

# A Useful Guide to Managing Manual Handling



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# A Useful Guide to Managing Manual Handling

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## Introduction

This Useful Guide has been written with the aim of promoting a new approach to managing manual handling. The traditional approach emphasises regulation, with sanctions in place for those who fail to comply. While this is important, we believe that over-reliance on regulation has created a culture of unthinking compliance, where rules are enforced without thought or understanding as to why they were made in the first place. Even worse, compliance is often at a minimum level, where boxes can be ticked but accidents, injuries and longer-term health problems are not prevented.

Worse still, this culture of unthinking compliance often has the opposite effect to what was intended. Because the reasons behind the rules and regulations are not properly explained, employees often do not see why they should comply with them. For this reason unthinking compliance often develops into non-compliance, with people finding ways of getting round or subverting the rules in the interests of expediency, laziness or sheer bloody-mindedness. The case studies we have included throughout this Useful Guide demonstrate all of these traits – and their consequences.

As we will demonstrate in chapter 1, rates of accidents, injuries and musculoskeletal disorders remain unacceptably high. The consequences of this for employers are reduced efficiency, impaired performance and unnecessarily high levels of absence – all of which directly affect business performance and profitability.

In the first four chapters of this Useful Guide we explore the current position and how it has developed. In chapters 5-8 we then move on to consider what motivates people to behave as they do, and how we can apply this knowledge so that people are motivated to behave differently in the manual handling environment. We believe that the key to this is effective leadership at all levels, from business owners and chief executive to supervisors and, most important of all, peers.

If you are a **senior manager** you will benefit from reading the whole of this Useful Guide, in order to see the big picture and develop strategies for changing it.

If you are a **first line manager or supervisor** you may wish to focus on the chapters on changing behaviour and providing effective leadership.

If you are part of the **workforce** you will find that Appendix 1 illustrates safe and effective manual handling techniques.

Throughout this Useful Guide we have illustrated our points with case studies. These are all real, and all drawn from the United Kingdom in the twenty first century. We believe that they demonstrate that there is work to be done.

There are several exercises in the Useful Guide. You can either print out the relevant page and write on the printout or, if you prefer, you can download the MS Word toolkit from [here](#) and do the exercises on your computer.



## Chapter 1

### The Paradox – Why Regulation doesn't reduce accidents

*'How wonderful that we've met with a paradox. Now we have hope of making some progress' - Niels Bohr (physicist)*

Why should you read this Useful Guide?

You're a busy person with a business to run – targets to achieve, customers to keep happy, staff to manage. The last thing you feel like spending your time on is yet another weighty tome on health and safety – especially an area as dull as manual handling. You probably think you know what the guidance says already, and if you don't know what it says, you know where to look.

There's a copy of the 1992 Health and Safety Executive Manual Handling Operations Regulations Guidance (as amended in 2004) sitting on your shelf, and as you always comply with relevant legislation (however onerous it may seem), you've ensured that all staff have had the relevant training for their roles. Your manual workers have had training in lifting techniques, your managers and supervisors have been trained in conducting risk assessments – what could possibly go wrong?

To answer that question let's begin by considering some case studies. As with all the examples in this Useful Guide, these case studies are drawn from recent workplace experience – they are all from the twenty first century, and nothing is made up.

#### Case study 1 – Two Men and a Boat

A university with a successful rowing club employed two men in their sixties to look after their boats. One of the men was short and plump, the other tall and thin, so they were mismatched physically – one factor which made it difficult for them to lift and move the boats. Another problem was the boats themselves, which were awkwardly shaped as well as heavy to lift. But, despite their age and physical limitations, both men perceived it as their responsibility to lift the boats off the racks and carry them out of the boat-house and down to the river – where eight fit, healthy young rowers, trained to the peak of their physical powers then sat in the boats.

It may be immediately apparent to you that there's something very wrong with this picture, but that didn't occur to anyone at the time. In the view of everyone involved it was the role of the two men to look after the boats and bring them out to the river, and the role of the students to sit in the boats and row them.

No-one thought to consider the potential damage to the older men's health, or even the cost implications (£50,000+) of an expensive boat being dropped and damaged.

### **Case study 2 – The Lady in the Store Room**

On one of his site visits James encountered a female HR manager moving archive boxes of papers, each weighing between 13 and 26 kilos, on her own. On the surface there's nothing wrong in that – certainly a woman is just as capable of safely lifting that weight as a man, particularly if, as in this case, she has been trained in manual handling techniques. However, in this case the person concerned was eight and a half months pregnant, and lifting loads that endangered not only her own health but that of her unborn child.

Elsewhere in the office, unaware of what was happening in the store room, were male members of staff in their twenties who would have been only too glad to help – had they been asked. But the request never came, because the perception of the HR manager was that she was just getting on with her job, and didn't 'want to impose' on others, even though at that particular time the others were far better equipped to carry out that task safely than she was.

### **Case study 3 – The Man in the Loft**

Steve recently had a new water cylinder installed in his loft. The company concerned sent a lone technician, a man of around 60, who borrowed Steve's ladder and clambered up through the hatch. When the time came to lift the cylinder into the loft the technician got a rope from his van, tied it around the cylinder and began hauling it up. Steve offered to help, and found himself standing under the cylinder – without anything such as protective headwear – guiding it up the ladder, through the hatch and into the loft.

This is an example of a process that started off wrong and continued in the same way. Why was there only one technician? Why didn't he have the appropriate lifting equipment? Why did the customer end up having to help and what would have been the implications had the customer been elderly, infirm, disabled or unable to assist for some other reason?

## What can we learn?

The feature common to each of these case studies is poor manual handling practice, putting the health of the people involved at risk. But the reasons for the poor practice are different in each case.

In case study 1 everyone unthinkingly accepted their role – the boat keepers looked after the boat until it was on the water, the rowers sat in it and rowed. There was no malice involved, it was just that with the passing of the years the employees had become ill-equipped for the part of their role which involved carrying the boat.

In case study 2 the HR manager felt that if she asked for help her value to her employer would be drawn into question. “She’s gone and got herself pregnant, she’s going off on maternity leave, and now she’s interrupting people to get them to move her boxes for her...”. There was no indication that anyone was thinking any of those things, but the culture of the modern workplace is such that we constantly feel the need to prove our worth, even if we risk our health and wellbeing in the process.

In case study 3 the employee and his employer both must have known that this was poor practice, but neither had the will to do anything about it. If the technician was a subcontractor he may well have feared not being employed again by that company if he voiced any concerns. So far as the employer was concerned it seemed to be a case of ‘out of sight, out of mind’ – a dangerous approach, particularly when your employees are lifting heavy loads in variable home environments.

The common feature in each of these case studies is that of thoughtlessness – people doing things in habitual ways, without taking into account changing circumstances which increase the risk of an accident.

The sceptics amongst you may be thinking that we have selected three isolated examples in order to prove a point. We have two responses to that – firstly, these are just the first of many real-life examples we will be using throughout this Useful Guide. And if just two people have encountered all this bad practice, it suggests there must be a lot of it about. Secondly, though, and more importantly, the figures suggest that bad practice in manual handling is pretty common. This brings us to the boring but important bit – the statistics.



## Facts and Figures

### The Good News

The good news is that manual handling accidents are unlikely to cause death. They also rarely cause what the Health and Safety Executive (HSE) classifies as 'major injuries', the main causes of which are slipping or tripping (41%) or falling from a height (16%). 26,061 major injuries were reported to the Health and Safety Executive in 2009-10.

And now for ...

### The Bad News

The bad news is that accidents involving manual handling are the largest single cause of the category of reported accidents, those leading to absences from work of three or more days. In this category 95,369 accidents were reported to the Health and Safety Executive in 2009-10, of which 36% were caused by handling, lifting or carrying.

This figure is the tip of a much larger iceberg. Employers are only required to report accidents resulting in an absence from work of three or more days. Many employees will struggle into work within this time, even though they may not be fully recovered.

Furthermore the Health and Safety Executive estimate that in 2009-10 only 57% of reportable injuries – i.e. those that should have been reported – actually were reported by employers. Not a very encouraging figure, even though the Health and Safety Executive state that reporting is improving, and has moved up from 52% in 2005-6.

To reveal the full extent of the iceberg ...

Poor manual handling practice is likely to manifest itself in increased rates of musculoskeletal disorders (MSDs).

A survey of self-reported work-related illness in 2001-2 estimated that 1.1 million people in Great Britain suffered from musculoskeletal disorders caused or made worse by their current or past work. An estimated 12.3 million working days were lost due to these work-related musculoskeletal disorders. On average each sufferer took about 20 days off in that 12-month period.

Since 2005 reports of new cases of work-related ill health have been collected in a survey of 300 general practitioners. The data collected reveals musculoskeletal disorders to be the most common type of work-related illness (53%), and

second only to work-related mental ill health as a cause of working days lost (37%). This is a particularly significant statistic for two reasons.

Firstly musculoskeletal disorders resulting from poor manual handling practice are likely to develop over a period of time, and not simply to be the result of a single accident at work. People working in childcare are an example of a group particularly susceptible to this – the teacher who spends her working life sitting on chairs designed for four-year olds, the nursery assistant who spends her working day picking up toddlers. James gives the example of a worker who suffered a slipped disc while picking up an elastic band. The injury was not the result of the innocuous act of picking up an elastic band; it was the cumulative effect on the years of poor manual handling practice that had preceded it.

Secondly, this survey is important because it identifies a problem which is not reflected by one-off reports of accidents, which may or may not be submitted to the Health and Safety Executive.

The 2009-10 Labour Force Survey has a central estimate of an incidence of 630 musculoskeletal disorders per 100,000 workers over the last 12 months. The Health and Safety Executive proudly state that this figure reflects a 'statistically significant' trend of improvement since 2001-2, when the figure was 750.

So, given that the Health and Safety Executive claim evidence that the picture is improving, how can we also be right in claiming the existence of a paradox – that increased regulation has not reduced accidents?

## **The Paradox**

To begin with, we need to look critically at the statistics. On the Health and Safety Executive's own estimate, only just over half the number of 'reportable accidents' are actually reported to them. And why would it be otherwise? Why would an employer put their head above the parapet and report an accident if they can easily avoid doing so? And why would an employee risk making an issue of this if it meant putting their job at risk? In many cases the current health and safety culture is not one that encourages or values the reporting of accidents.

We have also established that many musculoskeletal disorders arising from poor manual handling practice will not be attributable to a single incident. They arise from many years of strain on the body, not the single moment when you bend to pick up an elastic band and find yourself unable to straighten up again.

What is undeniable from the statistics is that the problem is huge. To give you the headlines ...

- Over 34,000 accidents reported to the Health and Safety Executive in 2009-10 resulted from lifting, handling or carrying.
- Musculoskeletal disorders remain the most common type of work related illness.
- There were 630 musculoskeletal disorders per 100,000 workers according to the 2009-10 Labour Force Survey.

