

# Oregon Department of Human Services

Office of Environmental Public Health  
800 NE Oregon Street #604  
Portland, OR 97232-2162

(503) 731-4030 Emergency  
(971) 673-0405  
(971) 673-0457 FAX  
(971) 673-0372 TTY-Nonvoice

## TECHNICAL BULLETIN

# HEALTH EFFECTS INFORMATION

Prepared by:  
Department of Human Services  
ENVIRONMENTAL TOXICOLOGY SECTION  
Office of Environmental Public Health  
October 1990

**ETHYLENE DIBROMIDE  
(EDB)**

**For More Information Contact:**

**Environmental Toxicology Section  
(971) 673-0440**

**Drinking Water Section  
(971) 673-0405**

## **SYNONYMS**

1,2-dibromoethane, glycoldibromide, Dowfume, pestmaster, soilbrome

## **EDB**

EDB is a synthetic, or man-made, organic compound with no natural sources. It is used as a gasoline additive and was formerly used as a pesticide fumigant for soil, grain, and fruit. Pesticidal uses have been restricted by the Environmental Protection Agency (EPA), but EDB may persist in groundwater for many years after soil applications cease. The EPA has set a maximum contaminant level (MCL) for EDB in drinking water of 0.00005 mg/l (0.05 parts per billion).

## **HEALTH EFFECTS OF DRINKING EDB CONTAMINATED WATER**

Consuming EDB, even at low levels over a period of time, has been shown to result in adverse health effects in animal studies, including damage to the liver, kidneys and testes, genetic mutations and chromosomal damage. Based on additional animal studies, EPA considers EDB to be a probable human carcinogen. EPA estimates that if an individual consumes water containing EDB at 0.04 parts per billion over his or her entire lifetime, that person would theoretically have no more than a 1 in 10,000 chance of developing cancer as a direct result of drinking water containing this pesticide.

## **WHAT TO DO ABOUT EDB CONTAMINATION**

The Health Division recommends that water containing EDB not be used for drinking water. Alternate sources of drinking water may include connection to a public water supply or properly constructing a deeper well. Some individuals may want to consider the installation of home treatment units such as granular activated carbon filters. Individuals interested in home treatment units are encouraged to contact the Health Division for information on selection and use of this type of equipment. A short term solution is to use bottled water.

**For More Information**, contact the Drinking Water Section of the Department of Human Services at (971) 673-0405.