



# WATCH YOUR BACK

AVOIDING BACK STRAIN IN TIMBER HANDLING  
AND CHAINSAW WORK

# BACK STRAIN

## How will it affect me?

Almost anyone can suffer from back strain, but people who handle timber and work with chainsaws are more prone than most. Just because you're young and fit doesn't mean you won't suffer from back pain later on in life. It could affect your job and your social life.

## What is back strain?

When we say strain what we really mean is **injury**. That can involve damage to your muscles, to the ligaments which bind the bones in your back, or to the discs which separate them.

The most common type of injury is damage to the muscles and ligaments. Although temporary, the pain can be intense and prolonged.

However the longer you mistreat your back the more likely you are to suffer a 'slipped' or prolapsed disc. The disc gets squeezed out from between the bones and presses on your spinal nerves. The result is sciatica - severe, long term pain extending right down into the leg.

## What causes it?

Back injury isn't only caused by lifting too big a load. You may just as easily damage your back if you put strain on it:

- before your muscles have had time to warm up
- after your body has become tired
- when your back is bent, stretched or twisted
- suddenly, by jerking the load, or when you stumble or lose your footing.

## How do I avoid it?

The first thing is to see if the job could be organised so that handling isn't necessary. Or could a machine do the handling instead? If those aren't reasonable options then you must make sure you do your work in a way which avoids injuring your back. A big load is bound to create problems, but small ones can cause just as much damage if handled in the wrong way. Limber up before you start and try to avoid using your back when you are tired. Ask your doctor about suitable exercises.

## These simple rules will help:

- only lift when it is really necessary
- only lift loads well within your capability
- don't lift with your back bent, stretched or twisted
- always keep loads close to the body
- get help if you need it
- give yourself proper rest breaks

## Aid tools

You will find it a lot easier to follow these rules if you invest in a few simple bits of kit. Used correctly they will help you to do the job with a minimum of effort and with a straight back.



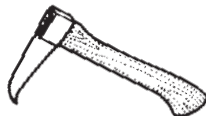
Breaker bar with  
cant hook



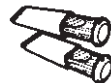
Pulp hooks



Log tongs



Log pick



High lift wedges

## Correct body position

It doesn't matter whether you're on the ground or up a tree, it's vital that the forces on your back are applied evenly.

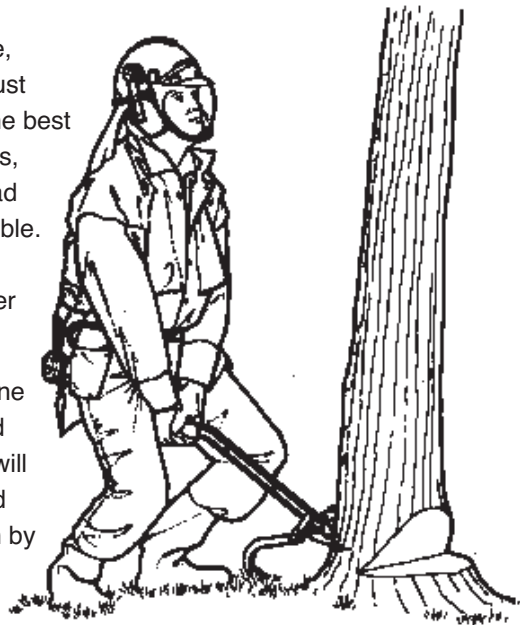
Before you lift, take up a position which gives you secure footing and which doesn't force you into an awkward posture. Place your feet apart with one leg slightly forward to maintain balance.

If you are levering over a tree, moving pieces of timber, or just picking up your chainsaw - the best way to do it is with bent knees, straight back and with the load as close to the body as possible. That way you are lifting with your strong leg muscles rather than your back.

Don't lever over a tree with one hand pushing on the tree and one on the lever. Your back will be stretched and twisted, and most of the load will be taken by your lower back muscles.

It is very important that you have a good grip when lifting and are free to adjust your position for the best lift. One of the best methods is to use properly sharpened pulp hooks or log tongs. This will also preserve your gloves and you won't have to bend so far. Use both hands otherwise you will tend to twist your back.

A log pick can also be a useful handling tool in some situations.



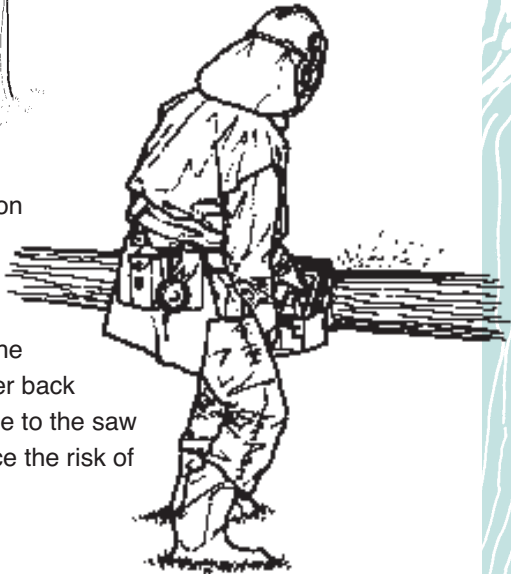
## Using a chainsaw

You may not think of your chainsaw as a load - but it is! If you work stooped, with the weight of the saw hanging from your arms, the strain on your back will be considerable.



