



Manual handling means **using your body to exert force** to handle, support or restrain any object, including people or animals. It is not just lifting or carrying heavy objects. It includes: lifting, pushing, pulling, holding, lowering, throwing, carrying, packing, assembling, cleaning, sorting and using tools.

The term is not limited to handling heavy objects – pushing a trolley or using a keyboard are all examples of manual handling.

It is much more than just 'LIFTING' !!!!!



MANUAL HANDLING – RISK FACTORS

KEY RISK FACTORS

- Size and Shape of the object or load
- Sudden or unexpected jarring movements
- Maintaining the same posture for long periods
- Personal Factors, such as:
 - Age
 - Physical Capabilities, reduced physical fitness
 - Size
 - Working shift work
- Awkward Movements, such as:
 - Twisting
 - Bending
 - Over-reaching

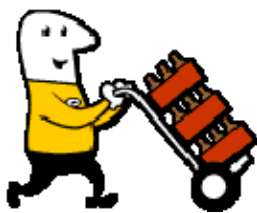
CONTRIBUTING FACTORS

- How long and Often the task is performed
- The way in which the work is organised
- Design and layout of work environment
- Training and familiarity with the task

Remember:

Most back injuries occur through an accumulation of 'wear and tear' on the body (i.e. repeated small injuries that a person is not aware of at the time). The final activity is usually not the entire cause of the injury but the 'straw that broke the camel's back'.

The more often you do things correctly, the fewer 'accumulating incidents occur' and hopefully, the longer your back will last!!! **It is up to you!!!**



CORRECT POSTURE

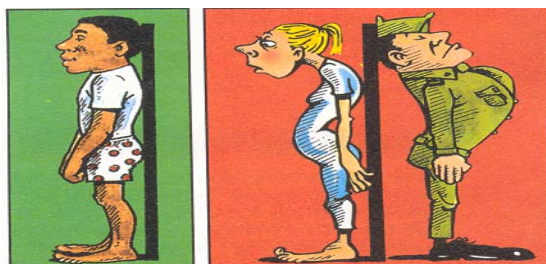
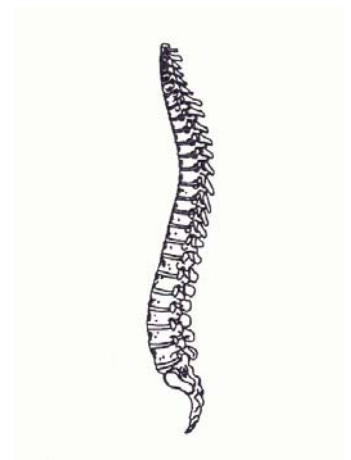
It is important to know the correct 'starting' position for your back.

Your back is naturally shaped like an S curve.

If your back is in an S curve you should notice that:

Your major weight bearing joints- neck, shoulders, lumbar spine, hips, knees and ankles are all in alignment

When standing against a wall your head, upper back, and buttocks should all touch the wall. At both your neck level and your lower back level you should be able to fit your hand in between your body and the wall.



Steps to Manual Handling

For tasks where the manual handling can't be eliminated, it is important that you follow these steps to ensure you are lifting in the safest possible way.

1. Size up the Load

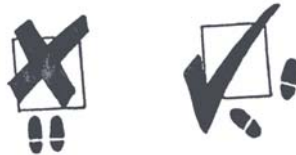
- Check if the weight of the object is listed on it
- If not, push, pull, gently kick or rock the object to be moved before you attempt to move it – get a feel for its weight, size and shape
- Check whether the weight is evenly distributed
- Recognise what your own limits are and stick to these limits

2. Ensure the area is clear

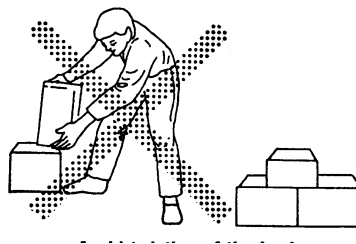
- Work out where the load is going
- Ensure that your intended pathway is clear and free of obstacles
- Make sure that your vision will not be blocked when moving large objects

3. Position your feet correctly

- Place your feet a comfortable distance apart (shoulder width). A broader base of support increases stability. With a narrow base of support with your feet too close together, you are more likely to lose your balance.



- Point your feet in the direction that you intend to travel
- Always turn with your feet, not your hips or shoulders.



Never twist as you move or go to lift!

