

Where can I get more information about EDB?

Your County Health Department can provide you with additional information on EDB contamination in your area.

Other sources for information related to EDB include:

Filter installation and maintenance:

Water Supply Restoration Program,

Bureau of Water Facilities Funding,
Florida Department of Environmental Protection, **850.245.8358**

<http://www.dep.state.fl.us/water/wff/wsapply/index.htm2>

Human health and field and laboratory testing:

Bureau of Water Programs,

Florida Department of Health,
850.245.4069

<http://www.doh.state.fl.us/environment/water/index.htm>



What you need to know about
Ethylene Dibromide (EDB)
and your well water.

Bureau of Water Programs
Division of Environmental Health
FLORIDA DEPARTMENT OF HEALTH

Ethylene Dibromide (EDB) in Florida Groundwater

One of Florida's most precious resources is drinking water. However, clean, safe, drinking water is something we tend to take for granted. In fact, in some areas of the state, drinking water supplies face a serious threat from a chemical known as ethylene dibromide (EDB). In 1983, EDB was found in drinking water wells in a number of areas of Florida. Since that time, the state has been testing water supplies and providing clean drinking water to homes whose private wells do not meet the state drinking water standard for EDB.

What is EDB?

EDB is a man-made chemical that was manufactured in the United States for more than 70 years. Millions of pounds per year were produced in the early 1980s, but amounts have declined since then. EDB was used:

- to kill insects in fruit and grain,
- to kill termites,
- to kill small destructive microscopic worms in soil called nematodes, and
- for leaded gasoline.

Is EDB currently used?

No, EDB in agriculture applications were discontinued in 1984 and unused EDB supplies were recalled. Leaded gasoline, which contained EDB, is no longer available.

How does EDB get into drinking water?

Until 1983, when EDB was first found in wells, most people did not consider it a threat to groundwater. Scientists thought that EDB would evaporate as quickly as it was applied to the soil. However, a portion of the EDB became bound to soil particles during application. In a few instances, EDB in soil was found to be caused by leaking underground leaded gasoline storage tanks. Rainwater slowly flushed EDB from the soil into the groundwater which carried the contamination to drinking water wells.

How much EDB in my well water is a safe level?

In 1984, the State of Florida adopted a Drinking Water Standard for EDB, which requires that no more than 0.02 parts per billion (ppb) of the chemical be present in water. Florida's program also provides free drinking water well sampling, and free modification of unsafe wells in communities where there are EDB concerns. To avoid taking chances with your health, Florida has established a standard that is more stringent than the Federal Drinking

Water Standard. Federal guidelines allow 0.05 ppb of the chemical in water.

What are the health effects of EDB?

Studies show EDB could cause cancer and birth defects in laboratory animals. However, the concentrations used in these animal studies were much higher than those usually found in Florida groundwater.

Can I use my water until alternative water is obtained?

Yes, in almost all cases in Florida, the concentrations found in the groundwater were too low to result in short-term exposures. In fact, even at the highest EDB concentrations in Florida groundwater, a few months or a few years exposure would result in a minimal increase risk of cancer. If your private well is tested and found to contain EDB at a concentration greater than the standard, the well water can safely be used for drinking, bathing, and cooking, for the short period of time until a filter can be installed or the home is connected to a public water supply.

Can water with EDB in it be used for other purposes?

Yes, the unfiltered EDB contaminated water is safe to use for washing dishes, flushing the toilet, and other normal household and garden uses.

How do I get my well water tested for EDB?

The Florida Department of Health (DOH), through its county health departments (CHDs), tests private drinking water wells near areas where EDB has been used. Between 1984 and 1985, all counties in Florida were surveyed for possible groundwater contamination with EDB. A number of EDB-related sites were identified in 22 counties, mostly located around agricultural fields and golf courses. Most of the EDB sites were found in Highlands, Jackson, Lake, Orange, and Polk counties.

If you feel that your water may contain EDB, you should contact your CHD's Environmental Health Section and request that your well be tested. DOH personnel will evaluate your property to see if EDB use was likely to have occurred in your area. Based on the preliminary evaluation, the local CHD may collect water samples from your well. The samples are then shipped to the DOH laboratory in Jacksonville for analysis. Test results will be reported to the well owner or the person living in the house at the address of the well. The property owner is not charged for these services.



Who else can test my well for EDB?

Several private laboratories can perform these tests. Private laboratories charge a fee for their service. You can get a list of private laboratories from the telephone directory or from the following DEP website: www.floridadep.org/labs/chemistry/index.htm.

Can EDB be cleaned from a well?

No, only the natural, slow breakdown of EDB will solve the problem, but this process takes many years. EDB can be removed by filtering the water through a granulated carbon filter. Boiling water and many other treatments do not effectively remove EDB. If a water line is located nearby, the best course of action for the property owner is to connect to a community water supply.

How much will this cost me?

Florida has established a fund to provide safe water to people whose wells have been contaminated by chemicals, including EDB. The fund is administered through the Department of Environmental Protection (DEP). DOH and DEP work closely together to identify wells containing chemicals above the state drinking water standards. Once a well has been identified, DEP will determine the most cost-effective way to provide safe water to the homeowner. DEP then contracts with private businesses to have filters installed or to connect the house to a community water supply. The alternative water supply is arranged at no cost to the homeowner.