



## Sewer Gas Infiltration

Sewer gas is a complex mixture of toxic and nontoxic gases that can be present at varying levels depending upon the source. It is formed during the decay of household and industrial waste. Highly toxic components of sewer gas include hydrogen sulfide and ammonia.

Sewer gas also contains methane, carbon dioxide, sulfur dioxide, and nitrous oxides. In addition, chlorine bleaches, industrial solvents, and gasoline are frequently present in municipal and privately owned sewage treatment systems.

**The principal risks and effects associated with exposure are:**

- **Hydrogen Sulfide Poisoning.** Exposure to low levels of hydrogen sulfide causes irritation of the eyes and respiratory tract. Other symptoms include nervousness, dizziness, nausea, headache, and drowsiness. This gas smells like rotten eggs, even at extremely low concentrations. Exposure to high concentrations can interfere with the sense of smell, making this warning signal unreliable. At extremely high levels, hydrogen sulfide can cause immediate loss of consciousness and death.
- **Asphyxiation.** High concentrations of methane in enclosed areas can lead to suffocation, as large amounts of methane will decrease the amount of oxygen in the air. The effects of oxygen deficiency include headache, nausea, dizziness and unconsciousness. At very low oxygen concentrations (<12%), unconsciousness and death may occur very quickly and without warning. Sewer gas diffuses and mixes with indoor air, and will be most concentrated where it is entering the home. It can accumulate in basements.
- **Explosion and Fire.** Methane and hydrogen sulfide are flammable and highly explosive.



The Green Drain can help to prevent sewer gas infiltration and potentially fatal cross contamination and infection spread caused by unprotected drains. The Green Drain is an economical Drain Trap Seal Device that allows water to flow down the drain while preventing Pests, Odors, and Harmful Gases/Pathogens from infiltrating the living or work space.



### Prevents

Drain Odors  
Pest Infiltration  
Sewer/Radon Gas Infiltration  
Harmful Biologic Aerosols

### Product Benefits

Increases Indoor Air Quality  
Protects the Public Health  
Green Technology  
Helps in LEEDS Certification

### Product Features

One way drain valve  
Ease of installation  
Does not impair flow rate

Does not impair plumbing maintenance  
Provides sewage back-flow protection  
Universal Plumbing Code Certified

