



Hydrogen Sulfide (H₂S)

Quick Facts

Hydrogen sulfide (H₂S) is a colorless gas that is naturally occurring in groundwater. It has a rotten-egg odor and is also known as sewer gas or swamp gas. People can smell the odor of H₂S at very low levels. Sensitivity to H₂S odor can be different for each person. People who have been exposed to the gas for a while may not be able to smell it because they can get used to the smell.

How can I be exposed to H₂S?



People are most likely exposed to H₂S by breathing it in. People may be exposed where they work or live.



People who work in or live near pulp and paper mills, natural gas drilling and refining operations, wastewater treatment plants, and landfills can be exposed to higher levels of H₂S than the general population.



Household exposure to H₂S can occur through misuse of drain cleaners, dry sewer traps, or by the presence of sulfur reducing bacteria in the plumbing system or groundwater.

Does H₂S remain in the body after exposure?



- The human body does not store or build up H₂S.
- H₂S leaves the body through urine.

How can H₂S affect health?



- Breathing air containing low amounts of H₂S over a period of time can cause nose and throat irritation and headaches.
- Breathing air containing extremely high amounts of H₂S can cause you to faint and can negatively impact your respiratory tract, nervous system, and brain.
- There is no evidence that H₂S causes cancer in humans.
- There is no evidence that H₂S causes asthma. However, breathing in H₂S may worsen asthma symptoms.

If I can smell H₂S, does it mean it can affect my health?



- Smelling H₂S does not mean that it will affect your health. People can often smell H₂S at levels below those that can increase risk of harmful health effects.
- However, high levels of H₂S in the air may not be noticed by smell. Breathing in extremely high amounts of H₂S can cause your sense of smell to stop working temporarily. Additionally, you may not be able to smell H₂S if you have been smelling it for a while.

What if I am concerned about exposure to H₂S?



- Having one of the health problems listed on this fact sheet does not mean that you have been exposed to H₂S or that the health problem was caused by H₂S.
- Talk to your health care provider about your health concerns.
- If you have questions or concerns about H₂S exposure, call the MDHHS Environmental Health Hotline at 800-648-6942.

Want to know more?

Call the MDHHS Environmental Health Hotline at **800-648-6942**
or visit Michigan.gov/EnviroHealth.