installing commercially available filter systems at home can also reduce exposures to bromodichloromethane from tap water.

For more information:

Call CDC-INFO at 1-800-232-4636, or submit your question online at https://www.cdc.gov/dcs/ContactUs/Form

Go to ATSDR’s Toxicological Profile for Bromodichloromethane: https://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=708&tid=127


Find & contact your ATSDR Regional Representative at http://www.atsdr.cdc.gov/DRO/dro_org.html