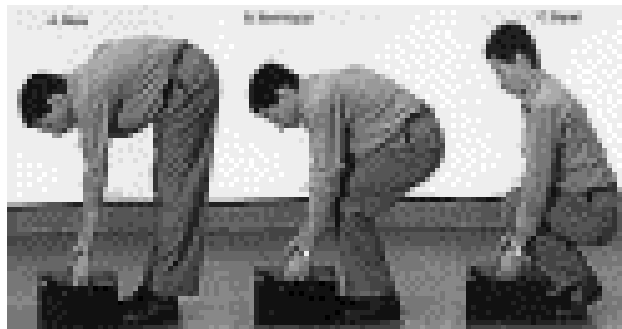
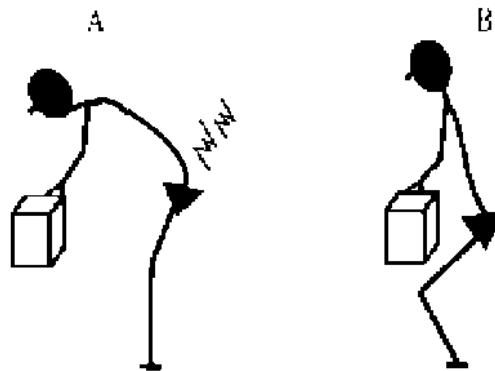
4. Get as close to the load as possible

- Walk over to the load – don't stand still and reach for it

5. Maintain the normal curves in your spine

You need to try and work in your power zone – above your knees and below the shoulders

- Keep the back straight and the head looking up
- Half bend the knees and use your leg muscles
- Bend forward at the waist
- Stick your bottom out
- Bend your back as little as possible
- Keep your head looking up, not down
- Put weight down through your heels, not the toes



6. Use the correct grip

- Have a firm grip by using the palms and the base of the fingers
- Don't just use your fingertips as this can cause strain on the hands, wrists and forearms

7. Lift Smoothly

- Grip the load firmly and hold it close to your body.
- Keep the heaviest side closest to your body
- 'Brace' (tighten) your stomach muscles. Remember to breathe out when you lift. However remember that bracing the stomach muscles does not mean 'holding your breath'

- **Thrust with the legs** - Use the leg muscles to move the load (quadriceps and gluteal muscles). They are much bigger and stronger than the back muscles
- Complete the movement smoothly and without jerkiness

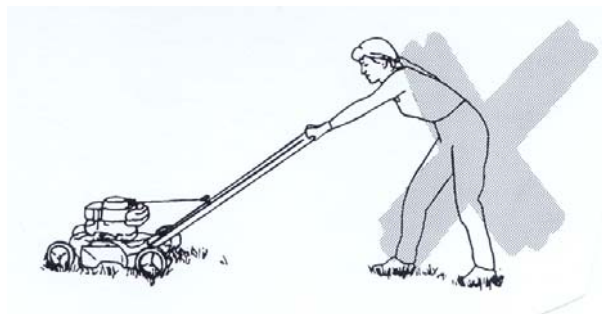
**Remember:**

Your LIFTING MUSCLES are your Quadriceps (thighs), Gluteal Muscles (Buttocks) and your Abdominal Muscles. Remember to use these muscles, NOT the small postural muscles attached to your spine!!!

Following the above steps helps ensure you use your LIFTING MUSCLES and not your postural muscles.

Pushing and pulling

- You should always try to push rather than pull – you can exert twice as much power when you push.
- Assume a lunge position with one foot in front of the other, knees bent, to use your leg muscles rather than arms and back.
- Get as close to the trolley as possible and make sure you can keep your elbows close to your body.
- In this position you are well balanced, should the load move forward or backward unexpectedly.
- When pushing, initiate the movement with a thrust from the back foot.
- When pulling, initiate the movement with a thrust from the front foot.



Summary

Although the weight of an item is of relevance, the more important factor is HOW you lift.

Where possible eliminate the load.

If the load has to be manually handled follow the following steps each and every time:

1. Size up the load
2. Ensure the area is clear
3. Position your feet correctly
4. Get as close to the load as possible
5. Maintain the normal spinal curves
6. Use the correct grip
7. Hold the load close to the body (and brace abdominals)
8. Thrust up with the legs

Stretch before and afterward!!

