

Avoiding dangerous impacts

Purpose:

To promote safe working practices in agriculture and horticulture to avoid dangerous impacts.

Why:

To help prevent the risk of injuries and fatalities to those working on farms or horticultural sites from dangerous impacts. Being struck by an object is one of the top five most common causes of death or injury on farms.

TIAH Capability Framework area:

This aligns with the knowledge and skills in the Health and Safety area.

<https://tiah.org/tiah-capability-framework>

Talk leader instructions:

- Prepare to do the talk in a suitable/quiet location with no distractions
- Consider using some of the resources as part of the talk, e.g. showing a video
- Engage with participants, ask questions and give everyday examples
- Conclude with a brief review
- Get everyone to sign the form. Make sure to write the name of the farm and the date. Keep a copy in your Health and Safety records
- Ensure all participants have access to a copy of this document to refer to once the session has finished. This could be electronic and emailed or printed

Notes:

Background

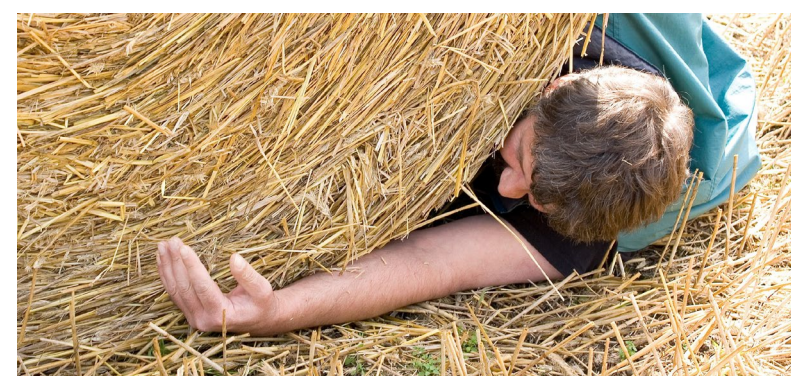
According to HSE, Agriculture has the worst rate of worker fatal injury (per 100,000 workers) of all the main industry sectors, with the annual average injury rate over the last five years around 21 times as high as the all-industry rate.

Being struck by a moving or falling object is among the top five most common causes of death or injury on farms.

Between 2017 and 2022, 22 people were killed when struck by objects.

This included:

- **11 Fatalities involving trees/tree branches**
- **6 Fatalities involving bales**
- **5 Fatalities involving other objects**



Recent fatalities have occurred from falling bales, branches and concrete slabs. Being struck by an object is also one of the top five causes of injuries in agriculture. These injuries can be life-changing.

Falling objects can move very quickly, and there's rarely time to react. The impact of a falling object is determined by the height at which it falls and its weight and mass. Even a relatively small object can cause injury or even death if it falls from a sufficient height because of the speed at which it travels.

Optional video: Grace tells her story of how she was struck by a half-ton bale that fell on her. Two years on, and she's still recovering. (9 minutes).
<https://www.youtube.com/watch?v=HMrEO9H0nxU>

Main learning points 7 minutes

Falling objects should be considered as part of a standard risk assessment process. This is covered in more detail in 'The TIAH Essential Skills: the risks in farming and the risk assessment process (for farm workers) module'.
<https://tiah.org/essential-skills>

Q: There's a five-step process for assessing the risk of being struck by a falling or moving object. What do you think they are?

Responses might include:

Step 1. Identify the hazard. Start by looking for any hazards or issues, such as equipment used at height, which could be dropped or fall.

Step 2. Consider who could be harmed. Who could get hurt if things go wrong? Is it just those completing the work, or are others at risk, such as staff, visitors, or the public?

Step 3. Evaluate the risk. In other words, what's the likelihood of the risk occurring? What would be the impact if the risk were to happen?

Step 4. Control the risk and record your findings. Decide on the appropriate precautions to lower the level of risk and keep yourself and others safe.

Step 5. Review the controls. It's a good idea to review the controls on an ongoing basis, as things can change over time.

You can download a risk assessment template from the HSE website here:
<https://www.hse.gov.uk/simple-health-safety/risk/risk-assessment-template-and-examples.htm>

Notes:

Preventing objects from falling is better than doing something after an accident or near miss has happened.

Take a look at the hierarchy of controls below and think about what you could do:

1. **Prevent** the object from falling—This might mean not placing or storing it high up. Consider using a lower shelf or securing it instead.
2. **Minimise** the object's fall—If it's not possible to prevent the object from falling, safety netting or other restraint systems can manage the distance of the fall and prevent objects from striking people on the ground
3. **Reduce** the chances of injury—For example, use signs or barriers to exclude people from specific areas. If exclusion isn't an option, wear protective equipment, such as a hard hat.

Hierarchy of controls:



Discussion points 12 minutes

Choose one or two of the following discussion points that you feel are most relevant to talk about with your team. You can also complete the remaining ones at another time if you prefer.

Q: What type of objects do you think could cause injury or death?