And while on the surface this figure may represent an improvement on 2001-2, we need to take into account that over this period there has been a change in occupational patterns, including a decline in traditional manufacturing industries that require heavy lifting.

A great deal of time, money and effort has been invested since the introduction of the Manual Handling Operations Regulations in 1992, with the aim of increasing compliance with the regulations. A worthy aim, but the emphasis on regulation and enforcement has generated a culture of minimum compliance, where training becomes a means to getting a piece of paper that promptly gets filed away and forgotten about afterwards. This then develops into a culture where people 'play games' with the system. They will use handling aids when inspectors or supervisors are around, but not bother when those people's backs are turned. Winning the game becomes more important than their own wellbeing.

And there lies the paradox – the point where regulation becomes counterproductive. The knee-jerk response to this is to legislate more, to introduce more stringent regulations which close existing loopholes, or to bring in harsher penalties for non-compliance.

This has been the approach throughout the 20 years since the 1992 Regulations, and we do not believe that the resulting 'statistically significant' improvements are a good enough return on the resources invested. Nor is it acceptable that injuries resulting from manual handling continue to place such an enormous strain on the National Health Service and the Benefits system, particularly in this new age of austerity.

In this Useful Guide we will argue that a new approach is needed. An approach which ...

- moves away from regulation and applies what we have learnt from behavioural science – why people behave as they do.

- draws upon what has become established as good practice in other areas of management, such as empowering people to take responsibility for assessing and managing their own risks.
- says that minimal compliance with regulation is not good enough – an approach that will change the way we manage manual handling.

## Chapter 2

### The Health and Safety Culture

The 1974 Health and Safety Act sent a fundamental message to employers – that they have a duty of care for their employees. This should have provided a firm foundation for the development of an enlightened culture of health and safety, but this core message has become clouded through excessive regulation by government and poorly thought-out interpretation on the part of employers. The result is a huge gap between what should happen in theory and what actually happens in practice.

As in chapter 1, we will begin by illustrating this point with three case studies.

#### Case Study 4 – The Toppling Tower

A local authority employed a firm of contractors to carry out some maintenance work at a swimming pool. The work involved the use of a scaffolding tower, which needed moving along when each stage of the work was completed. The prescribed way of moving the scaffold was for the man on the top to climb down, disengage the brakes, then push it along with his colleague until it was in position for the next stage, when the legs would be fixed back in position, the brakes applied and he would climb back to the top again.

That was the process as it was written down, but the employees concerned had other priorities. They wanted to get the job completed as quickly as possible, so instead of the time-consuming business of climbing up and down, fixing and unfixing the tower, one man remained on top while his colleague pushed the tower along. As befits the location everything was going swimmingly – until the tower collapsed while being moved, resulting in the worker on the top falling and suffering serious head injuries.

#### Case Study 5 – A Pile of Trouble

A manager with a catering company became frustrated at canteen staff not clearing trays, resulting in unwieldy stacks of them piling up on the tables. She therefore decided to remove the trays herself, so she picked up one of the unsteady piles and began making her way across the restaurant. As she went on her way the load slipped, resulting in her falling and suffering a slipped disc.

The manager successfully claimed compensation from her employer, but was left with pain and limited movement, meaning that she was no longer able to do her



job. She ended up accepting a position taking money on the till, several grades below her original job.

#### **Case Study 6 – The Painter and the Tall Boy**

James was running a training session on manual handling, when one of the participants asked about moving furniture. He explained that he was a painter, that he was left to work on his own, and that this involved moving large items of furniture unaided. He gave the example of an oak 'tall boy', which weighed in the region of 75-100 kilograms.

The man concerned had a slipped disc, resulting in him taking three weeks sick leave from work over the preceding twelve months, but remained adamant that he had no alternative but to move the furniture unaided. His response to the suggestion that he should request help or lifting equipment was "They'll fire me". In the end James had to take up the matter personally with the management of the company concerned, as it was the only way in which the situation would change.

Each of these case studies highlights the gulf between the employer's duty of care, as laid down by the 1974 Health and Safety Act, and what actually happens in practice. The duty of care is often met on paper, but as the case studies demonstrate the actual culture is often very different from the espoused culture.

James has an example of visiting a local authority and asking to see their health and safety manual. It was contained in a pristine, white bound folder. James had to break the printer's seal to open it. This was not an off the shelf manual – it was a document which had been specifically commissioned by the authority over a year earlier – but which had never been looked at. On paper the manual equipped the authority to fully meet its duty of care, but it had never become a working, living document – it had never even been opened.

The case studies reveal a health and safety culture which fails to meet the basic requirements of protecting employees from harm. However, it is simplistic to blame employers for this.

In each of the case studies the employees concerned share responsibility for putting themselves at risk. Sitting on top of an unsteady scaffolding tower while it was pushed along was never a good idea. Nor was impatiently trying to clear away an unstable pile of trays, or someone trying to move heavy furniture

unaided when he already had a slipped disc. The depressing conclusion which arises from these examples is that the current health and safety culture is one which fails to protect us from our own stupidity<sup>1</sup>.

Later on in this Useful Guide we will explore the motivations for human behaviour in more detail, and also how people can become motivated to behave differently. What is evident from the case studies are the conflicting pressures which can lead people to behave in ways which, from an objective point of view, may not appear very sensible.

The workers on the scaffolding tower were motivated to get the job done as quickly as they could – possibly because they were under pressure from their employers, or perhaps because they simply wanted to get it finished so they could get away.

The catering manager was frustrated by the piles of trays cluttering up the restaurant – quite possibly she felt that this reflected badly on her own management and organisational skills. As no-one else was clearing them she felt that the simplest solution to the problem was to clear away the trays herself.

The painter may well have feared for his job if he asked for help or lifting equipment – possibly as a result of bad experiences throughout his working life, which may have had nothing to do with his current employer.

People often have rational reasons for behaving in irrational ways but the current health and safety culture ignores this. Problems are addressed through the blunt instruments of regulation and punishment. Regulations are set out in manuals which all too often fail to become working documents.

One government department where Steve ran training courses boasted that it has 'over 150 policies to help you as managers' – a statement which makes our hearts sink! How can even the most dedicated managers be expected to familiarise themselves with over 150 policies – particularly at a time when they are being told that their main focus must be on delivering results?

Punishment is an equally blunt instrument. In case study 4 the contractor and the local authority were both fined, while in case study 5 the catering manager was awarded compensation. But punishment and compensation come after the event, when the damage has already been done. It does not take away the head

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<sup>1</sup>Please don't think that we exempt ourselves from this – as I write I am thinking of all the times I have stretched too far when standing on top of a ladder, or carried an excessive load from the car in order to avoid making another journey.

injuries, or the slipped disc, or restore an incapacitated worker to a state where they can resume their full range of duties.

A comparatively new aspect of the health and safety landscape in the UK is the rising of a culture of litigation. Imported from the U.S., fuelled by offers of representation on the basis of 'No win, no fee', the litigation culture disempowers both employers and employees. Employers, fearful of being sued, take false comfort in excessive regulation and policy making.

We have already seen the effects of this – the local authority with the manual which had never been opened, the government department with over 150 management policies.

Managers, fearing that they will be held personally liable if something happens to one of their team members, take on tasks they are not equipped for – removing piles of trays, or lifting heavy boxes when eight and a half months pregnant. Most serious of all, employees fail to take responsibility for their own health and safety because in the current culture responsibility lies with the employer. It is the employer who has the duty of care, and the employer who can be sued (on a no win, no fee basis) if they fail to provide this.

We believe that if an employer is to fully meet its duty of care, it needs to equip its employees to make sound decisions to ensure their own wellbeing. Excessive regulation, policy making and punishment achieve the opposite of this. Alongside the principle that employers have a duty of care for their employees we need to establish a second principle – that employees have a duty of care for themselves.

**In order to achieve this we need to change the way we think about health and safety.**

Instead of telling people that they have to follow prescriptive regulations, we have to empower them to analyse risks and take intelligent decisions for themselves.

Peer pressure is an important tool in achieving this.

A manual stating that you should not sit on top of a moving scaffolding tower is likely to be unread or forgotten, a manager or supervisor telling you the same thing will be ignored as a point of principle, unless they are physically there to watch you. But an experienced colleague, someone you work alongside day to day – he/she has a chance of being listened to.

We also need to start developing a health and safety culture which recognises and responds to the demands of the modern workplace. People will look for ways

to complete a job as quickly as possible –we need to recognise this and respond accordingly.

Given the temptation not to climb down from the scaffolding tower while it's being moved, the solution is to provide a scaffolding tower which can safely be moved while a worker sits on top of it. Given that workers will find themselves in situations where they have to lift water cylinders or heavy furniture unaided, we need to create a culture where it is the norm to expect the appropriate equipment and training to be provided.

The current culture of regulation and punishment has failed, as illustrated by our analysis of the statistical information in chapter 1. The principle that employers have a duty of care to their employees is a sound one, but needs to be accompanied by a second principle - that employees have a duty of care towards themselves and their colleagues. We then need to persuade people to act in accordance with this principle by applying what we know about what motivates people to change their behaviour at work.

## Chapter 3

### The Legislative Context

The history of legislation relating to the health and safety of workers begins in the eighteenth century with the Agricultural revolution. The enclosure acts meant that peasant farmers lost their rights to farm and keep animals on common land, forcing them to become tenant farmers or labourers.

To landowners the labourers on their farms became business assets, and, as with any other assets, they did not want them to become damaged. It was this line of thinking that led to restrictions on manual handling being enshrined in the agriculture acts. It was deemed that a male labourer could lift a hundredweight bale of hay and that a female labourer should be able to lift half that amount.

The same thinking continued to be applied as the Industrial Revolution brought workers from the land into the cities.

The Industrial Revolution was powered by steam engines but, unfortunately, they kept blowing up. In 1810 it was estimated that somewhere in the UK a boiler was exploding every week. This caused considerable levels of injury and death, but the impetus for change came from the fact that it was expensive. Not only did workers have to keep being replaced – the costly machines did too!

As a result of this relief valves were developed. Their use became a legal requirement in order to ensure consistency between factory owners – after all, why would you go to the expense of installing relief valves if your competitors were saving money by taking the risk of doing without them?

So legislation which might now be seen as providing protection for vulnerable workers was originally driven by economics. This only began to change in the twentieth century, culminating in the 1974 Health and Safety at Work Act. This established the vital principle that employers have a *duty of care* for their employees' physical wellbeing – psychological wellbeing did not become a consideration until the 1990s, as understanding developed of the impact of work on mental health conditions such as depression and stress.

While the Health and Safety Act established the core principles of good practice it also contained a number of caveats. As the Health and Safety Executive states ...



*These duties are qualified in the Act by the principle of 'so far as is reasonably practicable'. In other words, an employer does not have to take measures to avoid or reduce the risk if they are technically impossible or if the time, trouble or cost of the measures would be grossly disproportionate to the risk.*

The Act stressed the importance of risk assessment, but only businesses employing five people or more are required to record the findings of these assessments. In the field of manual handling this means that a small decorating or building firm, where the risks are significant, would not be required to have any written evidence of risk assessments having been carried out.

