



Welcome to the third edition of *Arb News*, a newsletter to help keep you up to date with health and safety news.

Here are some sobering accident statistics relating to tree work:

- Last year (2004/05) three people were killed while undertaking tree work.
- Over 20% of reportable tree work accidents happen while working at height.

New legislation

Work at Height Regulations 2005

The Work at Height Regulations 2005 came into force on 6 April 2005. Ensuring compliance with these is particularly important in arboriculture where falls from height continue to be reported and where the result is often death or major injury.

So what does the introduction of these Regulations mean for the arboriculture industry? If you are already following good practice for work at height now, you should be doing enough to comply with most of the requirements of the Regulations. In particular you need to:

- follow the risk assessments you have carried out for working at height and make sure all work at height is planned, organised and carried out by competent persons; and
- follow a hierarchy for managing risks from work at height ie:
 - where possible avoid work at height completely eg work from the ground using a pole pruner;
 - if work at height cannot be avoided then work equipment or other measures which will prevent a fall should be considered eg a MEWP;
 - where it is not possible to eliminate the risk of a fall, work equipment or other measures to minimise the distance and consequences of any fall should be used eg work positioning or access using ropes and a harness.

HSE wants to see all work at height properly planned, appropriately supervised and carried out in a manner which is - so far as is reasonably practicable - safe. Following existing arboricultural guidance (eg AFAG guides and the recently revised Guide to Good Climbing Practice - available from the Arboricultural Association at: www.trees.org.uk), ensuring your staff have adequate training (eg recognised industry training and certification), and choosing the right gear for the job should ensure that you are doing enough to comply.

Control of Vibration at Work Regulations 2005

The Control of Vibration at Work Regulations 2005 came into force on 6 July 2005. They apply to vibration entering the hand and arm from hand-held power tools and vibration of the whole body through the seats of vehicles. The four key things that employers need to do are:

- identify any risks from vibration and how they can be controlled;
- take steps to minimise exposures and reduce the risks from hand arm vibration (HAV);
- provide information and training for employees exposed to vibration; and
- implement an appropriate health surveillance programme.

Many power tools used in arboriculture and forestry give rise to HAV, for example:

- chainsaws;
- stump grinders;
- grass trimmers;
- hedge trimmers;
- brushcutters;
- cultivators;
- clearing saws;
- earth augers;
- mowers.

Action should be taken to minimise the risks to people who use these tools. In practice these actions are likely to be combinations of engineering and management control measures.

The latest information and guidance is available at www.hse.gov.uk/vibration.

Recent HSE publications

Fatal injuries in farming, forestry and horticulture 2004/05 www.hse.gov.uk/agriculture/pdf/fatal0405.pdf

Determination of rope access and work positioning techniques in arboriculture - HSE funded research www.hse.gov.uk/agriculture/pdf/wahreport.pdf

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HSE's arboricultural project

This year sees the beginning of a national three-year project aimed at making contact with arboriculture businesses, and anyone offering treework services, to raise awareness of the Work at Height Regulations, Employers Liability Insurance, Lifting Operations and Lifting Equipment Regulations 1998 (LOLER) thorough examination requirements, training requirements for the industry, and industry guidance. Health and safety advisory officers will be drawing up local databases and making contact initially by letter, and then later by phone or face to face, with a number of businesses on the list.

Engaging clients who appoint arboricultural contractors

Following on from last year's success, HSE in conjunction with the Arboricultural Association are running another series of events aimed at clients who use the services of arboricultural contractors. The purpose of the events is to raise awareness of the importance of engaging a contractor with the necessary skills and resources to do the job safely and properly. Details of the events are available from the AA website www.trees.org.uk.

What happens when it all goes wrong?

In 2004/05 three people were killed while involved in arboriculture.

A 25-year-old self-employed tree surgeon died after being struck by a branch. He was cutting a branch when his saw became trapped under the weight, pulling him downwards as the branch fell. The branch rebounded and hit him as he fell. It is thought that the anchor point gave way as the branch pulled the tree surgeon and chainsaw downwards.