Responses might include:

- Hay bales - if not stacked properly
- Transporting materials at height, for example, bales, seed or loose material in digger buckets, can lead to people being struck or crushed
- Parts of buildings and structures if not properly maintained – such as a collapsing roof
- People, tools or equipment being used at height can be dropped or fall on someone
- Parts of trees, such as branches, can fall – especially if someone is working on them
- Poorly secured stacks of materials, such as pallets or building materials, can collapse
- Poorly secured equipment, such as machinery or shelving, can topple over – especially if they are subject to forces such as someone climbing on them
- Unsecured or incorrectly secured loads, such as straw bales on a lorry, can fall and crush someone
- Materials or equipment stored at height without proper care can lead to items falling
- Products or materials being loaded or unloaded from trucks or tail lifts can crush someone if not secured correctly
- Moving machinery, including moving parts such as booms, can strike someone and cause crush injuries. Items such as stones can also be ejected from machines

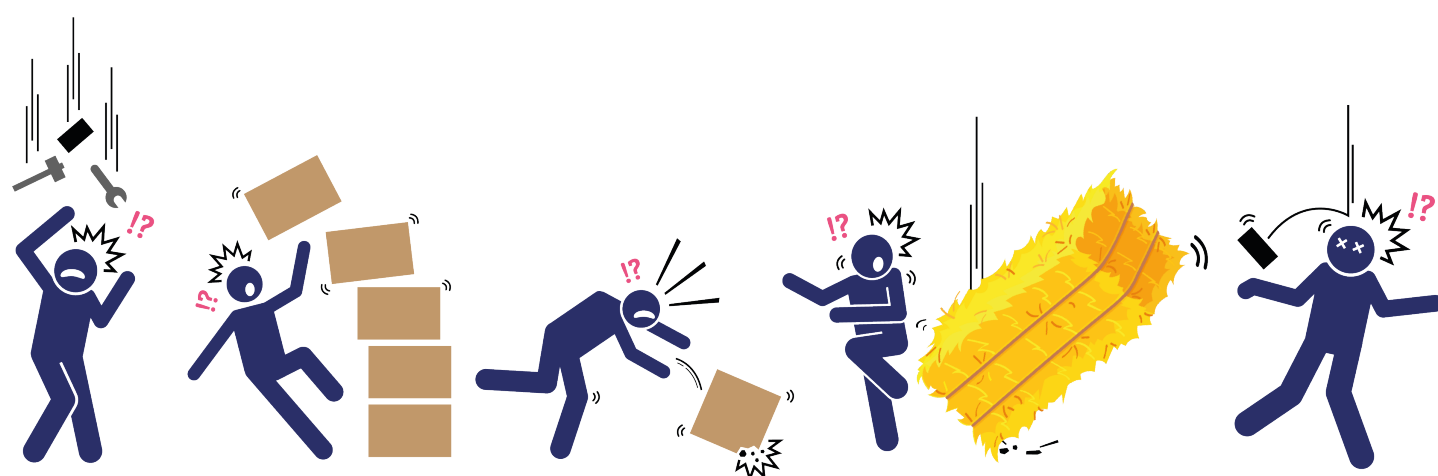
Suggestions/ ideas:

Notes:

Q: Everyone is at risk of injury or fatality caused by impacts from dangerous objects, but who do you think could have a higher risk?

Responses might include:

- New starters or younger workers as they may be getting used to their new work environment and haven't fully completed their training. They may also cut corners to reach heights
- Those carrying out a task where an object could move or fall as they are within the environment where the object is
- Children, including children of farm workers, visitors or the public, are more at risk as they can explore areas that are not normally accessed and where things may be waiting to be stacked safely
- Visitors or the public are at higher risk as they are unfamiliar with the working environment and won't fully understand the risks like a member of your team would
- Workers from outside Britain can be more at risk, sometimes due to a different working environment or working culture to what they experienced in their home country, so it's important that all workers, regardless of background, culture or language, are fully trained, competent and fully understand the risks



Q: What tips would you give someone to help prevent objects from falling?

Responses might include:

- Avoid having things at height. If possible, place objects on lower shelves, as this reduces the risk of the object falling and hurting someone.
- Don't place objects close to the edge of something, such as a shelf, as it's at higher risk of falling off
- If working at height, have a safe work plan and only take the tools you need. Always bring tools back at the end of every day or shift
- Ensure pallets, crates and building materials are stacked properly and secured where possible
- Stack bales correctly. You should only stack bales if you've been trained to do so or are being supervised by someone who has
- Ensure loads on trailers are secured correctly. Make sure you know how to do this correctly: If unsure, ask a fully trained person to oversee what you're doing
- If possible, use tail lifts with barriers at the side when loading a truck. Make sure you are fully trained and competent in doing this
- Inspect buildings, structures and trees regularly to make sure they are well-maintained and safe – This is especially important after a storm or after an impact such as a vehicle hitting it
- If you spot something loose or broken, inform your manager immediately so that they can control the risk

Suggestions/ ideas:

Summary/Wrap-up

 1 minute

Everyone who works on or visits a farm or horticultural site is at risk of being injured or killed by a moving object or vehicle. It’s important that everyone who works on a farm is trained, competent and fully understands the risks. Visitors and the public should be prevented from accessing areas where they may be struck by an object.

Resources:

- HSE: Struck by something: <https://www.hse.gov.uk/food/struckby.htm>
- HSE: Struck by...: <https://www.hse.gov.uk/mvr/topics/struckby.htm>
- HSE: About health and safety in agriculture: <https://www.hse.gov.uk/agriculture/hsagriculture.htm>
- H&HS: Work at Height/Falling Objects (PDF): <https://besmart.ie/fs/doc/TCB%20Work%20at%20Height%20WEB.pdf>
- HSE Farmwise: A guide to health and safety in agriculture: <https://www.hse.gov.uk/pubns/priced/hsg270.pdf>
- HSE: What a good farm looks like: <https://www.hse.gov.uk/agriculture/assets/docs/good-farm.pdf>
- HSE: Safe working with bales in agriculture: <https://www.hse.gov.uk/pubns/indg125.htm>
- HSE: Managing risks and risk assessments at work: <https://www.hse.gov.uk/simple-health-safety/risk/risk-assessment-template-and-examples.htm>

Toolbox Talk participants

Toolbox Talk: **Avoiding dangerous impacts**

Name of farmDate

Talk leader name.....

Name	Signature	Date