In 1992 a set of regulations were added to the 1974 Health and Safety at Work Act, many of them in response to EU legislation. This set of regulations has become known as 'The Six Pack'. Some areas covered have been subject to further amendments since 1992. 'The Six Pack' currently stands as follows ...

1. Management of Health and Safety at Work Regulations 1999 (MHSWR)
2. Workplace (health, safety and welfare) regulations 1992 (WHSWR)
3. Health and Safety (display screen equipment) regulations 1992 (DSE regs)
4. Personal protective equipment at work regulations 1992 (PPE regs)
5. Manual handling operations regulations 1992 (MHOR)
6. Provision and use of work equipment regulations 1998 (PUWER)

The two sets of regulations which are relevant to us here are the **Management of Health and Safety at Work Regulations** and the **Manual Handling Operations Regulations**.

A key principle of the Management of Health and Safety at Work Regulations is that employers must conduct a general assessment of risks to their employees' health and safety. In doing this they should have access to competent health and safety advice. This general assessment should include the assessment of manual handling operations.

At this point it might be worth pausing and pinning down a couple of key aspects of the 1992 Manual Handling Regulations.

Firstly, our perception of manual handling is often that it is simply about lifting things safely. However, the Regulations make it clear that 'manual handling operations' go beyond this ...

*"manual handling operations" means any transporting or supporting of a load (including the lifting, putting down, pushing, pulling, carrying or moving thereof) by hand or bodily force.*

This makes it clear that employers must assess the risks involved not just in the lifting of a load, but in its movement and putting down.

Secondly, another key aspect is the following principle ...

*Each employer shall –*

*So far as is reasonably practicable, avoid the need for his employees to undertake any manual handling operations at work which involve a risk of their being injured.*

This makes it clear that the emphasis of the regulations is on avoiding risk of injury by avoiding or eliminating the need to manually lift and move loads in the first place. This involves questioning the way in which things are currently being done.

For example, is it necessary to move a product to a separate area for wrapping, or could the process be changed so the wrapping takes place where the product is already situated?

Can manual processes be automated or mechanised? These may require some investment, but may also result in gains in efficiency, productivity and reduced damage to loads.

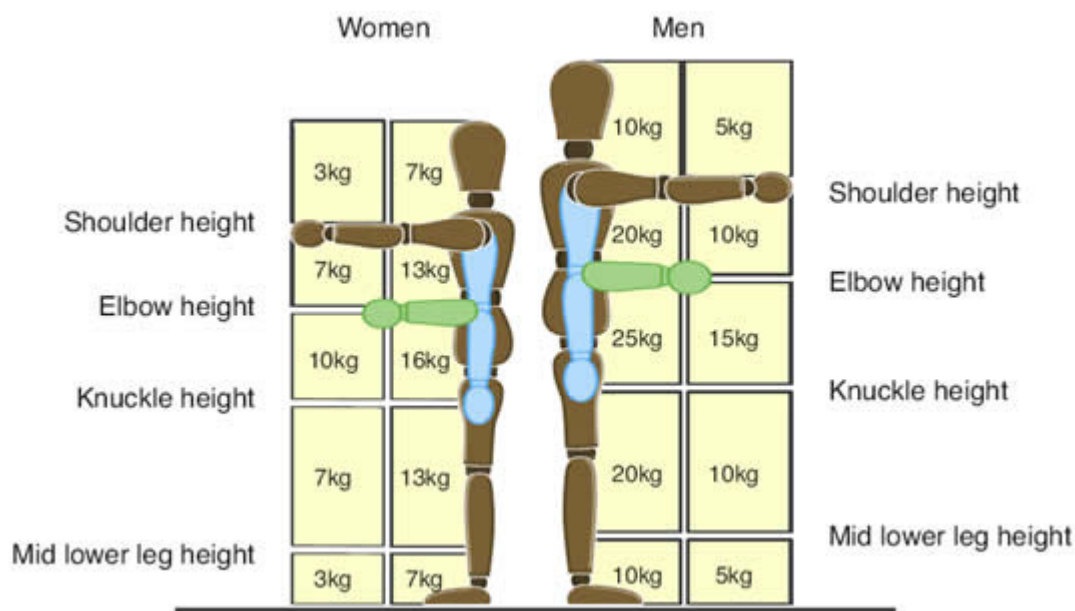
Where it is not practicable for an employer to avoid the need for manual handling operations which involve the risk of injury, the regulations require the employer to take the following three steps ...

1. Make a suitable and sufficient assessment of all such manual handling operations to be undertaken by them
2. Take appropriate steps to reduce the risk of injury to those employees arising out of their undertaking any such manual handling operations to the lowest level reasonably practicable
3. Take appropriate steps to provide any of those employees who are undertaking any such manual handling operations with general indications and, where it is reasonably practicable to do so, precise information on –
  - a. The weight of each load, and

- b. The heaviest side of any load whose centre of gravity is not positioned centrally

The Health and Safety Executive Guidance on the Regulations includes a Risk Assessment Filter which is designed to help employers in assessing risk. The illustration below is a guide to the weight of stable loads which can be safely lifted by a reasonably healthy, trained and competent person in 'reasonable working conditions' ...

## Lifting and Lowering



Each box in the diagram contains a guideline weight for lifting and lowering in that zone. Using the diagram enables the assessor to take into account the vertical and horizontal position of the hands as they move the load, the height of the individual handler and the reach of the individual handler. As can be seen from the diagram, the guideline weights are reduced if the handling is done with arms extended, or at high or low levels, as that is where injuries are most likely.

(Manual Handling Operations Regulations 1992 (as amended) – Guidance on Regulations – p55)

The Guidance goes on to cover the need to reduce the guideline figures for frequent lifting and lowering, or operations which involve twisting, carrying, pushing or pulling.

The Guidance is helpful, but not without problems. There is a temptation to interpret the guideline weights as absolute limits, which is not how they were intended. It may be safe for employees to lift heavier weights than these, but the employer would be expected to conduct a rigorous risk assessment, analysing ...

- The task itself – what it involves and whether it can be carried out safely
- Whether the right person has been identified to carry out the task (i.e. are they fit, healthy, trained and competent?)
- The environment – is it clear of obstacles and hazards?
- Whether someone else needs to be involved to manage the process as it is being carried out.

While on the one hand there is a risk of the guidelines being interpreted too strictly as a set of limits, on the other hand there is the risk that people involved in manual handling operations are completely ignorant of them.

This is unlikely to be the case in an industry such as construction, where manual handling operations are part of the day to day work, but in other areas people may be unaware that such guidelines even exist.

In many office environments the perception is ‘we don’t do that kind of thing’ – which would be fine if it were true. The reality though, as many of us will have experienced, is that if a desk or filing cabinet needs moving, the task will probably fall to junior members of the office staff. These people are unlikely to be skilled or trained in manual handling techniques, just as their managers are unlikely to be equipped to effectively assess the risks. Neither movers nor managers in this scenario are likely to have a clue as to what the items to be moved weigh – nor any quick method of weighing them<sup>2</sup>.

Put all these factors together and the chances of the Manual Handling Guidelines being applied are zero. It’s another paradox – environments where manual handling hardly ever happens are the ones where people are at the highest risk. To illustrate the point – time for another case study ...

### **Case Study 7 – Reversing into Trouble**

Although office workers often perceive that their jobs don’t involve manual handling, one of the commonest items of equipment to need moving is a printer. Often they are heavily used, or simply become outmoded and in need of

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<sup>2</sup> Do you know how much items of office furniture and equipment weigh? Take our test at the end of this chapter!

replacement. On this occasion an IT technician was moving a printer, which weighed about 45 kilograms, on her own. Being aware that she would have to walk backwards, she had ensured that she had a clear walk to the trolley in the corridor before starting the task. She then picked up the printer, walked backwards through the office then turned around the corner into the corridor – where a colleague had just left a crate on the floor. She fell backwards over the crate and sustained injuries to her chest.

In this instant the technician had done most things right. What she had failed to do was manage the environment, by ensuring that it would remain safe until the task was completed. Another person was needed to monitor this while she carried out the task.

Managing the environment is also a significant factor in our next case study, which illustrates the chasm which can exist between what the regulations say and what actually happens in practice ...

#### **Case Study 8 – Spiralling Madness!**

At a leading university porters were moving washing machines up a 400 year-old spiral staircase to the fourth floor. Although the machines are cube-shaped they are a difficult load – heavy with no hand-holds. Manoeuvring the machines up the winding staircase at times involved lifting them high to get them around corners – the ideal opportunity for students waiting to come down the stairs to duck under them and get past – with no regard to the risks involved for themselves or the porters.

In this scenario it was fortunate that no-one was hurt, but clear that something had to change before someone was.

The key aspect was recognising that what had been perceived as a two person job in fact needed six – someone with sufficient authority at the bottom of the stairs to stop anyone from going up, someone with sufficient authority at the top of the stairs to stop anyone from going down, and four people to manoeuvre the machine safely up the stairs. Stopping on each landing provided an opportunity for the porters to rest and for the students to pass in a controlled manner. The environment did not allow for mechanical aids, such as stair crawlers, so extra manpower was required instead.

In this chapter we have seen how health and safety legislation has evolved, from the days when people were seen simply as economic assets to be protected in the same way as any other tools of production, to the current climate where employers are required to safeguard both the physical and psychological



wellbeing of their employees. The 1974 Health and Safety at Work Act enshrined this duty of care as a fundamental principle, and it has underpinned the regulations introduced since that time. The problem is that regulation has become an increasingly blunt instrument for promoting best practice. In many work environments, particularly those where manual handling is not part of the day to day work, there is ignorance not only of the guidance but of the implications of failing to comply with it. And while the guidance may be applied in a modern business occupying modern purpose built premises, it is harder to apply in more challenging environments such as older buildings, domestic homes or those where people may behave unpredictably or irresponsibly. In these circumstances employees need to be equipped both with the skills to assess risks for themselves, and the authority to take the necessary action to address them.

Now try the test on the next page to see if you know how much items of office furniture and equipment weigh ...

## What does it weigh?

Do you know how much these items of office equipment and furniture weigh?  
Note your answers then check them against our list in Appendix 2.

This exercise is in your MS Word toolkit which you can download from [here](#).

Item	Weight in kg
<b>Desk – single drawer set</b>	
<b>Executive chair</b>	
<b>Filing cabinet – 4 drawer (Empty)</b>	
<b>Filing cabinet – 4 drawer (Full)</b>	
<b>Meeting table</b>	
<b>19 litre water bottle</b>	
<b>Paper – box of 2500 sheets, A4, 80 gsm, 5 reams</b>	
<b>Archive box with average content</b>	
<b>Plasma screen TV – 42" - 50"</b>	
<b>Computer monitor – 17"</b>	
<b>LaserJet Printer</b>	

For Read Out loud Readers: The table has finished

## Chapter 4

### Training and Equipment

As with all aspects of health and safety the risks involved in manual handling can be minimised by ensuring that the people involved are properly trained and have the right equipment. However, as the following case study illustrates, this will not always be the case.