STRETCHING

We all know athletes perform stretches as part of their warm up routine before taking the field to start a game. For people who work in a job that involves lifting, carrying or performing similar movements regularly, it is just as important that they also 'warm up' their body at the start of their shift and throughout the shift by performing gentle stretches. In the same way that stretches prevent an athlete from injuring themselves on the sports field, stretches can help to combat the aches and fatigue that work can place on your body and prevent injuries from occurring.

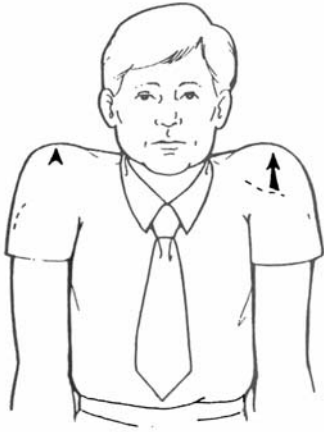
The stretching exercises below are simple stretches that only take a few minutes to do. The different stretches shown work on different body parts- you do not have to do all the stretches shown every time. Ideally everyone should be looking to take a few minutes at the start of their shift to perform at least one stretch for the back, neck, shoulders and arms.

Remember:

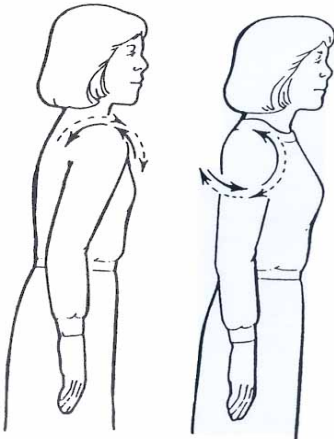
- When you stretch do not bounce- move smoothly and gently
- Stretch to the point where it feels tight, but does not hurt. Never stretch to the point where pain is experienced.
- For most stretches you should aim to hold the stretch for about 10 seconds and then relax
- Regularly stretch the muscles that you are using- such as those in the neck, shoulders, hands and wrists and the lower back.

If you have an existing medical condition or injury that may be aggravated by exercise, it is important that you check with your doctor before performing any of the stretches attached. If you experience pain when performing the stretches, cease the activity and speak with your doctor.

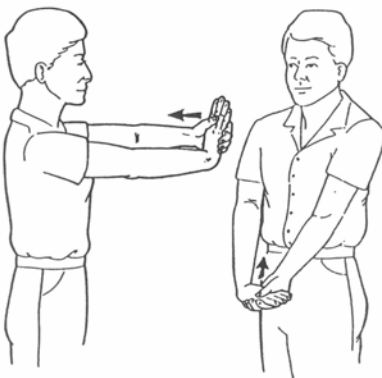
Finally, remember that prevention of back injuries is always better than the cure!



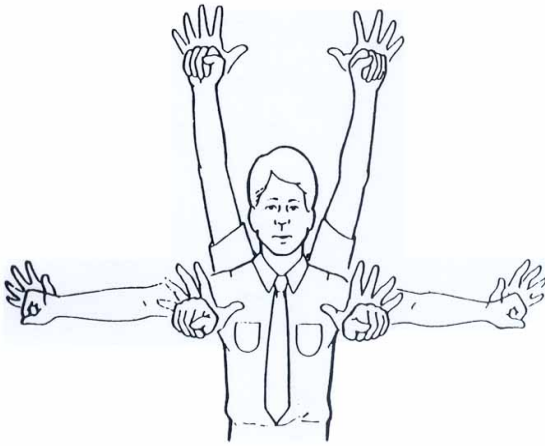
- Stand
- Shrug your shoulders and hold them up in this position for 10 secs
- Relax



- Slowly roll both shoulders forward in large circles
- Slowly roll both shoulders backwards with the same circular motion



- Stand with your arms down in front of you
- Make a loose fist with your right hand
- Keep your right elbow straight, bend the wrist and fingers on your right hand with your left hand
- You should feel a stretch in your forearm
- Change arms and repeat



- Stand up straight
- 'Reach for the sky'- stretch your arms above your head and hold for the count of 10
- Open and close your fingers to make a fist
- Then do the same by reaching your arms out the side and then out to the front



- Gently grasp your head with your right hand
- Pull your head towards your right shoulder
- Stretch your left arm out in the other direction



- Stand and stretch your arms above your head
- Interlock your fingers together
- Slowly lean to the left side until you feel a stretch on your right side
- Hold for the count of 10
- Repeat to the other side