

## **Manure Gas --**

### **Farmer and Brother Die from Manure Gas Poisoning**

A 31-year-old male dairy farmer and his 33-year old brother died after entering a 25-foot square, 4-1/2-foot deep manure pit located inside a building on their farm.

The farmer had entered the pit to clear a clogged pipe on the pump intake. He was overcome by manure gases and collapsed while in the pit.

His brother was standing at the entrance of the pit. He saw his brother collapse and entered the pit in an attempt to rescue him.

Both brothers died of a combination of toxic gases and an oxygen deficient atmosphere.

**A Hidden Hazard**

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## Manure Gas -- A Hidden Hazard

The decomposition of manure that occurs in manure pits generates methane, hydrogen sulfide, carbon dioxide, and ammonia gases. These gases can produce oxygen-deficient, toxic and/or explosive atmospheres.

A person might enter a manure pit one time without apparent problems, but the next time could die. The most serious problems with gases occur when manure is agitated or when ventilation systems fail. However, gases are constantly being produced and there is never a "safe" time to enter a pit.

To reduce the danger of manure pit gases, take the following precautions:

- ◆ **Never enter a pit**, especially during or just after agitation. Without testing for toxic gases, there is no way to know if it is safe.
- ◆ **If absolutely necessary** to enter a pit, always wear a self-contained breathing equipment with oxygen supplying tanks. Cartridge respirators are not sufficient. **Always wear a safety line** and work with at least two other people outside the pit.
- ◆ **Remove all people** and all animals from buildings over pits before pit agitation.
- ◆ **Provide maximum ventilation** when agitating or pumping manure.
- ◆ **Do not smoke** or have any other fire or ignition source around manure pits.

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### UW Center for Agricultural Safety and Health

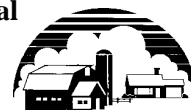
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