#### Case Study 9 – A Slippery Situation

A company director wanted an expensive prized tropical fish tank removing from his house. The tank was substantial – over two metres long, 72 centimetres wide, a metre high. It was made of 8mm thick uncut glass, and still had 10 centimetres of water sloshing about in the bottom to protect the live rocks – the rest of the water and the valuable fish had been removed. The total weight of the tank was around 100 kilograms; the house was old and awkward for manoeuvring.

The tank needed to be moved out of the room it was in, through corridors involving two right angle turns, out of the house then up a steep flight of steps and into a van. The space did not allow for machinery to be used, so he therefore gathered six physically fit and capable people to move the tank. One of them had gloves, the other five just their bare hands.

They lifted the tank up and two major problems quickly became apparent. Firstly the tank was almost as wide as the doorway, meaning that the first pair had to duck under the glass tank to get through the doorway, while it was held by the other four. This centipede-like action continued until the tank and the movers were all through the doorway. At this point the five without gloves all realised that their hands were bleeding, from where the razor sharp edges of the glass penetrated the silicon sealant. These edges were also wet, from the seawater in the bottom of the tank.

Unfortunately putting down the tank was not an option – firstly there was no room, and secondly they would not have been able to lift it up again. No-one had had the foresight to put out trestles for the movers to put down the tank and take a rest. Bleeding hands or not, they had no choice but to continue with the operation until the tank was finally loaded into the van. By this time everyone involved was physically damaged, with cut hands and muscle strains.

So – what should have been done differently?

Firstly a fuller risk assessment should have been carried out. In this case it could be argued that a general risk assessment was conducted – the company director had identified the need for six people, the lack of scope for using lifting equipment, the fact that the tank would just about fit through the doorways. However, this assessment was so superficial as to be of no value in protecting the people involved in the task. The general analysis should have highlighted the need for a fuller risk analysis, focusing on the four factors affecting risk of injury

...

- The task
- The load
- The working environment
- The people

These four factors are crucial to safe manual handling, so let's look at each of them in more detail.

### **The Task**

You need to consider whether the task involves ...

- Holding the hands away from the body
- Twisting
- Stooping
- Reaching upwards
- Large vertical movements
- Long carrying distances
- Strenuous pushing or pulling
- Unpredictable movement of loads
- Repetitive handling
- Insufficient rest or recovery
- A work rate imposed by a process

### **The Load**

Is the load itself ...

- Heavy
- Bulky
- Unwieldy
- Difficult to grasp
- Unstable or unpredictable (a particular risk if it is alive – e.g. a person or an animal)

- Intrinsically harmful (e.g. sharp or hot)

### The Working Environment

Does the environment include ...

- Uneven or slippery flooring
- Constraints on posture (e.g. due to low ceilings or doorways)
- Hot/cold/humid conditions
- Poor lighting
- Other activities which may affect the handling process
- Other people working in the area

### The Person/People

- Are they physically fit to carry out the task?
- Do they have the necessary information/training?
- Do they have any health issues which may make the task hazardous for them or their colleagues?
- Are they pregnant?
- Is movement or posture hindered by clothing or protective equipment?

Take a moment to consider the four factors in relation to case study 9. Make a note of the points which should have been considered.

This exercise is in your MS Word toolkit which you can download from [here](#).

#### The Task

#### The Load

#### The Working Environment

#### The Person/People

You have probably found that several hazards under each of the four factors should have been identified.



Repeat this exercise for any of the case studies included in this Useful Guide and you will find that the causes of the problems lie in insufficient attention being paid to some combination of these four factors, either by the people planning the task, the people carrying it out, or both.

Analysing the four factors would also have led to some basic equipment being supplied – just having some safety gloves would have avoided the lacerations to the hands. Overalls would have provided protection to the rest of the body. Suitable footwear should also have been provided – safety boots with reinforced protection for the toes and ankles.

While the working environment placed constraints on the use of any bulky or sophisticated lifting equipment it might have been possible to use strapping, for example, to get a firmer and more stable hold on the tank.

If we go back to the earlier case studies we can see that in many cases problems could have been avoided by the provision of basic equipment. In ‘The Painter and the Tall Boy’ sliders could have been put under the item of furniture in order to move it – or even a piece of old carpet could have pushed under it, enabling it to slide out. In ‘The Man in the Loft’ a simple tripod lifting gantry could have been used to raise the water tank into the loft.

The Health and Safety Executive booklet ‘Are you making the best use of lifting and handling aids?’ can be downloaded from

<http://www.hse.gov.uk/pubns/indg398.pdf>

We have also seen instances of where equipment has been provided, but has not been used safely – ‘The Toppling Tower’ is an example of this. It is often tempting to cut corners, in order to save money, time or both, and this can lead to equipment being used in ways which were not intended. The provision of equipment, therefore, is not in itself the solution to poor manual handling practice. It needs to be supported by training, both in using the equipment properly and in identifying and minimising the risks associated with it.

The four factors should provide the foundation of any training in manual handling – before the training even starts to go into effective kinetic lifting techniques (See Appendix 1). However, all too often there is a huge gap between what is said on a training course and what happens in the workplace. Sadly our experience suggests that this is the case even when a significant investment has been made in what appears to be good quality training, i.e. training which has been tailored to the needs of the particular organisation and job, and which includes practical work as well as theory.

Companies willing to invest in this kind of initial training also tend to be willing to invest in refresher training – at which point we find that all too many people have reverted to many of the bad habits they had in the first place. And if this is the case with specific, tailored face to face training, what are the chances of success in those companies where training consists of getting people to watch a 15 minute DVD?

**If we are to reduce the number of manual handling accidents and injuries we need a different type of training.**

Instead of the current focus on learning and following procedures, we need to change people's thought processes so that it becomes second nature for them to analyse the risks for themselves before starting the process of lifting and moving a load. And, if their conclusion as a result of that analysis is that the operation is unsafe, or requires equipment, they need to feel sufficiently empowered to say so and feel confident that their concerns will be listened to.

Reaching that point really would be a change in the culture of manual handling; the next chapters consider what's involved in getting there.

## Chapter 5

### What Motivates Behaviour?

Before starting this chapter take a moment to complete the table below. Be honest – we promise not to come round and check your answers!

This exercise is in your MS Word toolkit which you can download from [here](#).

Column A	Yes/No	Column B	Yes/No
Do you take regular daily exercise?		Do you smoke cigarettes?	
Do you eat 5 portions of fruit or vegetables each day?		Do you drink more than the recommended amount of alcohol each week?	
Do you floss your teeth daily?		Do you ever exceed the speed limit when driving your car?	
Do you take time to meditate each day?		Do you regularly eat processed food (e.g. bacon, burgers, ready meals)?	
Do you have smoke alarms in your house – and, if so – do you test them each month?		Do you go out in the sun without putting on UVA protection first?	
<b>Total Column A</b>		<b>Total Column B</b>	

We know that the behaviours in column A have beneficial long term consequences for our health and well being, but most of us are unlikely to have answered 'Yes' to all of them.

We are equally aware that the behaviours listed in column B are detrimental to our own (and sometimes others') health and well being – often to the point of being life threatening – but few of us are likely to have answered 'No' to all of them.

If you have answered 'Yes' to each question in column A and 'No' to each question in column B then congratulations – you deserve to live a long and

healthy life! But given that most of us probably haven't, what does this tell us about what motivates human behaviour?

It helps us to identify some of the things that don't seem to have much influence. These include the following ...

### **Long term consequences**

For years we have been aware of the consequences of behaviours such as smoking tobacco. Cigarette packs warn that their contents kill, while advertising campaigns have featured graphic images of lungs clogged with tar. Yet still people continue smoking, and young people are doing so more and more.

It appears that warning people about long term consequences doesn't really work. The time frame is too great, the consequences too distant from the actions. Why worry about dying at sixty when a cigarette helps you look cool at seventeen?

The same short term logic applies to manual handling. We know that lifting excessive loads may eventually result in a slipped disc, but the immediate desire to get the job done expediently overrides this.

### **Unnoticed consequences**

Unnoticed consequences are closely related to long term consequences – we don't respond to them because we don't notice them creeping up on us. My dentist nags me to floss my teeth, but because they don't hurt I go home and forget. Only when I get toothache do I think about flossing and, by then, it's too late. So a problem that could have been prevented by maintaining my teeth properly ends up needing painful and costly remedial action involving drilling and filling.

Again we see the same lack of thought in people's behaviour at work. They may have been trained in safe lifting techniques but people quickly forget, and fall back into habitual ways of doing things. Most musculoskeletal disorders are not the result of a single incident, but the accumulated effects of poor manual handling practice over a long period of time.

We don't register these effects until we start feeling pain – at which point the damage has already been done, and can no longer be prevented.

### **Things that might not happen**

Often we ignore the risks of our careless behaviour in the blind belief that 'It will probably be ok'. After all, not every smoker gets cancer. And most speeding drivers don't run anyone over...

This line of thinking enables us to avoid facing the potential consequences of our behaviour. The individuals on the scaffolding tower in case study 4 thought 'it will probably be ok' to push the tower along with one of them sitting on top of it and it was – until the time when it collapsed and he fell to the ground, sustaining serious head injuries.

After the event it looks like an accident waiting to happen, but before the event it simply looked to them like the quickest way to get the job done.

### **'It's never happened to me'**

Closely related to things that might not happen at all are things which 'have never happened to me'. The decorator in case study 6 argued 'I've been moving furniture on my own for years, and I've never had anything fall on me'.

The human mind seems to find it hard to learn from others' experience, or even simple reasoning, until it has suffered the painful lessons of personal experience.

The people who pay close attention on manual handling courses are the people who have already experienced pain as a result of their own poor practice. Those who have yet to suffer stare vacantly into space, thinking about lunch.

High quality training which involves and engages people will overcome this to some extent, but still has only a limited impact on behaviour for the reasons we have explored above.

### **Legislation and Regulation**

In themselves legislation and regulation have little effect on behaviour, unless they are constantly enforced. Which of these road traffic signs is more likely to influence you to slow down?



Making a rule does not in itself change behaviour – in fact, it will be seen as a challenge by some people, to see if they can get away with breaking it.

The answer to this is often seen as more rigorous enforcement, such as speed limits being enforced by the use of cameras. But how often do we see people

slowing down when they pass the camera, only to speed up again as soon as they are past it?

This kind of enforcement becomes a game, between the people trying to enforce the rules and people trying to find ways around them. So the consequences of legislation and enforcement are often negative ones, such as a driver so intent on picking up speed as soon as they pass a speed camera that they end up causing an accident.

