

Agency for Toxic Substances and Disease Registry Fact Sheet

Methane Gas in Well Water

This fact sheet is about methane gas in well water and what actions need to be taken to protect yourself from methane gas.

What is methane?

- Methane is a colorless, odorless gas.
- Methane can dissolve in water and escape to the air as a gas.
- Methane gas can build up in poorly ventilated areas and cause a fire or explosion.

How can methane harm my health?

- Drinking water or eating food prepared with water containing methane gas is not a health hazard.
- Skin contact with water containing methane gas is not a health hazard.
- Running a large amount of water, such as with bathing or showering, could cause methane gas to build up in a small poorly ventilated area, such as a small bathroom, and cause a fire or explosion.

How do I know if methane is in my water?

- Water that has bubbles like carbonated soda or that looks white or milky may contain methane.
- Water can be tested for methane by an approved drinking water testing laboratory. Contact information for these laboratories is available from state and local health departments.

What can I do if methane is in my water?

- Put a combustible gas detector in poorly ventilated spaces in your home where methane gas could concentrate.
 - The detector will warn you if methane in your home approaches an unsafe level.
 - Most home improvement or hardware stores carry detectors that will alert you with light or sound.
 - Follow the directions that come with the detector to find the best place to set it up.
- Ventilate areas in your home where methane gas could accumulate.
 - In small or inside areas where you use a lot of water (such as the bathroom, kitchen, or laundry room), make sure you turn on a fan or open a window when water is running for more than a few minutes.
- Have a vent put on your wellhead.
 - A vent on your wellhead will let the methane gas get away before it enters your home.
- Do not let sparks or open flames near the wellhead or inside your home, such as the bathroom or laundry room.

What should I do if the combustible gas detector sends out an alarm?

- Follow the instructions that come with the alarm.
- A combustible gas detector is meant to be a warning. If the detector sounds an alarm, that does NOT mean you will have an explosion or fire in your home.
- Open the windows in your home.
- Put out any open flames such as cigarettes or candles.
- To be safe, you should get yourself and everyone else out of the house.
- Get far enough away from your house to be safe in the unlikely event of an explosion and call 911.
- Do not go back into your house until the fire department checks your house and says it's safe.

How can I vent my water well for methane?

- Contact your state or local public health department for information on approved water well drillers and pump installers who can put in a well cap vent for you.

How can I get more information?

- Contact Bruce Tierney, MD, Medical Officer with the ATSDR Exposure Investigation Team, at 770-488-0771 or 1-888-320-5291 or by email at BTierney@cdc.gov
- ATSDR at 1-800-CDC-INFO (800-232-4636) or TTY: (888) 232-6348 or by email at cdcinfo@cdc.gov

About ATSDR

ATSDR—the Agency for Toxic Substances and Disease Registry—is a federal public health agency and part of the U.S. Department of Health and Human Services. ATSDR works to create healthy and safe environments and helps people avoid harmful exposures to toxic substances.