



What is Hydrogen Sulfide (H₂S)?

Hydrogen sulfide (H₂S) is a colorless gas that smells like rotten eggs. At very high levels, hydrogen sulfide can be flammable.

Where does Hydrogen Sulfide come from?

Hydrogen sulfide often occurs naturally in some environments (gas wells, sulfur springs, swamps, etc.). It can also be associated with animal farms, industrial plants, sewers or sewage treatment plants.

How would a person be exposed to Hydrogen Sulfide?

Hydrogen sulfide is part of the natural environment; the general population will have likely had some exposure to hydrogen sulfide. The release of hydrogen sulfide from a specific source does not always lead to human exposure. You can only be exposed to the gas when you come into direct contact with it by breathing it in, eating or drinking something contaminated with it, or when it touches your skin. Any absorbed hydrogen sulfide does not accumulate in the body as it is rapidly metabolized in the liver and excreted in the urine. Hydrogen sulfide usually breaks down in the air and therefore exposure is only likely to continue if there is an ongoing source.

How is Hydrogen Sulfide detected?

People usually can smell hydrogen sulfide even at very low concentrations in the air, ranging from 0.0005 to 0.3 parts per million (ppm). These levels in the air are not dangerous and will not cause negative health effects.

What are the health effects of Hydrogen Sulfide?

Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some people with asthma. Low concentrations of hydrogen sulfide may cause headaches, poor memory, tiredness, and balance problems.



Brief exposures to high concentrations of hydrogen sulfide (greater than 1000 ppm) can cause a loss of consciousness. In most cases, the person appears to regain consciousness without any other effects. However, in some individuals, there may be permanent or long-term effects such as headaches, poor attention span, poor memory, and poor motor function.

What to do if I suspect a Hydrogen Sulfide gas leak?

If you notice a rotten egg scent near your home and suspect Hydrogen sulfide, call the Haldimand-Norfolk Health Unit at 519-426-6170.

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