Once again, this is equally true of the workplace. We are all familiar with situations where people behave in accordance with the rules when being observed by their supervisor or the Health & Safety Representative, only to completely disregard them when those people are not present. So far from positively influencing people's behaviour, excessive reliance on regulation and enforcement can put both those individuals and the people around them at risk.

So far in this chapter we have identified a number of factors which evidence suggests are ineffective in influencing human behaviour. However much we may try to raise their awareness, people are generally unresponsive to information about the long term or unnoticed consequences of their behaviour, no matter how damaging they may be.

People often display a blind faith that 'things will be ok', which usually persists until something goes wrong which affects them personally. Finally we have established that legislation and regulation often fail to achieve the desired effects, and may lead to consequences which are the opposite of those which were intended.

If this is the case, then what are the factors which do influence behaviour?

### **Instant Gratification**

In 'Bringing Out the Best in People – How to Apply the Astonishing Power of Positive Reinforcement', Aubrey C Daniels writes ...

*People do what they do because of what happens to them when they do it*

The point here is that behaviour is not motivated by what might happen years into the future, or what might never happen at all – what motivates behaviour is the effect it has on us right now.

This enables us to understand why the immediate pleasure of smoking a cigarette outweighs the far-off spectre of lung cancer, and how the pleasing



effects of drinking alcohol take precedence over the long term risk of liver damage.

Economists and politicians who wonder why people don't save more for their pensions demonstrate a fundamental lack of understanding of this – we feel much happier spending our money on the things we want now!

Instant gratification can take many forms.

Positive reinforcement is one – managers are always being urged to 'catch someone doing something right – and praise them for it'. This can be very successful, but for it to be so you need to create the right culture and working relationships first.

In a business where an 'us and them' divide exists between workers and management the last thing an employee will want is the embarrassment of a manager praising them in front of their colleagues. In this situation the instant gratification is more likely to come from peer approval, which may result from being subversive, i.e. being the person who gets away with breaking the rules rather than demonstrating the benefits of following them.

### **Peer Influence**

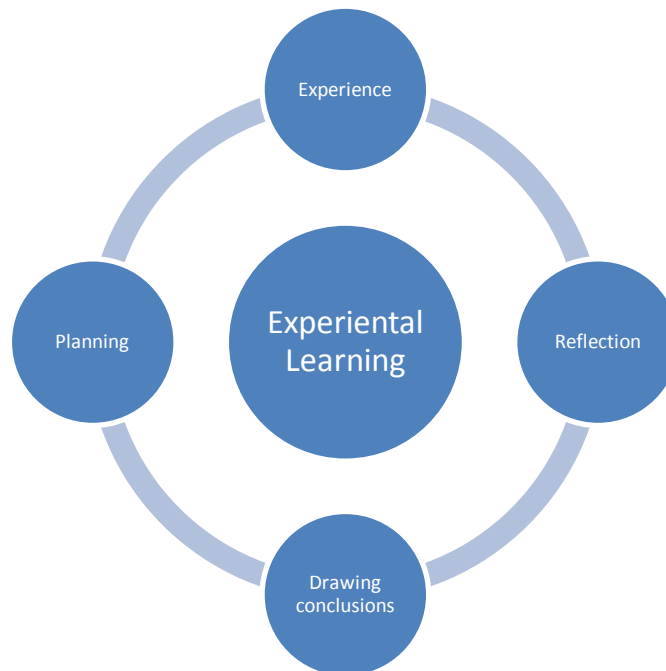
The actions and reactions of an employee's peers often influence their behaviour far more than the actions of people who are seen as figures of authority.

James gives an example of a site visit to a manufacturing firm. He noticed one of the employees cleaning and tidying his workspace at the end of the day and, in the spirit of 'Catch someone doing something right', went over and praised him for this. Unfortunately the response of the individual's peers was to laugh at him and mock him for being a 'teacher's pet'.

In this instance the individual concerned was assertive enough to stand his ground – he had a strong personal work ethic about doing things in the right way. But no-one else cleaned or tidied their work areas – neither the experienced employees who laughed nor the younger ones who followed their lead.

### **Personal Experience**

As we have already identified people learn from personal experiences. David Kolb illustrated this process of 'experiential learning' as a cycle:



If people are to learn effectively from their experiences they need to be given the opportunity to move around this cycle. This involves ...

- Opportunities to gain experience safely – e.g. through supervised training or workplace learning
- Encouragement to reflect – e.g. by giving people the opportunity to talk through what they have learned and to ask questions
- Drawing conclusions – pulling together and summarising what has been learned
- Planning – identifying what learning will be put into practice next time around

Often this is a subconscious process, which may have the consequence of people learning bad habits rather than good ones. For example, if your experience on putting on protective clothing is that your colleagues laugh at you, you may well reach the conclusion that you will not wear the protective clothing in future.

Equally damaging is not following the cycle at all, which leaves people doomed to repeat the same experiences in the same ways, without learning from them.

Good habits are learned by repeatedly following this process in a structured way. It is often effective to have a mentor, an experienced colleague with a personal work ethic about doing things in the right way. With the right conditions in place

Kolb's cycle becomes a spiral, with people constantly building and adding to what they have learned.

### Personal Values and Beliefs

Our behaviour is not only influenced by what goes on at work. When people start work they already have a set of values and beliefs in place which will affect how they behave.

Factors which influence these values and beliefs include family, education, religion, social class, gender and age. Sometimes these values and beliefs are deeply ingrained. A strong personal work ethic, for example, may stem from the example set by parents, the approach followed within school and the precepts of a religion.

With all these factors already in place the value or belief is unlikely to change.

Other values and beliefs are more malleable. Those associated with age, for example, may change over a period of time.

In a conversation with myself and our colleague Debbie Moore, James gave an example of observing a young man using a jack hammer while wearing only trainers and shorts. He was not receptive to James's suggestion that he should be wearing protective clothing and ear protectors because, as Debbie pointed out, 'He probably looked really cool'.

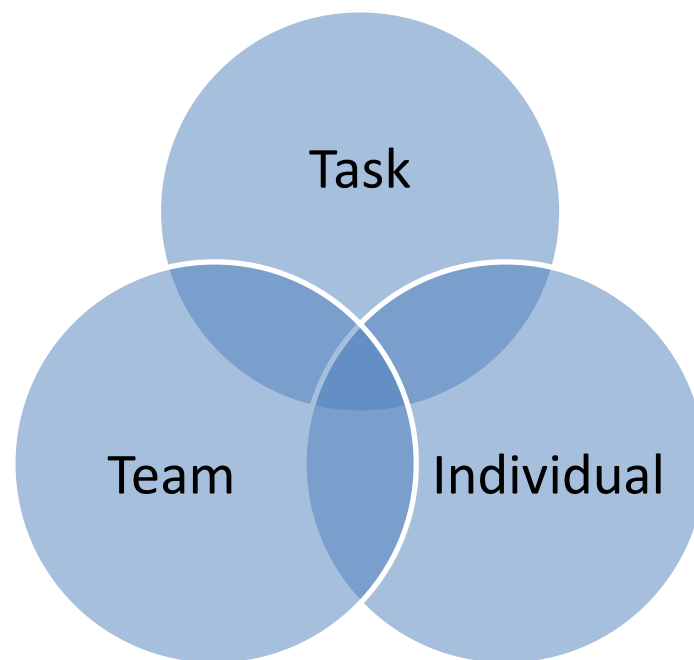
From a young person's perspective the instant gratification of 'looking really cool' may seem really important, but it is the kind of belief that often changes with age and experience. Twenty years on and hard of hearing the same individual may well have a different perspective.

The challenge in the workplace is to accelerate that change of perspective, so that it takes place before the individual suffers lasting physical harm.

### Effective Leadership

The key to harnessing these influencing factors in order to change behaviour in the workplace lies in effective leadership. One of the UK's leading experts on leadership, John Adair, identified that an effective leader must pay attention to three sets of needs ...

- Achieving the **task**
- Building **team** cohesiveness
- Meeting the physical and psychological needs of **individuals**



To emphasise the interconnectedness of the three sets of needs Adair illustrated them as three interlocking circles ...

- Successfully achieving the **task** is dependent on a cohesive team and committed, competent individuals
- If the **team** lacks cohesiveness performance on the task is impaired and individual satisfaction is reduced
- If **individual** needs are not met he/she will become dissatisfied, reducing their effectiveness in contributing to the team and the achievement of the task.

Over a period of time the amount of attention given to each of the three circles needs to be kept in balance. In the short term it is fine to focus exclusively on one of them – for example, if there is a pressing deadline the leader needs to focus on the tasks required to achieve it.

However, in the longer term it will become difficult to go on achieving at a high level if individuals do not feel motivated, and the team does not work together as an effective unit.

Many leaders fail because they are too task-focused. They spend their time devising and implementing detailed procedures and, if these fail, they respond by regulating them more closely. They miss the human dimension, the need to

get to know people as individuals and to mould them into an effective, committed team.

In the manual handling environment the consequences of being too task focused may include people cutting corners, taking unnecessary risks which may lead to injuries arising for themselves or their colleagues.

It is the human dimensions of team and individual which are the key to influencing all aspects of behaviour at work, including manual handling.

## Chapter 6

### Changing Behaviour at Work

As we established at the end of the last chapter effective leadership is key to influencing employees' behaviour at work. By this we do not just mean leadership from the top, although that is important, but leadership at all levels.

The owner or chief executive of a company may set its direction, but the day to day leadership falls to line managers and supervisors. A crucial factor which is often overlooked is peer leadership – the influence of people who emerge as informal and unofficial leaders on the shop floor.

In this chapter we will explore what is involved in effective leadership at all of these levels, and how a good leader at any level can influence the behaviour of others.

It's been a while since we last had a case study – in fact we had a whole chapter without one! Remembering that Adair highlighted how an effective leader pays attention to the task, the team and the individual, see what you think of the leadership provided here.

#### **Case study 10 – Grease is the Word!**

On one of his visits to a small manufacturing company James became concerned at seeing workers on the shop floor moving large, greasy sheets of metal without wearing gloves. The gloves were available, but nobody bothered putting them on. It was an all male environment (apart from a lone female administrator) and in this macho culture it was seen as a sign of weakness to wear gloves – or even to wash the grease off your hands.

Occasionally the supervisor would vent his frustration by instructing someone to put their gloves on, but generally speaking the requirement to wear gloves was ignored. This was despite the obvious hazards of carrying slippery, sharp-edged sheets of metal around the shop floor with already greasy bare hands.

In one to one conversations with James a number of the workers admitted to suffering skin problems such as dermatitis. In response to these conversations James went and bought them some barrier cream from the Body Shop! But back on the shop floor the peer pressure was not to use the cream, just as it was not to wear the gloves.



Take a moment to jot down the leadership failings evident here in each of the areas defined by Adair. Our thoughts are on the next page.

This exercise is in your MS Word toolkit which you can download from [here](#).

Task	Team	Individual

### Task

The task was not being carried out safely. Workers had been instructed to wear gloves when moving the sheets of metal, but this instruction was generally ignored. The supervisor was ineffectual in challenging this.

