

Hay safe information guide

Managing risks while working with hay

Fodder Brief



There are many hazards and risks associated with working with hay - here we present the top seven.

This Fodder Brief aims to provide the worker with information on how they can limit their exposure to these risks, making the workplace safer for everyone.

Hay production: baling

Examples of risks

Injuries sustained from contact with machinery in operation.

How does it happen?

Workers can be placed at risk in a variety of ways, including being run over by tractors/machinery, becoming entangled in machinery such as power take-off (PTO) shafts or where guards are not in place or intact, and sustaining major cuts and abrasions from sharp components (e.g. knives on balers and mowers).

Ways to reduce risk

Ensure machinery is kept in good, well maintained condition, with maintenance and repairs being undertaken in accordance with Original Equipment Manufacturers (OEM) requirements.

Ensure power take-offs PTO's) and hydraulic equipment are stopped and isolated before working on machinery,

ensure gears in the tractor are disengaged.

Ensure personnel are kept clear of machinery when operating.

All personnel operating machinery must be licenced (e.g., driver licence for that tractor), and be trained correctly in the use of the machinery – verify competency of personnel.

Do not allow personnel to walk in front of the tractor and/or machinery while in operation.

Loading and unloading hay bales (including stacking)

Examples of risks

Falling or collapsing hay bales. Workers and others (bystanders) can be placed at risk by falling or collapsing hay bales – well packed (dense) large square and round bales can weigh up to 800kg. Significant crush injuries and/or death can occur.



How does it happen?

Hay bales falling or collapsing is usually caused by several factors, including:

- Ill-made bales (soft, not consistent in density, poor wrapping/string)
- Bales have moved, collapsed or become compressed during transport and handling
- Bales are stacked incorrectly
- Bales are stacked too high
- Hay bales being stacked on uneven ground

Ways to reduce risk

Create an exclusion zone around the area where loading/unloading and stacking is taking place.

Ensure that hay is stacked only to a height that is safe, ratio should be 1.5 times the minimum dimension of the ground level stack. For example, if the stack of hay is 10m wide by 20m long, hay should only be stacked to a height of 15m.

Correct technique for stacking hay—ensure that hay (especially squares) is neatly stacked on top of each other, and that the stack does not start to lean. If it does, immediately unstack and start again.

Use only equipment (such as telehandlers) that are designed for the task.

Ensure that the area used for stacking is clear and flat, do not stack hay on a slope or uneven ground.

Transporting hay

Examples of risks

Injury from falling hay, injuries from contact with machinery.

Remember that even if the hay is only being transported a short distance (e.g. only a few metres from a truck to a shed) accidents can happen.

How does it happen?

Bales are not correctly lashed onto trucks.

Machinery not designed to transport hay is used to carry out the task (e.g., bucket on a front-end loader or tractor).

Blind spots created when using equipment – operator unable to see clearly in all directions.

Uneven/rough roads or route.

Ways to reduce risk

Only ever use the correct machine to transport hay (such as a telehandler).

Use mechanically sound trailers and trucks to transport hay – all should be well maintained in good condition.

Ensure all equipment used to load or transport hay is fitted with well maintained falling object protective structures (FOPS), to provide protection in the event bales fall.

All hay needs to be lashed/strapped appropriately. Each 'stack' needs to be lashed, do not skip any. Do not skimp on the number of ropes/straps being used.

Utilise a 'spotter' if needed to ensure that the operator can transport the hay safely – ensure that eye contact can always be maintained and agree on a hand signal process for warnings about potential dangers.

Only critical personnel to be in the area of transportation, all other personnel to keep clear.

Ensure that drivers transporting hay are driving to the conditions, NOT the speed limit – take particular care on unsealed roads and routes.

Never stand on top of loads or loaders whilst in transit.

Working at heights

Examples of risks

There is a significant risk of



falling from a height, such as a haystack.

How does it happen?

Persons may be on the back of a truck or trailer to assist with loading, or on top of a haystack to assist with tarping of the stack, or to remove tarps and other lashings.

Ways to reduce risk

Use mechanical aids or equipment to assist personnel up and down stacks (ensure that it is a built for purpose 'man cage' – do not allow anyone to ride tines or other attachments).

Ensure that workers loading/unloading, or stacking are trained and competent in the process.

Personnel to remain clear of edges when working on top of stacks.

Provide a safe method of access to the stack, a risk assessment should be carried out prior to access.

Install a fall arrest system, particularly for the hay shed, to protect against falls.

Working around suspended loads

Examples of risks

There is a risk of hay dropping from a height, injuring or killing personnel who may be working underneath or near the suspended load.

How does it happen?

Personnel being too close to suspended loads.

Incompetent operators not using safe methods of operation – e.g. lifting loads too high, travelling with loads too high.



Stacking too high for the ability of the equipment (e.g. carrying five bales high instead of four).

Ways to reduce risk

Absolutely no personnel to be working underneath or beside a suspended load.

Create an exclusion zone around the machinery operators.

Only carry what the equipment is designed for.

Utilise a 'spotter' if needed to ensure that the operator can transport the hay safely – ensure that eye contact can always be maintained and agree on a hand signal process for warnings about potential dangers.

Manual handling

Examples of risks

Personnel working with hay can experience manual handling issues including strains and sprains. This can lead to long term health issues such as back pain.

How does it happen?

Health issues from manual handling usually arise from personnel not using mechanical methods of lifting and/or moving that are available to them, lifting items that are too heavy and/or too bulky.

Remember that it doesn't necessarily need to be very heavy to cause issues.

Problems can arise from the item being awkward to carry, creating strain on muscles and joints, and from repetitive lifting.

Ways to reduce risk

Use mechanical aids that are available – for example,

telehandlers, trailers and pallet jacks.

Consider a two-person lift for heavier items, especially for small square bales of high density (such as legumes) as they are a lot heavier than for example straw.

Take rest breaks at regular intervals while loading hay by hand to ensure that the repetitive work does not create too much strain on the body. Rest breaks can include swapping job roles (e.g. taking over driving of the tractor while that person takes a turn at lifting and moving bales).

Working around powerlines

Examples of risks

Electrocution through contact with live powerlines – remember you do not need to come into direct contact with lines to receive an electric shock – electricity can jump or arc across air gaps.

How does it happen?

Electrocution or electric shock can occur from working too close to powerlines, loading and unloading hay, and moving hay around on telehandlers that have not been lowered as close as possible to the ground during transit.

Ways to reduce risk

Ensure workers are aware of surrounding powerlines.

Ensure workers are aware of clearances that must be maintained from powerlines, poles and stay wires – enforce exclusion zones.

Ensure loading and unloading does not occur around powerlines.

Workers do not stand on trucks or trailers while loading or unloading near overhead powerlines.

Loading equipment, such as telescopic booms, masts of forklifts, front end loader attachments etc are lowered when passing near or under overhead powerlines.

In Brief

There are seven key areas of risk in working with hay, and these are:

- Hay production: baling
- Loading and unloading hay bales
- Transporting hay
- Working at heights
- Working around suspended loads
- Manual handling
- Working around powerlines

By recognising these risks it is easier to prevent accidents occurring on your farm.



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