A 50-year-old tree surgeon cut his arm and face with a top handled chainsaw while cutting branches. He was untrained, using unsuitable equipment and free climbing in the tree, cutting as he went. No one was available or trained to get him down or to effect an aerial rescue. He was eventually rescued from the tree by the Fire Brigade but subsequently died in hospital from his injuries.

A 61-year-old employee was felling a tree in the back garden of a domestic residential property when the tree fell and crushed him. There was little clearance between the tree and a fence at the bottom of the garden and his colleague was unable to control the direction of the fall. After trimming off side branches he made a cut at the front of the tree and a further felling cut at the back, but misjudged the cut and left an uneven hinge. The tree fell unexpectedly sideways and because of the absence of an adequate escape route, fell on top of him, causing fatal crushing injuries.

Inspectors have also been busy taking action against arborists who are not complying with the law. A total of nine Prohibition Notices and over 20 Improvement Notices have been issued in the year since *Arb News* was last published. The issues covered included:

- chainsaws being used by untrained operators often without the correct PPE;
- tree work being carried out without anyone being available to carry out aerial rescue;
- LOLER inspections not being carried out;
- not having adequate arrangements in place to ensure safe working of multi-site teams;
- insufficient arrangements for lone workers;
- incorrect or no signage particularly for roadside working.

Case study: Arboriculture contractor suffers respiratory problems shovelling wood chips

What happened?

A tree surgeon recently reported suffering short-term respiratory ill health under the following circumstances. He had been chipping branches but did not have a full load of wood chips to deliver, so he left them in a pile. Some days later he moved the wood chips. Later that evening, he experienced chest tightness, nausea and flu-like feverishness. The symptoms had gone by the next day. The same thing happened again on a later occasion when he had shovelled a pile of wood chips which had been left for a few days. It was only at this point that he made the connection between the wood chips and his flu-like illness.

What caused it?

Microbes (bacteria and mould) naturally present in the wood start to multiply in the moist wood chip pile. They generate heat, and the warm moist conditions accelerate the growth of these microbes. This is the same as the composting process, but can happen in any stored plant material. When the tree surgeon moved the chip pile, he created a dust cloud containing the microbes (a bioaerosol). When he breathed this in, toxins in the microbes (called 'endotoxins') stimulated his immune system to cause the fever symptoms. This problem is known as 'inhalation fever' or 'organic dust toxic syndrome' (ODTS). These problems are short term, but repeated exposure to this quantity of bioaerosol could trigger respiratory sensitisation such as asthma.

So it's a biological problem - what's the solution?

Awareness and risk assessment

Many specific activities in arboriculture are hazardous, the key is to be aware of those hazards and have suitable controls that reduce the risk of accidents and ill health occurring. Now he knows that the dust from the wood chips can cause inhalation fever, the tree surgeon is taking precautions when carrying out that specific task.

Reducing exposure

Handling mouldy wood chips in the open will allow dust to disperse, but if the chips have been stored in an enclosed area, you may be exposed to more dust. In either case, it is also worth considering respiratory protective equipment (RPE). It is not necessary to wear RPE all the time, just when doing that particular dusty job. Choose a well-fitted filtering face piece (FFP) respirator, not just a nuisance dust mask. These won't give you enough protection. See the HSE Agriculture information sheet *All you need to know about disposable dust masks* on the HSE website at: www.hse.gov.uk/agriculture/dustmasks.htm for more information about choosing respiratory protection.

To get a feel for how widespread this problem might be, the sector would be very interested to hear if others have experienced similar symptoms when handling wood chips.

Are there any other biological hazards for arboriculturalists?

- Make sure you are immunised against **tetanus**.
- If you are clearing undergrowth, be aware of infectious hazards such as **Lyme Disease**, an arthritis-like infection caused by bacteria spread by animal ticks.
- If you are clearing ditches or working near water, be aware of **Weil's Disease** (leptospirosis), an infection from bacteria spread by contact with rat urine.

Your views

What do you think of *Arb News*? What would you like to see in future editions?

Send your views to Frances Hirst at the address below.

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