### Team

A 'macho' culture had developed in the all male team where it was seen as a sign of weakness to carry out the task safely, or for individuals to pay attention to their own health and well being by using barrier creams. Leaders at all levels had allowed this culture to develop and prevail unchallenged.

### Individual

There was no sign of leaders paying attention to their workers' individual needs. When James spoke to them one to one they often recognised the risks of accidents and of long term damage to their hands. However, a one-off conversation with an external consultant was not sufficient to outweigh the long term leadership failings and peer pressure.

## Changing Behaviour

So – what needed to change?

With regard to the **Task**, the requirement to wear gloves needed to be made clearer and to be enforced. But that just takes us back to our speed limit analogy in the last chapter – people see that the limit is 30 miles per hour, and slow down when it's enforced by a speed camera – but aside from that continue driving in the same way as they always have. We say it again – in itself, regulation does not change behaviour.

What does change behaviour is paying attention to the human dimensions of team needs and individual needs. Some people seem to have an instinctive understanding of this – the great football managers, for example, such as Brian Clough, Bill Shankly and Sir Alex Ferguson – share the ability to consistently get the best out of their players. For those of us who lack this instinctive knack though, it is worth taking a bit of time to consider the psychology which underpins human behaviour.

In the nineteen fifties Eric Berne developed a theory of human behaviour called Transactional Analysis (T.A.). T.A. is based on three basic principles ...

- People are ok
- Everyone has the capacity to think
- People decide their own destiny, and those decisions can be changed

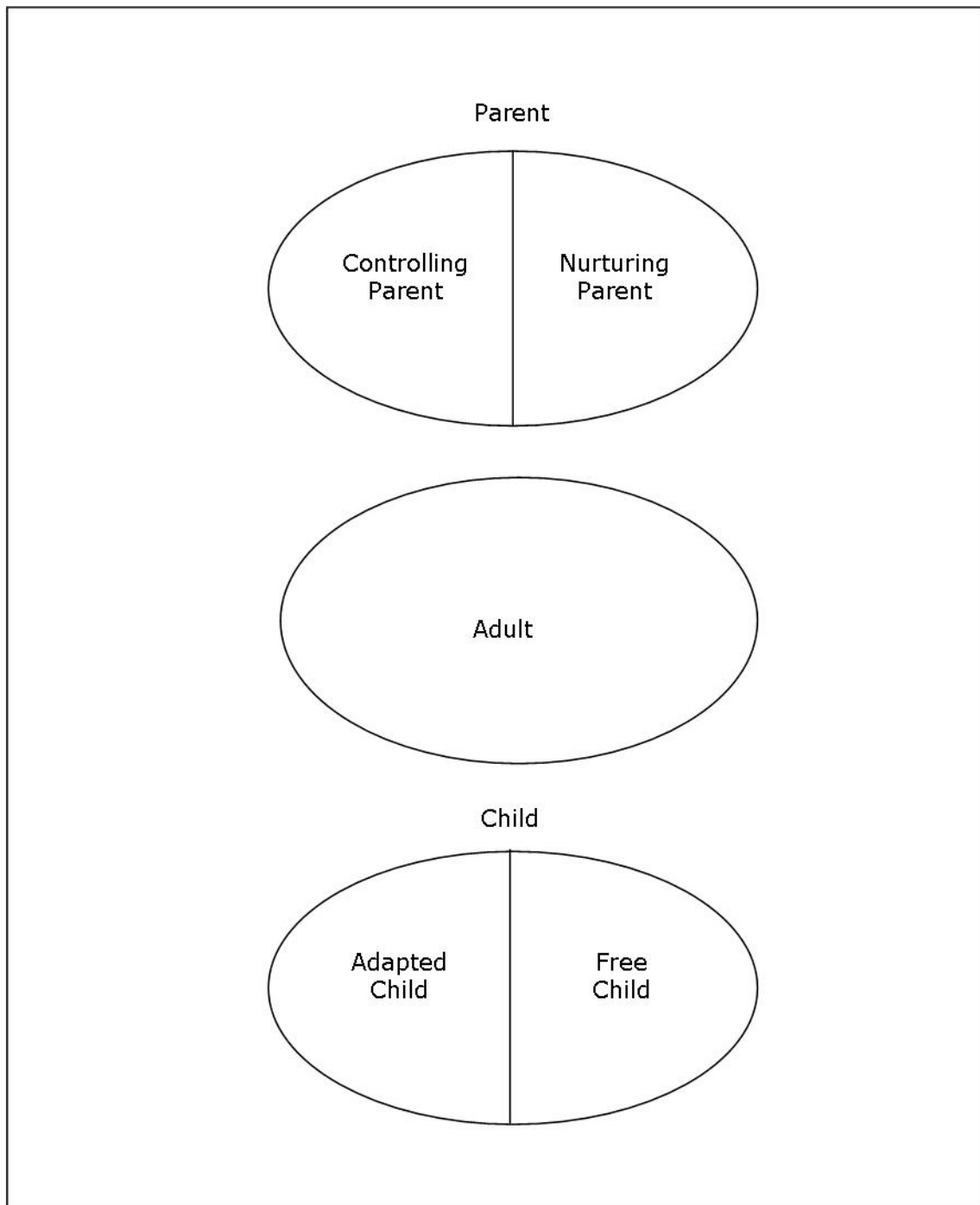
These principles are important, because by accepting them we recognise that people have the capacity to think about their behaviour and make decisions to change it.

One of the key models at the heart of T.A. is the Functional Ego state model. This is a model which relates to the way we behave. The model states that there are ...

- Parent behaviours
- Child behaviours
- and a functional Adult, which we use to weigh things up and make conscious decisions about which behaviours we should use.

The model is on the next page ...

## Functional Ego State Model



The Parent Ego state can be sub-divided into two modes, **Controlling Parent** and **Nurturing Parent**. **Controlling Parent** behaviours are those which involve setting rules and giving instructions, while **Nurturing Parent** behaviours involve caring and looking after people.

Both of these have positive and negative aspects. Controlling is often necessary, particularly in a hazardous work environment where people's health and safety is at risk. **Positive Controlling Parent** behaviours include appropriate boundary setting and rule enforcement.

However, for some people controlling becomes a habit, stifling opportunities for others to think for themselves.

**Negative Controlling Parent** behaviours include coercing people into compliance through the use of warnings, threats and punishments. These behaviours may ultimately result in resistance or rebellion – the opposite effect to what was desired.

In Case Study 10 – 'Grease is the Word', there is a clear need for more effective control, such as enforcement of the requirements to wash hands and wear safety gloves. This may include using sanctions against workers who do not comply.

However, it is important that these are presented to the workforce in an 'Adult to Adult' way, giving the reasons why this requirement is considered important.

If it is simply presented as an instruction it will be perceived as 'Dominating', and may exacerbate the resisting and rebelling behaviours which are already evident.

It seems strange that Health and Safety is often approached in such a controlling, dominating way, because the *duty of care* enshrined in the 1974 Act seems to fit more closely with a **Nurturing Parent** approach.

When we look at how Health and Safety is portrayed in the media it is often associated with the characteristics of **Negative Nurturing Parent**, encapsulated in the phrase 'the nanny state'.

The **Positive Nurturing Parent** mode involves providing appropriate care for others, including helping them to grow and develop so that they will ultimately be able to take responsibility for themselves.

It is the **Nurturing Parent** within us that wants to take care of people, and ensure that they are properly looked after. However, in a traditionally male work environment it often feels hard to express our concerns for other people. So a genuine concern that workers may suffer injury as a result of not wearing safety gloves ends up being expressed as ...

"Oi – put your bloody gloves on! How many more times do I  
have to tell you..."

As we saw in case study 10 individually workers did respond to a more nurturing approach, but this was quickly undermined by the wider culture of the work environment.

The **Child** ego state can be sub-divided into ...

- **Free Child** – where we behave in accordance with our feelings without censorship or control
- **Adapted Child** – where we behave in accordance with written or unwritten rules which we learn bring certain results

Once again, there are positive and negative aspects to both sides of the Child Ego state.

In the **Positive Adapted Child** mode we may comply with rules and regulations which we recognise are there for the benefit of ourselves and others.

**Negative Adapted Child** behaviours may range from compliance on the grounds of intimidation or fear, through to resistance or rebellion, such as the reaction of the workforce in 'Grease is the Word'.

Free Child behaviours are fine in situations where we can be spontaneous – in the creative industries nothing would happen without them. But **Negative Free Child** behaviours do not take into account the effects they may have on others, and in the workplace may be dangerous.

For example, throwing objects around on a busy factory floor is unlikely to be viewed as desirable behaviour, no matter how 'playfully' it is intended.

The **Functional Adult** enables us to weigh things up so we can respond competently and effectively to what is happening in the present moment from the appropriate positive mode. These things may often look the same as behaviours from the other ego states – shouting an instruction at someone may look like 'Negative Controlling Parent' behaviour, for example, while complying with that instruction may look like 'Negative Adapted Child'. The difference is that if we use Adult we are consciously thinking before acting – e.g. 'I'd better shout a warning before Bob falls over that box', or 'I'd better look where I'm going or I'll injure myself'.

Transactional Analysis is one model of human behaviour and we think it is a useful one.

The important point here is that an effective leader will have a high degree of self-awareness, and insight into the effects that their behaviour has on others.



Sir Alex Ferguson knows when shouting at a player will bring the desired result, just as he knows when to put an arm around a player's shoulder.

One of the most effective supervisors James has encountered in his work is an ex army major. Much of his behaviour appears to be Controlling Parent, issuing instructions and applying sanctions if they are not properly followed. But he also knows each team member by their first name, knows the names of their partners and their children, and takes the time each morning to talk to them individually and find out what is happening in their lives.

It is an approach which works – non-compliance with health and safety is not an issue in that workplace.

An important aspect of this approach is consistency. Team members know that non-compliance with health and safety requirements will be acted upon and, if it continues, may lead to dismissal. But they also know that effective performance will be recognised and reinforced.

Reinforcement of desired behaviour is fundamental to behavioural change.

B. F. Skinner, often seen as the founding father of Behaviourism, was doubtful about the long term benefits of punishing undesired behaviour, arguing that it only led to a temporary suppression of that behaviour until conditions changed – e.g. workers complying by wearing their safety gloves while the supervisor is watching them, then returning to their old ways as soon as the supervisor has gone.

A workforce that needs constant supervision is unlikely to be very effective in achieving the task, and permanent vigilance is both exhausting and unworkable for the supervisor.

Skinner favoured positive reinforcement, a theme taken up by Aubrey C Daniels in 'Bringing Out the Best in People – How to Apply the Astonishing Power of Positive Reinforcement'. Daniels describes positive reinforcement as ...

*...any consequence that follows a behaviour and increases its frequency in the future.*

He goes on to state ...

