



## LOLER: How the Regulations apply to arboriculture

### Agriculture Information Sheet No 30

#### Introduction

This information sheet gives advice to employers, the self-employed and contractors working in arboriculture to help them understand the requirements of the Lifting Operations and Lifting Equipment Regulations 1998 (LOLER). These requirements came into force on 5 December 1998.

The requirements of LOLER apply to employers, the self-employed and people in control of or managing lifting operations.

LOLER is aimed at ensuring all lifting operations are properly planned, lifting equipment is used in a safe manner and lifting equipment is thoroughly examined at suitable intervals by a competent person.

This information sheet **does not** include all of the detail of the Regulations. It aims to provide you with guidance on interpretation and application in relation to arboriculture. Details of the complete Regulations, Approved Code of Practice and Guidance can be found in the 'References' section<sup>1</sup> as well as advice on the application of LOLER to forestry or agriculture.<sup>2,3</sup>

#### Other key legislation

LOLER has links with other health and safety legislation which you need to consider when applying the Regulations.

#### **Management of Health and Safety at Work Regulations 1999 (MHSWR)<sup>4</sup>**

The MHSWR require a risk assessment to be carried out to identify the nature and level of the risks associated with a lifting operation. Factors you need to consider include:

- the type of load being lifted;
- the risk of the load falling and striking a person;
- the risk of the lifting equipment striking a person;
- the risk of the lifting equipment failing or falling over in use.

You should assess the risks for each type of lifting equipment and the way it is used in your business,

and take action to control the risks. Risks from lifting operations identified by the risk assessment should be eliminated, or reduced to an acceptable level by applying LOLER.

#### **Provision and Use of Work Equipment Regulations 1998 (PUWER 98)<sup>5</sup>**

PUWER 98 applies to all work equipment including lifting equipment. Under PUWER 98 you are required to select suitable work equipment in terms of:

- its construction and design;
- where it is to be used; and
- the purpose for which it is to be used.

#### **Work at Height Regulations (WAHR) 2005<sup>6,7</sup>**

The WAHR apply to all work at height where there is a risk of a fall which is likely to cause personal injury. The Regulations require that:

- all work at height is properly planned and organised;
- those involved in work at height are competent;
- the risks from work at height are assessed and appropriate work equipment is selected and used;
- the risks from fragile surfaces are properly controlled; and
- equipment for work at height is properly inspected.

The requirement for properly inspecting equipment used for work at height overlaps to some extent with the requirements of LOLER. However any equipment currently inspected under LOLER will continue to be inspected under LOLER and **does not need re-inspection** under the WAHR.

#### **Lifting Operations and Lifting Equipment Regulations (LOLER) 1998**

#### ***What is lifting equipment in arboriculture?***

Any equipment that lifts or lowers loads and includes its attachments used for anchoring, fixing or supporting it.

For example:

- rope access and work positioning systems including anchor points, ropes, karabiners, harnesses and strops;
- rigging systems for lowering branches;
- mobile elevating work platforms (MEWPs);
- cranes;
- tree spades.

The term 'load' includes a person.

### ***What is not lifting equipment in arboriculture?***

Equipment that does not lift or lower loads, for example any equipment used for winching operations at ground level where the load does not leave the ground, such as skidding operations.

### ***Strength***

LOLER requires you to make sure your lifting equipment will have adequate strength for its proposed use. Often loads will be difficult to quantify and a suitable margin of safety should be allowed. Activities requiring careful consideration for strength include:

- rigging operations;
- work in diseased or decayed trees.

Anchor points in trees for rope access and work positioning and rigging systems are part of lifting equipment. Arborists using rope access or work positioning should be trained to select suitable anchor points and to recognise the differences between tree species and the effect of age, condition of the tree and disease.

### ***Stability***

LOLER requires you to ensure your lifting equipment will not collapse or overturn when working. The risk of this happening during arboricultural operations can be reduced by:

- selecting equipment appropriate for the materials to be handled, given the slope and terrain of the work site;
- training operators in the limitations of machinery.

When using MEWPs, ensure:

- tyres are inflated to the correct pressure; and

- stabilising equipment such as outriggers are placed on suitable bearers.

### ***Lifting equipment for lifting people***

As a general principle, you should eliminate the risk of a person falling or, if this isn't possible, reduce it (see the section on the MHSWR), for example:

- to eliminate work at height, arborists should consider pruning low-level branches from the ground with long-handled hand saws or pole pruners, taking into account the hazards of over-reaching and working below the branches to be cut;
- choose access techniques which reduce the risk of falling. Use MEWPs in preference to rope access techniques where ground conditions allow and where reasonably practicable.

Where rope access and work positioning systems are necessary, refer to Schedule 5 of the WAHR.

The main climbing rope and associated equipment should be inspected every day by a competent person.

In the event of an emergency a reliable means of rescue should be available and people trained in tree rescue should be available at each work site.

### ***Positioning and installation***

Position and install lifting equipment to reduce to as low as reasonably practicable the risk of the equipment or the load striking people, or the risk of the load drifting, falling freely or being released unintentionally.

Position lifting equipment to minimise the need to lift loads over people. Check that:

- unauthorised access to the work area is prevented where timber is handled by lifting equipment on or near public rights of way;
- MEWPs and cranes are set up so the counterweight does not swing out into the way of pedestrians or road traffic;
- arborists in the same tree do not endanger each other either by working too close or by lowering branches.

Loads should not be allowed to drift, for example:

- arborists should use supplementary anchors where practicable to reduce the risk of a pendulum swing within the tree;

- attach control lines to loads where necessary to stop contact with people or objects.

