



Safety focus on: Farm transport

This guide highlights the key risks to you from accidents involving moving vehicles and provides practical advice on how you can make your farm a safer place for you, your employees and any visitors.

The Law

The Workplace (Health, Safety and Welfare) Regulations 1992 requires all employers to ensure, so far as is reasonably practicable, the health, safety and welfare of all their employees.

Transport activity is also covered by the Provision and Use of Work Equipment Regulations 1998 (PUWER). They require that equipment must be suitable for the task, properly maintained and guarded and that adequate training and information about the equipment is available for employees.

The Prevention of Accidents to Children in Agriculture Regulations 1998 (PACAR) makes it illegal to allow a child under 13 to ride on or drive agricultural self-propelled machines (such as tractors) and certain other farm machinery.

Introduction

Accidents involving moving vehicles account for approximately one quarter of the deaths each year in farming and in the past two years, this figure has risen to nearly a third of all fatalities.

The most common types of serious injury relating to transport in agriculture involves reversing manoeuvres, vehicles overturning and people using ATVs.

There are four main areas you should focus on when looking at how to make your farm a safer place as regards moving vehicles:

1. [Safe Vehicle](#)
2. [Safe Driver](#)
3. [Safe Site](#)
4. [Safe ATVs](#)

Safe Vehicle

Many accidents happen when people leave a vehicle without making sure it cannot move.

Even when the vehicle is stationary, you should make sure it is properly secured and made safe by following the Safe Stop procedure:



Always follow the Safe Stop procedure, no matter how short your stop:

1. **Handbrake on**
2. **Controls in neutral**
3. **Engine off**
4. **Key out**

Case Study

In 2005 a 23 year old farm worker was working alone, cultivating the land, a task he'd done many times before and was more than capable. For reasons unknown, the worker left his tractor without turning the engine off and was run over and killed by the cultivator.

A passing horse rider sounded the alert after she spotted his tractor by a hedge with the engine still running. His body was found with the spikes from the cultivator embedded in him.

Although it may not be convenient, remove the keys from machinery when vehicles are not in use to prevent accidents from untrained and inexperienced people operating them.

It is your legal duty to ensure that vehicles, machines and handling equipment are inspected regularly and any faults repaired immediately.

All loads carried must be stable and secure, many people are killed each year from falling objects.

Materials handlers and loaders must have good cab protection as they are far more likely to be hit by any falling objects.

Your tractors, trailers and other machinery must have brakes designed for the maximum loads and speeds at which they will operate.



Case Study

A farmer borrowed a telehandler from a neighbouring farm. Although the vehicle's brakes had recently been serviced, he felt a poor braking response so topped up the brake fluid.

As he drove down a slight hill the brakes failed and the vehicle started to run away. He jumped from the cab but hit his head as he fell and died from his injuries.

The following investigation found that during the recent service, one of the brake pipes had been left unconnected. Two partners in the farming business were fined £8,000 plus costs of £1,800 for the failures.

Sadly this accident is also thought to have contributed to the later suicide of a partner in the farming business who had lent out the vehicle.

Lifting Operations

Only use lifting equipment which is fit for the job and operated by a trained and experienced driver.

Under no circumstances should you use grain buckets, pallets or other makeshift equipment to lift people off the ground.

Safe working loads will be marked on lifting equipment. Make sure overload indicators on handling machines are in working order and are not ignored. People are regularly injured and killed from using lifting equipment at over its capacity.

Lifting equipment should be regularly inspected and tested (if necessary) by a competent person, who has the necessary qualifications and experience to identify potential faults. For specialist assistance in this you may want to talk to your insurer, local agricultural engineer or machinery dealer.

On the road

Specific legislation applies to vehicles which travel on public highways. However, as more farming transport accidents occur off road than on, the HSE apply the same standards and principles for off road travel as VOSA and the police do for on road travel.

Some basic points to consider are:

- The legal maximum road speed for a tractor (with an unsprung rear axle) is 20mph (32km/h)
- The maximum weight of a laden tractor-trailer combination on the road is 24.39 tonnes.
- All trailers over 750 kg require brakes, if towed above 20mph they should have high speed (commercial) brakes with a mechanism to apply the trailer brakes in the event the trailer accidentally detaches.
- You must protect and mark all sharp or dangerous edges and cover or remove attachments on materials handlers for road use.

There is a Trailer Buying Guide available with tips on how to purchase or hire a trailer that's safe and legal to use. Remember, trailer brakes are only as good as the maintenance - they need adjustment to keep performing well.

Case Study

A farm worker was loading beans into a lorry using a telehandler when the machine overbalanced, fell forward and partially trapped the lorry driver underneath the bucket. The lorry driver had to have both legs amputated.

An investigation found that the telehandler's safe working load indicator was not working, the load chart and extension markers on the boom were missing and the farm employee had not been trained in how to use the machine safely.

Following the accident, the farm owner was fined £20,000 plus costs of £1,891.

Case Study

A partner in a farming business was fined £1,000 plus prosecution costs of £343 when a tractor towing a trailer load of bales went out of control on a steep track and overturned. A bale was thrown through a hedge onto a public road causing a road traffic accident.

The trailer had been constructed at the farm without a suitable braking system, i.e. it was foreseeable that it would not impart any weight transfer onto the braking wheels of the tractor.