*Positive reinforcement occurs every time a behaviour produces a favourable change in the environment for the performer*

The more closely the consequence follows the event, the more powerful it is in reinforcing the desired behaviour.

The manager or supervisor who is out on the shop floor is much better placed to do this than someone who is shut away in an office. Even better, leaders who have this degree of close contact with their teams are more likely to find their behaviour being replicated by team members.

Instead of undermining the efforts of management, as we saw in 'Grease is the Word', peer influence becomes a source of positive reinforcement which is even more powerful than that provided by a respected manager.

Daniels identifies **two types of positive reinforcement** – **social** and **tangible**.

Many people believe that **tangible reinforcement** is what matters – that human beings are motivated by material rewards. To some extent this is true – what gets us out of bed and into work in the morning is the need to earn money, so we can provide food and shelter for ourselves and our families.

But tangible reinforcement can quickly become ineffective and even counterproductive – think of all those embarrassing employee of the month schemes, where the winner gets a gift voucher but loses all credibility with their colleagues.

In order to get the best out of people at work you need to provide them with **social reinforcement**.

The effective supervisor we mentioned earlier in this chapter was great at this, simply by demonstrating that he valued his team members as individual human beings. Not once did he give anyone a gift voucher!

So the good news for employers is that positive social reinforcement, probably the most powerful tool for influencing behaviour at work, costs nothing. And the even better news is that it can be provided by anyone – managers, supervisors, peers, customers.

All the leader needs to do is to create the conditions where this will happen, by ...

- Balancing the needs of the task, team and individuals
- Demonstrating effective and appropriate Parent, Adult and Child behaviours
- Applying the power of positive reinforcement

In the next chapter we will look at the practicalities of applying this approach to leadership at all levels in a manual handling environment.

## Chapter 7

### Changing Behaviour in the Manual Handling Environment

In the last two chapters we have explored firstly what motivates people to behave as they do at work and, secondly, what might motivate them to change their behaviour. Effective leadership has emerged as a key ingredient.

These leadership qualities might be learnt through hard experience, or by developing an understanding of the established theories of what motivates human behaviour. We have also established the importance of effective leadership at all levels, from the Chief Executive to colleagues working together on the shop floor.

Consider the leadership issues in the following two case studies.

#### Case Study 11 – Sleeping on the Job

A koi fish pond was being created on a difficult site, requiring the removal of fifty tons of earth from the side of a hill. The design required over fifty interlocking railway sleepers to be put into place to hold back the hill from tumbling down into the pond. Each railway sleeper weighed around 75-100 kilos, and the nature of the site meant that each one had to be moved into position manually.

The sleepers were moved into position by two fit, healthy young men. They had been trained in manual handling techniques, and both wore appropriate protective clothing. They established a system for moving the sleepers safely into position and worked together effectively as a team. Most importantly it was accepted that one of them was the leader, who would give instructions for his colleague to follow.

Unfortunately, as with any repetitive task, there was a risk of complacency setting in. The second worker's concentration began to waiver and his attention drifted from paying close attention to the task. As a result he stopped listening closely to his colleague's instructions, so when he misheard an instruction and thought he'd heard, 'Drop it', that's precisely what he did.

His co-worker found himself holding the railway sleeper on his own, with insufficient capability to control it. The loose end fell to the ground, his end

snapped down catching his ankle. Fortunately he was wearing safety boots with ankle protection, but the impact was still sufficient to dislocate his ankle, leaving him in agonising pain.

### **Case Study 12 – Listen to Your Father!**

A father and son were moving a washing machine together. As we noted in Case Study 8 – Spiralling Madness! – washing machines are challenging items to move, heavy with no hand-holds. It was accepted that the father was in charge of the task and that it was his son's role to follow instructions.

As in case study 11 the problem came when the son lost concentration and misheard an instruction, which he misinterpreted as telling him to 'put it down'. The son complied with what he thought he had heard, leaving his father bearing the entire load unaided. The result was that the father suffered a strained back, and was unable to carry out manual work for several weeks afterwards.

There are common factors in each of these case studies. Firstly there is the importance of effective two-way communication. People leading a task must give clear, unambiguous instructions, which are easy for co-workers to follow. The co-workers have a responsibility to listen to what they are being told and to act on those instructions.

In these cases both co-workers thought that they were carrying out their instructions, but, if they had been paying proper attention, they would have recognised that this was not the case. Why would someone suddenly be instructed to drop a railway sleeper, changing the established process for the task and leaving their colleague to take the full load on their own? Why would the son suddenly think he should put the washing machine down, when it was clearly not yet in position and his father was still bearing the load?

The answer lies in the proverb ...

*A leader is only as effective as his or her followers.*

In both of these case studies the problems lie less in the leadership than the 'followership', with instructions firstly being misheard and secondly being unthinkingly followed.

In the first case the task had become repetitive and dull – exactly the right conditions for complacency to set in and for attention to wander.

In the second example we have a classic example of ineffective Parent-Child communication – the son was so used to unquestioningly following instructions from his father that he did not even consider whether suddenly putting the washing machine down was a good idea.

If effective leadership is reliant on followers who apply their intelligence rather than slavishly doing as they are told, how can we create the conditions for this in the manual handling environment?

This is a key question, and we are going to suggest four possible answers ...

1. Providing effective training
2. Harnessing peer power
3. Reinforcing desired behaviour
4. Ensuring that you appoint the right leader

## 1. Providing Effective Training

In order for any training to be effective, it is first necessary to pay attention to the wider context in which it is being delivered. This should not be a secret process – the more explicit the context is made to participants, the more effective the training is likely to be. This is because they are being given information about **why** the training is being conducted in the first place, and **why** particular methods are being used.

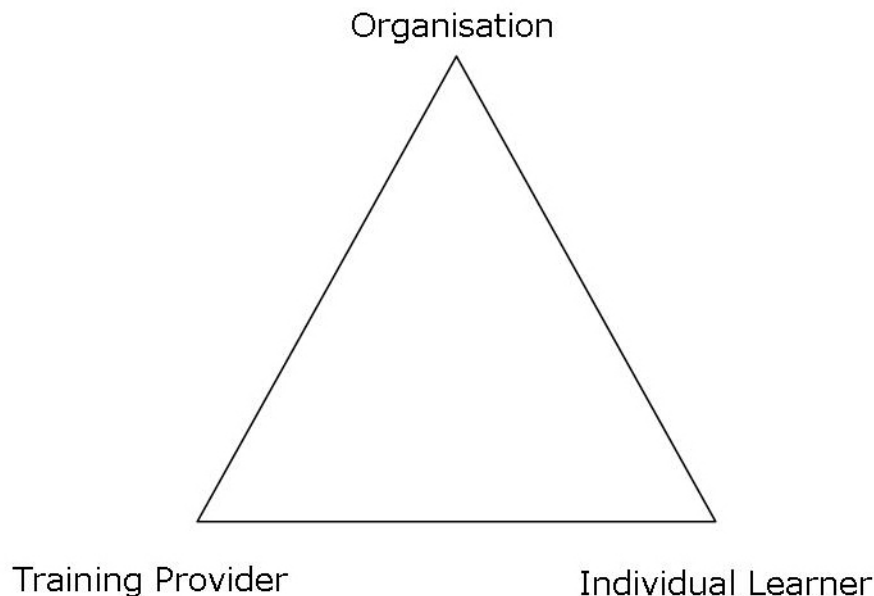
If we think back to the Parent-Adult-Child model in chapter 6, this is treating learners in a more Adult way than the Parent-Child approach of expecting them to learn because someone in authority has decreed that they should.

The context for Manual Handling training is the employer's *duty of care*, as defined by the 1974 Health and Safety at Work Act. The context here is partly legislative – organisations have to provide training in order to comply with the law – but it is also philosophical.

A company which just provides the minimum training required by the law is displaying a very different philosophy of management from a company which has a genuine commitment to the health and wellbeing of its workers.

Another aspect of the context of training is what might be seen as a three-cornered contract between the provider, the organisation and the individual learners.

## Effective Training – the Three-Cornered Contract



**Organisation and Training provider** – this includes the contract for delivery, style and content and success measures for the training. These may include some unsaid expectations about what the organisation expects the outcomes of the training to be.

For example there may be an expectation that the training alone will be enough to change behaviours, thereby absolving the organisation of its other responsibilities.

These need to be discussed and dealt with otherwise they may interfere with the effectiveness of the work.

**Organisation and Individual learners** – this includes the contract that the organisation will provide employees with appropriate training. Learners are expected to attend (if the training is mandatory) and the training will help equip learners to do their jobs effectively and safely. Sometimes this is not made explicit which may make employees resent attending. The organisation also has an expectation of learners in terms of engagement and participation in training.

**Training provider and Individual learners** – this includes the contract for how they will work together for the duration of the training – clarification of mutual expectations, aims and objectives, acceptable and unacceptable behaviour and possible consequences.

As we have already stated, the more explicit this contract is in setting out the roles, responsibilities and expectations of the three parties, the more likely it is

to result in effective training which has a positive effect on behaviour in the workplace.

A sector with a reputation for providing excellent training is courier and transportation services. Due to the nature of their work these companies need to empower their workers by providing training which equips them to make decisions by quickly analysing risks for themselves. Because their couriers may be collecting, loading and delivering packages which are variable in size, weight and shape, and from a wide range of premises, they need to be able to make quick decisions about when it is safe to lift an item, or when they need to use a trolley or other lifting aid. Their training is designed to encourage the development of good habits, which both protect the safety of the workers and add to the efficiency and effectiveness of the business.

In a time of recession training is often one of the first areas to suffer cutbacks. However, the courier sector approach demonstrates that effective training is not a cost but an investment. The return on investment is not simply meeting the employer's duty of care, but generating more profitable business performance.

Some of the most effective health and safety training we have come across involves the use of actors.

They throw themselves (sometimes literally!) into demonstrating all sorts of poor practice, until trainees can no longer restrain themselves from intervening and pointing out the dangers. The actors then respond with the arguments familiar from the case studies throughout this Useful Guide – 'It's the quickest way to do it', 'I've been doing it this way for years', 'That's health and safety gone mad' etc.

This type of training actively engages people and is far more likely to influence their behaviour in the workplace than the passive experiences of watching a video or a PowerPoint presentation. It may be more expensive, but the initial outlay will bring business benefits far beyond those of mere compliance with the Health and Safety at Work Act.

## 2. Harnessing Peer Power

In any process of organisational change one of the most powerful approaches is to identify the informal leaders in the workforce and harness their influence to promote the changes with their colleagues. Case study 13 provides an example of this.



### Case Study 13 – The Lord of the Storeroom

One of the most influential people in a large, successful hotel was the man who ran the storeroom. He was not formally a head of department but wielded power by running the stores as a fiefdom, helping the people who showed what he saw as appropriate deference towards him while making life as difficult as possible for everyone else.

