



15 Minute Safety Presentation

Manual Handling - Lifting

15 MINUTE SAFETY PRESENTATION – MANUAL HANDLING - LIFTING

INTRODUCTION

Manual handling injuries account for an estimated 25% to 40% of injuries in most modern workforces. Almost every occupation has some manual handling tasks, which means that we are all at risk of manual handling related injuries. We all need to know how to perform manual handling tasks safely in order to prevent injuries.

LEARNING OUTCOMES

At the end of this presentation you will know:

- what manual handling is;
- the types of manual handling injuries;
- back injuries;
- the Four Principles of Lifting;
- carrying and setting down loads; and
- alternatives to lifting.

MANUAL HANDLING

Before we begin to look at manual handling injuries and their causes we must clearly understand what the term “manual handling” means. Manual handling is any task where people physically move, handle or shift materials and objects.

Examples of manual handling include lifting, pushing, pulling, carrying, sliding and stacking

Now that we have discussed what manual handling is we will take a close look the lifting aspect of manual handling tasks.

LIFTING INJURIES

Incorrect lifting can result in different types of injuries and illnesses.

Some injuries can occur immediately, while others may develop over many years.

Some injuries can be minor and have no long-term lasting effects, while others can be severe and permanently disabling.

Some examples of injuries caused by incorrect manual handling methods are:

- **back injuries** - damage to the spine, ligaments and muscles. These types of injuries can be very painful and are often permanent;
- **abdominal hernia** - tears in the weak points of the muscular wall of the abdomen, which allows part of the small intestine to protrude;
- **muscle and joint injuries** - tears and sprains to muscles in the legs, back and arms and inflammation and chronic pain in joints and nerves; and;
- **impact injuries** - crushed or amputated body parts, such as, fingers, hands, toes and feet.

BACK INJURIES

As you can see, there are a number of injuries that you can receive as a result of incorrect lifting. The most common of these are back related.

There are three (3) basic types of stress that cause spinal damage.

The three main causes of stress damage are:

- **sudden stress** - which can be caused by slips, falls and lifting;
- **consecutive stress** - which can be caused by heavy lifting, high force repetitive movements or extreme postures; and
- **continuous stress** - this can be caused by vehicle vibration or poor posture.

Over time, serious spinal damage can result from all or any of the various stresses. These stress damages can be reduced by following the **Four Principles of Lifting**.

THE FOUR PRINCIPLES OF LIFTING

When most people get ready to lift a load, they are not thinking “**how** am I going to lift this load?” They are thinking, “**where** am I going to put this load?”

It is not always possible to maintain the correct curves of your back or to avoid manual handling. At some stage, you will most likely have to lift and carry materials or equipment. Of all of the manual handling activities, lifting causes the greatest number of injuries. The risk of injury will be minimised by using the Four Principles of Lifting.

PRINCIPLE 1

The first principle is **keeping the load close to your body!**

By keeping the load close to your body, you will:

- keep the three natural curves of your spine;
- reduce the stress loads on your spine; and
- minimise the risks of a back injury.

When you hold a load out at arms length this load can be up to seven to ten times heavier on your back than when you hold the load close to your body. The further the load is held away from your body, the more you will flatten out the curves of your spine. This will make the lift more difficult for your back to cope with.

PRINCIPLE 2

The second principle is **Supporting your body!**

What does “supporting your body” mean?

“Supporting your body” means supporting your back when performing lifting tasks. You can do this by:

- **supporting your upper body** by leaning against a support when bending to pick up an object;
- **wearing a support** to brace your lower back, like those worn by employees in large hardware stores; and
- **wearing a harness** that attaches to a support, similar to those worn workers in specialised jobs. A good example is the one used during sheep shearing operations.

If you are bending over and lifting at the same time, your body will not only have to lift the load, it will also have to lift your upper body. Your upper body weight is added to the weight of the load. By supporting your upper body when lifting, you will place significantly less stress on your back.

PRINCIPLE 3

You now know the first two principles, **keep it Close, Keep the Curves** and **Build a Bridge**.

The third principle is **Staggered Stance!**

Most people lift with their feet too close together. Having your feet too close together will make you bend your lower back.

What does “Staggered Stance” mean?

When lifting, you need to create a wider base of support. You can achieve this by:

- placing your feet further apart;
- staggering your stance; and
- maintaining the “Power Stance.”

THIS IS AN 11-PAGE DOCUMENT.