

Farm safety - confined spaces

Any confined space on a farm poses a particular danger, because the threat may not be apparent until it's too late. Silos, vats, tanks, wells, manure pits and other enclosed or partly enclosed structures can suffocate a person with vapours, toxic gases, dust or low oxygen levels.

Rescuers coming to the aid of someone who has collapsed inside a confined space are usually exposed to the risk too. It is not unusual for numerous members of the same family to be killed in a single confined space accident.

The dangers of confined spaces

Harmful fumes or low oxygen atmospheres are common in many confined spaces on farms. There is also the risk of suffocation inside a silo if stored grain or fertiliser collapses. The safest approach with any confined space is to avoid going in there. In many instances, tasks such as cleaning can be achieved using other means, such as external pumps.

If it is necessary for someone to go inside the confined space, consider hiring a contractor who is trained and experienced. If you have no other option but to go inside the confined space yourself, be sure to take all the safety precautions you can. Talk to WorkSafe Victoria first for valuable and potentially life-saving advice.

Sewers and manure pits

Gases such as methane and hydrogen sulphide can build up inside manure pits and displace the oxygen. Safety suggestions include:

- Cover pits securely and post warning signs.
- Include natural or mechanical ventilation in the pit's design.
- Try to devise ways to clean the pit from the outside.
- Keep ignition sources well away from the pit, as methane and hydrogen sulphide are flammable.
- If you must go inside the pit, wear self-contained breathing apparatus or an airline respirator. Take all necessary precautions.

Silos

A person can be buried and asphyxiated by falling feed, grain or fertiliser inside a silo. Safety suggestions include:

- Use a drier feed so you don't have to unblock the auger discharge or find ways to mix the feed so that it won't crust.
- Clear blockages from the outside through a hatch.
- Fit vibration systems or turbulence valves.
- Prevent moisture getting in and caking the feed by fitting and maintaining seals.
- If you have to go inside, use a strong safety line or harness and switch off mechanical devices like the auger.
- Don't work alone.

Underground tunnels and wells

Children can be attracted to wells as interesting places to play. Safety suggestions include:

- Cover or fence entrances securely and post warning signs.
- Warn children of the dangers.
- Make wells and underground tunnels strictly out-of-bounds as play areas.

Water tanks

Keep out of the tank by finding other ways to empty, repair and clean it. Safety suggestions include:

- Put a lid on the tank so animals and debris can't fall in.
- Fit an external pump or an automated self-cleaning system.
- Install taps in above ground tanks.
- Try cleaning out the tank from the outside, using high pressure hoses.
- Don't use petrol-powered pumps inside the tank.
- Hire a professional when required.

Rescue attempts can be fatal

Our first impulse when seeing a loved one in danger is to help them. However, entering a confined space with dangerous fumes or low oxygen levels can overcome and kill the rescuers too. Never attempt a rescue unless you have a proper rescue plan and the right safety equipment, such as breathing apparatus. Otherwise, call on emergency services personnel, who are professionally trained and equipped.

Draw up an emergency plan

An emergency plan for the whole family is vital. Some suggestions include:

- Seek advice from WorkSafe Victoria on how to safely deal with the confined spaces on your farm.
- Ensure easy access to a suitable first aid kit.
- Make sure at least one person on the farm is trained in first aid.
- Keep emergency numbers and correct addresses next to the telephone.
- Plan routes to the nearest hospital.
- Regularly talk through your emergency plan with your family and other workers.
- Make sure your children understand what to do in an emergency.

Where to get help

- Your doctor
- In an emergency, always call triple zero (000) for an ambulance
- National Centre for Farmer Health Tel. (03) 5551 8533
- WorkSafe Victoria Tel. (03) 9641 1444 or 1800 136 089
- Victorian Farm Safety Centre Tel. (03) 5335 3717
- Farmsafe Australia Tel. (02) 6752 8218

Things to remember

- Enclosed or partly enclosed structures on farms such as silos or manure pits can suffocate a person with fumes, dust or low oxygen levels.
- Without a proper rescue plan and safety equipment, rescuers coming to the aid of someone who has collapsed inside a confined space are usually overcome too.
- The safest approach with any confined space is to avoid going in there.
- Organisations such as WorkSafe Victoria can offer valuable advice on improving health and safety on your farm.

This page has been produced in consultation with, and approved by:

National Centre for Farmer Health

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