When you are making the felling cut on a tree you can support the weight of the saw by bracing your forearms on your thighs or knees.

If you rest the saw on your thigh when you are cross-cutting and de-branching it takes the weight off your lower back muscles. Keep close to the saw - this will also reduce the risk of kick-back.



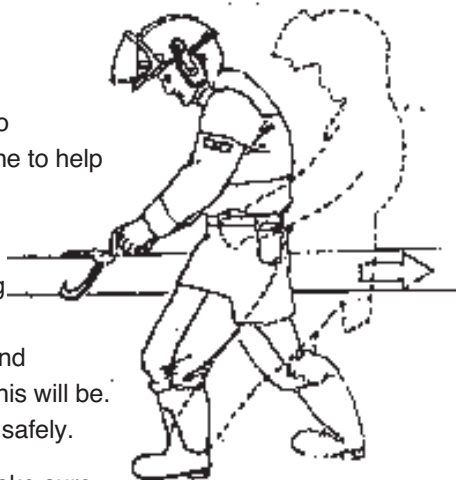
Aim to get the work at a height where you can easily support the saw on the tree without stooping (see the photograph on the front cover of this booklet).

## Handling timber

Make sure you cut the timber into manageable pieces. Get someone to help you with the larger sections.

You can often avoid having to lift by rolling, pivoting or sliding the wood. The more thought you put in when you are felling and processing the trees the easier this will be. Aid tools will help you do the job safely.

If you do have to carry timber make sure the ground is free of obstacles and tripping hazards.



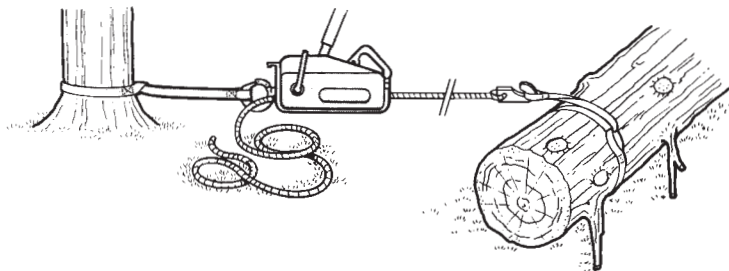
## Heavy loads

Even good lifting techniques have their limitations when it comes to heavy loads. You will need to use equipment which gives your body a big advantage.

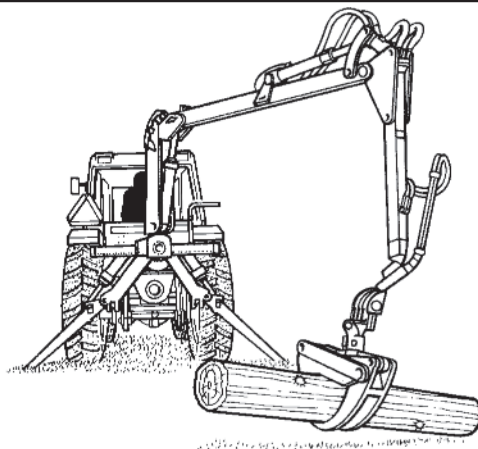
A portable winch is a useful tool for applying large forces when felling large or awkward trees. It will also make it easier to turn over a large tree stem.

Similarly high lift wedges allow you to apply forces well in excess of that from a breaking bar. This spares your back - and you will have much more control.

Felling cushions are also available which can be used instead of wedges. Exhaust gas from your chainsaw is used to inflate the cushion and force the tree over.



For some jobs you should simply let a machine take the strain.



## **Training**

Correct manual handling is all part of doing the job properly. Recognised training courses are available for chainsaw work and for some other tasks involving timber handling. These will teach you how to do the job safely and efficiently without putting your back at risk.

## **Surviving back strain**

If you do hurt your back, make sure a temporary condition doesn't become a permanent disability. Stay active and try simple pain relief. If you need it, get advice from your doctor on what you can safely do and how soon. Your doctor will also be able to recommend exercises which will help guard against injury and speed recovery.

**Look after your back – you'll never regret it.**



## Further advice

*Watch your back: Avoiding back strain in chainsaw work*  
Video HSE Books 1992 ISBN 0 7176 2021 2

*Manual handling. Manual Handling Operations Regulations 1992 (as amended). Guidance on Regulations L23 (Third edition)* HSE Books 2004 ISBN 0 7176 2823 X

*Getting to grips with manual handling: A short guide*  
Leaflet INDG143(rev2) HSE Books 2004 (single copy free or priced packs of 15 ISBN 0 7176 2828 0)

## Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk/](http://www.hse.gov.uk/). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

**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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