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Safe Driver

As an employer, it is your legal responsibility to ensure that your employees are adequately trained and competent to use machinery. Lantra offer a wide range of training courses focused on efficient and safe operation of machinery and equipment.

It is illegal to allow a child under 13 to ride on or drive agricultural vehicles and any passengers should only ride in cabs if they can sit in a safe position which doesn't interfere with the operation of the machine.

If you work alone, make sure someone knows where you will be working and when you will be expected back. It's a good idea to have a procedure for all staff to report in at the end of the day.

If you have signal on the farm, mobile phones are a very cheap and effective way to get help in an emergency, but must be kept on your person at all times.

Some models of phones are available with emergency assistance buttons or other functions built in which can automatically operate in the event of an accident.

To avoid overturns always turn uphill and if spreading things like fertiliser, recognise that as your load gets lighter, you will have less grip on the rear wheels.

Case Study

A 21 year old farmer's son was working alone spreading fertiliser. When loading the fertiliser he left the spreader tractor parked with its engine off and brought the loader tractor up to the spreader. He then got out leaving the engine running without putting the handbrake on properly.

As he went between the machines to slit the fertiliser bag, the loader tractor, which was on a slope, gathered speed and pinned him between the tractor and the spreader. His mobile was in the spreader tractor cab and he could not summon help.

When he failed to return home at the expected time and did not answer his phone, his father and sister went to look for him. They found him dead in the yard crushed between the two tractors.

To reduce the risk of injury if you do overturn:

- Wear your seatbelt; this is a legal requirement where there is a risk of overturning
- Stay in the cab and do not try to jump clear, this is one of the most common causes of death
- Make sure there are no large or loose items in the cab
- Do not remove windows or doors from a safety cab and regularly inspect the structure to make sure it is in a good condition

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Safe Site

Every year people die from being run over in farm yards. Many of these accidents involve older people and semi-retired farmers who fall and cannot move out of the way quickly enough and tragically children, who may not anticipate what a vehicle will do next.

Children are naturally curious and farms are an inviting place to play and explore. They will not understand the potential dangers in farm yards and with modern cabs, you may not be aware they are there until it is too late. Children should only be allowed into areas where machinery is moving when they are properly supervised.

Make sure people working on the farm know if there is likely to be children present and explain that staff should stop operations if children are in the farm yard and send them off somewhere safe.

If you have a lot of machinery moving around a yard, think about how to keep pedestrians and vehicles separate, to reduce the risk of people getting run over. This is particularly important for delivery drivers and sales reps who may not be familiar with your machinery movements.

Case Study

In Swansea, a worker was crushed to death between a truck and a reversing JCB. The employer had asked the driver of the JCB to reverse the vehicle into a workshop, but he did not assist with the backing up of the machine, despite being in a position to do so.



The company was fined £15,000 plus costs of £22,544 for not having a safe system of work for reversing machinery into the workshop.

Reversing cameras can help in improving visibility as can the use of hi-vis clothing at busy times.

Think about general site visibility and how you might be able to improve safety with lights and signs.

Visiting drivers should be made aware things like where to park and if there are one-way systems in operation. Signs can help with this, as will issuing clear delivery instructions when ordering products.

Case Study

An employee was unloading pallets when he was hit by a moving forklift truck. The worker received extensive internal injuries including damage to his spleen, which had to be surgically removed.

The company was fined £10,000 plus costs of £8,853 for not having a safe system of work to control vehicle movements on site.

One of the directors of the company was fined a further £5,000 for failing to provide an adequate health and safety system.

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Safe ATVs

All-terrain vehicles (ATVs) such as quad bikes have been involved in many serious incidents.

Head injuries are the most common cause of death and everyone riding a quad bike should wear a suitable helmet.

Helmets are available at a very reasonable price that have been designed for farm operations and that do not obstruct your vision or hearing.

Anyone riding an ATV should also have specific training on how to handle and maintain the machine. You can get details of suitable training courses from Lantra, franchised ATV dealers, manufacturers' websites and agricultural colleges.

ATVs can often be viewed as the poor relation of farm vehicles, despite being one of the most used. Levels of maintenance and safeguards should be the same on ATVs as those on bigger machines such as tractors and combine harvesters.

Safety checks and maintenance should be carried out in accordance with manufacturer's recommendations, but one of the most vital checks on ATVs is tyre pressures, as these are important for off road stability. Pressures should generally be low (2-7 psi) and a special pressure gauge may be needed (usually supplied by the manufacturer when new) as conventional gauges may not give an accurate reading.

Case Study

A 53-year old stand-in gamekeeper on a Scottish Borders estate was killed after suffering serious injuries to his pelvis when the quad bike he was driving overturned on a slope. He had no means of raising the alarm although there was a mobile phone signal in the area and the normal gamekeeper had been issued with a phone. He was found 52 hours later, some 200 yards away from the scene of the accident, in a separate field.

The trustees were fined £3,000 for breaching health and safety regulations by failing to provide a means of communication or carrying out a risk assessment for a lone worker to report in at the end of a shift.

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Further information

HSE can be contacted for specific health and safety information at www.hse.gov.uk/agriculture

For agricultural training search www.lantra.co.uk/CourseFinder or www.lantra-awards.co.uk. Alternatively call 0845 707 8007.