Transport Safety On Farms.

The most common serious and fatal injuries on farms involve moving vehicles or overturning vehicles.

Suitably trained and experienced staff only should drive all workplace transport. Telehandlers and teleloaders can only be driven by people have had the correct training - see HSE Approved Code of Practice L117.
The operator's view from the cab may be obstructed or 'masked' by the boom, cab pillars and other parts of the structure. Restricted visibility from the cab can also be a problem when reversing and when lifting large loads.

Risks from telehandlers use include: -

- Overturning whilst travelling during lifting or work on slopes
- Contact with OHPL
- The load becoming unsecure and falling from height
- Poorly maintained or unsecure attachments
- Vehicle moving unexpectedly
- Visibility can be poor and obscured by the boom/load
- Accidental contact with the boom if side glass is missing
- Using equipment to carry out jobs that it is not designed for e.g. hammering in fence posts

Precautions:

Machine safety: -

- Before you start –make sure the operator is familiar with the machine and all the controls.
- Ensure that the operators manual is available
- Make sure the machine is CE marked
- Ensure that the machine has been maintained in accordance with the manufacturers recommendations and carry out pre use checks each time, lights, fluids, brakes, mirrors, glazing, wipers etc.
- Check that mirrors are in good condition to help visibility around the vehicle
- Replace any missing glass, particularly side glazing, which provides protection from contact with the boom, prior to use.
- Check tyres are inflated correctly
- Check the overload indicator is working.
- Use supports if any work has to be conducted under a raised boom.

Know your site

- Check that the terrain and ground conditions are suitable for the machine
- Know your farm site and presence of OHPL's
- Improve external lighting and signage around farm buildings if necessary
- Ensure that there are no pedestrians around the area where you are working before you move off.
- On a busy site identify ways of separating pedestrian and vehicle routes. A one-way system can help.

- Consider visitors e.g. delivery drivers to your site and provide signage and places to park

Driver Safety

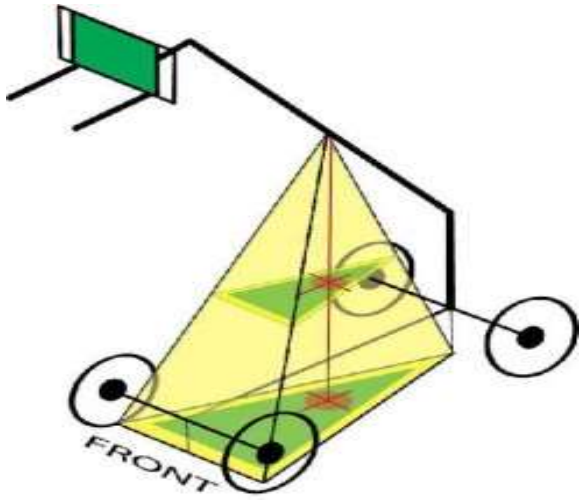
- Wear the seat belt provided
- Make sure there are no large loose items in the cab
- Travel with the boom as low as possible to the ground to improve the centre of gravity
- Know your load
- Avoid having to turn on slopes and staking/de stacking on gradients.
- If you have to turn on a slope, turn up hill
- When reversing use your horn
- Reversing cameras can help

Follow Safe stop

- Put the handbrake on.
- Make sure the controls are in neutral (equipment made safe).
- Stop the engine (or turn off the power).
- Remove the key (or lock-off the power supply.

Telehandler Stability (From HE Plant Services)

The Stability triangle shown below has been developed to show where a Telehandler is at is least stable. It is a triangle between the two front support points (tyres or outriggers) and the boom pivot.



To demonstrate stability a triangle is used because of the rear-pivoting configuration of the chassis. The red dot identifies the centre of gravity when the machine is in operation. The green area is the safest within the telehandlers operation with stability being reduced in the yellow area.

When the centre of gravity of the telehandler and the load move past the line between the two front supports then the machine will tip forward. This also applies for tipping sideways. Unlevel ground, an unbalanced or swinging load or even high winds can cause contributing factors that can cause the machine to loose stability. Manufacturers usually specify that telehandlers operate on mainly flat ground usually with a limit of 5^{o}

While on flat ground the centre of gravity moves from near the geometric centre of the machine forward, dependent on the boom extension, boom angle, and load. As the boom is raised, the centre of gravity moves back and when on a forward rising slope the centre of gravity moves further back minimising the lateral slope. The further backwards the centre of gravity shifts the more unstable the Telehandler becomes.
Be aware of the interaction that the boom angle, boom extension and effects of longitudinal and side slope can have on machine stability and know the load. These factors effect the position of the centre of gravity and whether the machine will turn over.

In short, with the boom angle at 0 degrees regardless of the boom extension and load, a lateral slope (side tilt) of 30+ degrees could be tolerated before tipping the machine over onto its side; but at maximum boom angle, and maximum extension, with maximum allowable load and a backward slop of 20 degrees the Telehandler will topple sideways with as little as 0.1 degree lateral slope.