

# What's the Risk?

## Liquid Manure Storage Safety

### Introduction

Liquid manure storage is an integral part of the building systems on many modern farms. It allows farmers to store manure and apply it on croplands at the most beneficial time. Manure storage areas may pose a significant risk to the people and animals near them.



### What's the Risk?

- Lagoons, ponds, and liquid storage structures present the potential for drowning of animals and humans if access is not restricted.
- Floating crusts can appear capable of supporting a person's weight, providing a false sense of security and they make swimming, buoyancy or even moving around very difficult.
- Tractors and equipment can fall or slide into storage structures, ponds or lagoons if they are operated too close to them.
- Steep and slippery slopes or straight sides can make getting out of manure storage areas difficult or impossible.

### What Can Be Done?

To address the safety concerns created by construction of a liquid manure storage system farmers should:

- Enclose all open liquid manure storages with a permanent safety fence or wall extending to not less than 1.5 m (5 ft) above adjacent grade or floor level and having gates with latches to deter access by children and livestock.
- Install covers over access ports of all manure tanks with tops. These covers should weigh at least 20 kg (45 lb) so that children cannot lift them. A chain bolted to the cover and to the tank lid will prevent the cover from being removed from the area, or from being lost if it should fall into the tank.
- Install a sign warning of the danger due to toxic gases at every access to a liquid manure storage tank or under-floor manure transfer chamber.
- Where an outside tank is joined to the barn by a pipe or gutter, install gas traps to prevent dangerous gases from entering the barn.
- To discourage entry, do not install permanent ladders in a manure tank

Although there may not be many incidents of falling into liquid manure storage areas, the accidents that do occur are most often fatal. Adequately designed liquid manure storage areas with the appropriate fencing and gates will reduce the likelihood of accidental drowning.

For more information on liquid manure storage please see:  
<http://www.omafra.gov.on.ca/english/engineer/facts/10-051.htm>