Lifting equipment should be fitted with suitable devices to minimise the risk of the load (including people) falling freely. Make sure:

- arborists do not climb above anchor points when using work positioning techniques;
- roping down of branches is controlled by using a friction device or other suitable system;
- arborists descend ropes in a controlled manner using either a friction knot (ie a prussic) or mechanical descender device.

Loads should be prevented from being released unintentionally by:

- adequately training people involved in slinging loads;
- in rope access and work positioning, using a karabiner with a 3-way action gate at the main attachment point between the rope and the harness.

### **Marking of lifting equipment**

Information on the safe working load (SWL) of any machine used for lifting should be available to the operator. If applicable, lifting equipment should be marked to show it can be used to carry people.

MEWPs or man-riding cages should display the SWL and number of people they can carry.

Where the SWL depends on the equipment's configuration, the operator will need clearly visible information to keep both machine and loads within the safe working limits for any particular configuration.

Accessories should be marked with information needed for their safe use. The use of labels or colour coding is acceptable. Examples of this in arboriculture include:

- ropes, slings, karabiners, strops, and harnesses for rope access;
- rigging system equipment, particularly to show it is not designed to carry people.

### **Organisation of lifting operations**

Lifting operations should be properly planned, appropriately supervised and carried out in a safe manner. It is important that:

- people planning a lifting operation should have adequate practical and theoretical knowledge and experience of planning similar lifting operations;

- you organise the work so, where practicable, loads are not carried or suspended over people;

- where possible, people should not be present under loads that have been left suspended;

- your workers have appropriate training and instructions so they can ensure lifting equipment is safe to use.

### **Thorough examination**

LOLER requires lifting equipment to be thoroughly examined. This means a detailed examination by a competent person who has appropriate practical and theoretical knowledge and experience to enable them to detect defects or weaknesses in the equipment being examined and assess their importance in relation to the safety and continued use of the lifting equipment.

The risks in arboriculture which arise through failure in lifting equipment for lifting people justify independent and impartial thorough examination. In practice this probably means somebody external to your business. Your insurance company may require you to use an independent examining engineer. Your supplier or the manufacturer may also be able to suggest suitable people or organisations.

Lifting equipment in arboriculture is exposed to conditions which could cause deterioration and result in dangerous situations.

It should be thoroughly examined either:

- every six months where it is being used for lifting people and every twelve months otherwise; or
- in accordance with time intervals specified in an examination scheme drawn up by a competent person.

Lifting equipment should also be thoroughly examined each time exceptional circumstances occur which jeopardise the safety of the equipment. For example, your rope should be thoroughly examined after it has been subject to a severe shock load.

Lifting equipment should be thoroughly examined after installation, but 'installation' does not apply to the positioning or repositioning of rope access equipment.

When lifting equipment subject to thorough examination is contracted to be used in the business of another employer, then a copy of the equipment's current thorough examination report should be made available.

### **Inspection**

Inspections of lifting equipment should be carried out at suitable intervals where your risk assessment made

under the MHSWR has identified risks which could be addressed by inspection.

Arborists should be trained to carry out a daily pre-use check of their lifting equipment and, in the case of items subject to high levels of wear and tear (ie ropes), a written weekly record of inspection should be kept.

### Reports and defects

A person making a thorough examination for an employer should notify defects and make a report of the examination.

The competent person should notify the employer immediately of any defect which in their opinion is or could become a danger to people. They should also send a copy of the report to HSE if they consider there is an imminent risk of serious personal injury.

If you are notified of a defect you should ensure the lifting equipment is not used before the defect is rectified or it is rectified within the time specified in the report.

If during an inspection a defect is discovered which could become a danger to people, the employer should be informed and a report of the inspection made.

### Records

Copies of EC declarations of conformity for any lifting equipment should be kept for as long as the equipment remains in use.

Information contained in any thorough examination report should be kept available for inspection.

### References

1 *Safe use of lifting equipment. Lifting Operations and Lifting Equipment Regulations 1988. Approved Code of Practice and guidance* L113 HSE Books 1998 ISBN 0 7176 1628 2

2 *LOLER: How the Regulations apply to forestry* AIS29 HSE Books 1998

3 *LOLER: How the Regulations apply to agriculture* AIS28 HSE Books 1998

4 *Management of health and safety at work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice* L21 HSE Books 2000 ISBN 0 7176 2488 9

5 *Safe use of work equipment. Provision and Use of Work Equipment Regulations 1998. Approved Code of Practice and guidance* L22 HSE Books 1998 ISBN 0 7176 1626 6

6 *The Work at Height Regulations 2005* SI 2005/735 TSO 2005 ISBN 0 11 072563 8

7 *The Work at Height Regulations 2005: A brief guide* Leaflet INDG401 HSE Books 2005 (single copy free or priced packs of 10 ISBN 0 7176 2976 7)

### Further reading

*Tree work accidents* INDG278 HSE Books 1998

*A guide to good climbing practice* available from the Arboricultural Association, Ampfield House, Ampfield, Romsey, Hampshire SO51 9PA Tel: 01794 368717

### Further information

HSE priced and free publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 2WA Tel: 01787 881165 Fax: 01787 313995 Website: [www.hsebooks.co.uk](http://www.hsebooks.co.uk) (HSE priced publications are also available from bookshops and free leaflets can be downloaded from HSE's website: [www.hse.gov.uk](http://www.hse.gov.uk).)

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This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.

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