

MTBE & WELL WATER

What is MTBE?

Methyl Tertiary Butyl Ether (MTBE) is a chemical added to fuel to make it burn more cleanly and efficiently. In the 1990s, many states required the addition of MTBE to gasoline in order to meet federal clean air mandates.

MTBE is a flammable liquid with a distinctive, offensive odor, somewhat like a sweet solvent. It has been found in groundwater throughout the US. Leaking gasoline storage tanks and spills are the leading source of MTBE contamination in water.

What are the health effects of MTBE?

There is no published data on the effects on people who ingest MTBE. Studies with rats and mice suggest that it may be a cancer-causing agent and may cause gastrointestinal irritation, liver and kidney damage, and nervous system effects.

The EPA recommends a maximum level of MTBE of 0.02 parts per million to control odor and 0.04 parts per million to prevent adverse taste. Meeting these control levels can help protect against adverse health effects. Well owners are encouraged to use this level as a guideline for when well water should be treated. If your state has a lower maximum level for MTBE in drinking water, this level supersedes the EPA level and should be used in its place.

If you suspect contamination or experience illness, stop drinking and cooking with the water immediately and do not resume until testing has proven it to be safe to use. Always seek advice from your medical doctor if you have any health concerns.

How do I test for MTBE?

If you live near a gas station in a state where MTBE has been used, it is recommended that you test for the chemical. Your local health department or state environmental agency may be able to tell you if MTBE has been found in water in your area and provide a list of state-certified laboratories in your area. You can also use [our interactive map](#).

What is the treatment for MTBE in well water?

Air stripping in packed tower aerators and granular activated carbon (GAC) filters which are used frequently to remove other volatile organics from drinking water may help to reduce MTBE. Treatment systems should be certified by NSF or Water Quality Association (WQA) when available. To find treatment systems that are certified visit [NSF](#) or [WQA](#) websites. It is necessary to maintain treatment devices as specified by the manufacturer or your water treatment professional. You should also retest your water after treatment is installed and after maintenance to confirm the effectiveness of the device. Contact a certified water treatment professional for guidance. To locate a certified water treatment professional in your area, visit [WQA's](#) website.

For More Information on MTBE & Well Water

Contact your licensed well contractor, local health department, state environmental agency, or the [wellcare®](#) Hotline.



Information to help maintain and protect your water well system:

[wellcare®](#) is a program of the [Water Systems Council \(WSC\)](#). WSC is the only national organization solely focused on protecting the health and water supply of an estimated 23 million households nationwide who depend on private wells (according to the U.S. EPA).

This publication is one of more than 100 [wellcare®](#) information sheets available FREE at www.watersystemscouncil.org.

Well owners and others with questions about wells and well water can contact the [wellcare®](#) Hotline at 1-888-395-1033 or visit www.wellcarehotline.org to fill out a contact form or chat with us live!

JOIN THE WELLCARE® WELL OWNERS NETWORK!

By joining the FREE [wellcare®](#) Well Owners Network, you will receive regular information on how to maintain your well and protect your well water.

Contact us at 1-888-395-1033 or visit www.wellcarehotline.org to join!