His approach to health and safety was casual. The first aid kit was in a biscuit tin, which sat on a shelf alongside his sandwiches and bottles of concentrated cleaning materials. He was equally careless in his approach to manual handling, quite happy to move large catering packs of food unaided and expecting his colleagues to do likewise. No risk assessments were conducted, and processes were uncontrolled.

He began to change his approach after meeting James, who was carrying out a safety inspection. While their initial conversation was heated (to say the least!) the fact that it took place in private meant that he was able to change things without losing face. As a result of this discussion he began to recognise the importance of good health and safety and, by becoming a champion of this, was able to channel his powers of influence in more positive ways. Once he began to model and promote best practice his colleagues followed suit.

### 3. Reinforcing Desired Behaviour

Once someone has been persuaded to consider changing their behaviour the new ways of doing things require positive reinforcement. In 'Bringing Out the Best in People – How to Apply the Astonishing Power of Positive Reinforcement', Aubrey C Daniels sets out the following ABC approach for understanding why people behave as they do ...

**Antecedent:** Something that comes before a behaviour that sets the stage for the behaviour to occur

**Behaviour:** What a person does

**Consequence:** What happens to the performer as a result of the behaviour

To give a simple example:

**Antecedent:** Your nose itches

**Behaviour:** You scratch it

**Consequence:** It stops itching

As we discussed in chapter 5, people generally behave in ways which provide some form of instant gratification - scratching an itch being an obvious example. The consequences of the behaviour meet the 'PIC' criteria – Positive, Immediate and Certain.

When people are asked to change their behaviour at work they often initially see the consequences as being the opposite of this. 'We will emerge from this change as a leaner and fitter organisation' is an uncertain future consequence, with the likelihood of significant pain before the intended gain. From the employees' point of view the short-term consequences of workplace change – redundancy for example - often meet the 'NIC' criteria – Negative, Immediate and Certain.

It's no good waiting until you want to change things to address these issues. As we have seen in chapters 5 and 6, effective leaders at all levels are those who have invested time over a period of years in developing effective working relationships. They are trusted and respected, so when they ask their workers to make changes where the benefits will only be seen in the longer term they are more likely to be believed. In the short term they will need to provide positive reinforcement through praise and recognition, but also in more subtle ways such as demonstrating trust and empowering people to take responsibility for how they do their own jobs.

#### 4. Appointing the Right Leader

If the culture of manual handling is to be changed in an organisation, then credible leadership has to be provided from the top of the organisation downwards. All too often this does not happen. At board level responsibility for health and safety is seen as a poisoned chalice – best avoided if you value your career! This view tends to be replicated down the management chain – even showing a passing interest will on the one hand see your colleagues dismissing you as a nerd, while on the other hand they pass you responsibility for every Health and Safety related issue which comes their way.

James worked with one company where all responsibility for Health and Safety was assigned to the receptionist. She was very capable, but her position carried no authority.

Organisations need to demonstrate their commitment to meeting their *duty of care* to their employees from the top down. This means that key messages about required practice need to be delivered by credible senior people, who are willing to work with leaders at all levels of the organisation to ensure that best practice is promoted and, where necessary, enforced.

In this chapter we have considered the conditions which need to be put in place to change the culture of manual handling. Effective leaders need effective followers, people who will take responsibility and think for themselves. This kind of 'followership' can be encouraged by ...

1. Providing effective training, which engages, stimulates and challenges participants
2. Harnessing peer power – by identifying influential individuals and getting them on board
3. Reinforcing desired behaviour, both through positive reinforcement and by building working relationships based on mutual trust and respect
4. Appointing the right leaders, who have the authority and credibility to promote best practice at all levels

## Chapter 8

### An Action Plan for Changing the Culture of Manual Handling

*Fast forward to the year 2030. The NHS is struggling to cope with what doctors are describing as an epidemic of musculoskeletal disorders. Waiting lists are at an all-time high, and some hospitals are refusing to treat patients unless they are suffering debilitating pain. A government spokesperson states 'The country as a whole and the NHS in particular do not have the resources to deal with this crisis. These problems are the legacy of years of bad manual handling practice throughout society. To prevent the crisis we have now, change was required 15-20 years ago'.*

Our argument in this Useful Guide has been that, on its own, legislation is ineffective in ensuring good manual handling practice at work. Despite the 1974 Health and Safety at Work Act and the 1992 Manual Handling Operations Regulations, rates of accident and injury remain unacceptably high. To reiterate our facts and figures from chapter 1 ...

- In 2009-10 95,369 manual handling accidents resulting in absences from work of three days or more were reported to the Health and Safety Executive
- The Health and Safety Executive estimate that 43% of accidents that should be reported go unreported
- Long term poor manual handling practice manifests itself in high rates of musculoskeletal disorders. Data collected in a survey of 300 GPs since 2005 reveals musculoskeletal disorders to be the most common type of work-related illness
- The 2009-10 Labour Force Survey has a central estimate of 630 musculoskeletal disorders per 100,000 workers over a twelve month period

The figures demonstrate that there is a significant problem, which is already adversely affecting business performance and will continue to do so in the future.

The Health and Safety Executive's response has been to focus on more stringent enforcement of the 1992 Regulations to the point where this approach has

become counterproductive, because it has generated a culture of minimum compliance on the part of employers and game-playing on the part of employees. This is the manual handling paradox – the outcome of the increased emphasis on regulation has been the opposite to that which was intended. As we have explored throughout this Useful Guide, if accident and injury rates and the resulting business problems are to be significantly reduced, then a major shift in the management of manual handling is needed.

This chapter sets out an action plan for making this cultural shift. We have grouped our points under five headings ...

1. Education and Training
2. Risk Assessment
3. Motivation
4. Leadership
5. Regulation and Enforcement

## 1. Education and Training

Throughout this Useful Guide we have highlighted the gap between **ineffective training**, which tells people what to do and, at best, results in a minimum level of compliance; and **effective training**, which engages learners in thinking about 'why' certain behaviours may be more desirable than others, and empowers them to think for themselves and make their own decisions.

A further characteristic of effective training is that it is continuous, sessions in the classroom acting as a trigger for ongoing learning in the workplace.

While workplace training is important, it sits in the context of the wider education system. For example, written training material will not be effective unless the learner has the literacy skills to understand it (a serious issue, given that the Department for Education estimates that 100,000 school leavers a year are functionally illiterate).

We believe that, like literacy, manual handling is a core life skill which should be taught in schools. If this was the case people would arrive in the workplace already equipped with the skills to lift, carry and put down loads safely. Learning these skills would also equip them with a basic understanding of how to assess risk.

At present, sadly, this is not the case. Much workplace training in manual handling is about getting people to unlearn bad habits which have already

become ingrained. Unless this training is constantly reinforced in the workplace people often return to these bad habits, which in effect means that refresher training, in those companies which bother to provide it, simply means repeating the initial training over and over again.

Part of our manifesto for changing the culture of manual handling, and avoiding a future crisis in the healthcare system, lies in changing the wider educational context so that it is taught as a core life skill in schools. In the meantime, employers need to provide workplace training which is ...

- Engaging – delivered in a way which grabs and keeps the learners' attention
- Stimulating – in getting people to think for themselves
- Empowering – in equipping people to make decisions for themselves
- Reinforced in the workplace – so that key messages are not forgotten

There are currently 'pockets' of good training practice – the courier and transportation sector, for example, which meet these criteria. We have also referred to innovative approaches to training, such as the use of actors. While this kind of investment may be beyond the means of most SMEs similar benefits can still be achieved by using more conventional methods more effectively.

Rather than using videos for low level 'tick box' training, for example, they can be used to encourage discussion and identify changes required in the learners' own workplace.

## 2. Risk Assessment

A core feature of education and training in manual handling must involve equipping people to assess risk for themselves. The current culture is just the opposite of this, with the rise of the 'no win, no fee' compensation culture encouraging people to look around for others to blame for their actions.

In many of the case studies we have featured in this Useful Guide the employees were successful in claiming compensation from their employers, but in many cases their injuries were, at least in part, the result of their own poor decisions.

If we are to change the culture of manual handling then we need to equip people to assess risks for themselves. The Health and Safety Executive sets out a five step approach to risk assessment ...

### Step 1 - Identify the hazards

This involves steps such as ...

- Walking around your workplace and identifying what could reasonably be expected to cause harm.
- Asking employees what they think – they may have identified hazards that are not immediately apparent to you.
- Consulting accident and ill health records – these may provide an indication of less obvious hazards.
- Consideration of long term hazards to health – as we have identified this is particularly important in the area of manual handling, where poor practice over a long period will eventually result in musculoskeletal disorders.
- Checking manufacturers' instructions for equipment – as well as setting out how to operate equipment safely these often highlight potential hazards.

### Step 2 - Decide who might be harmed and how

For each hazard you need to be clear about who might be harmed; it will help you identify the best way of managing the risk. That doesn't mean listing everyone by name, but rather identifying groups of people (e.g. 'people working in the storeroom' or 'passers-by'). In each case you can then identify how they might be harmed, i.e. what type of injury or ill health might occur. For example, 'shelf stackers may suffer back injury from repeated lifting of boxes'.

### Step 3 - Evaluate the risks and decide on precautions

Once you have identified the hazards the law requires you to do everything 'reasonably practicable' to protect people from harm. Employers are expected to consider two key questions ...

1. Can I get rid of the hazard altogether? (E.g. by mechanising a process which is currently carried out manually)
2. If not – how can I control the risks so that harm is unlikely?  
Often this involves taking simple, cost-effective measures; in the area of manual handling wearing gloves, for example. Another simple measure is painting yellow lines to designate walkways, making it clear that these should be kept free of obstructions.



#### **Step 4 - Record your findings and implement them**

There is no point in conducting a risk assessment unless you act upon your findings! Writing down the results of your risk assessment, and sharing them with your staff, encourages you to do this. If you have fewer than five employees you do not have to write anything down, but it is useful to keep a brief written record so that you can monitor progress and implementation. The written record will often be short and simple. For example, an analysis of the risks identified in case study 10 – ‘Grease is the Word’, may read ...

*Risk of damage to hands when lifting and carrying greasy sheets of metal – workers instructed to wear gloves, keep hands clean and apply barrier creams*

The Health and Safety Executive do not expect a risk assessment to be perfect but it must be ‘suitable and sufficient’. This means that you will need to be able to demonstrate that ...

- A proper check was made
- You asked who might be affected
- You dealt with all the significant hazards, taking into account the number of people who could be involved
- The precautions are reasonable, and the remaining risk is low
- You involved your staff or their representatives in the process

#### **Step 5 - Review your assessment and update if necessary**

The work environment is never static. To the person who puts it down, leaving a box in a designated walkway may seem trivial, but it will have a significant impact on the level of risk. Risk assessments should be regularly reviewed to identify new and changing hazards, but to be truly effective it must be a continuous process for business owners and employees at all levels.

The Health and Safety Executive guidance on conducting risk assessments can be downloaded from <http://www.hse.gov.uk/pubns/indg163.pdf>

Better risk assessments will be one of the outcomes of changing the culture of manual handling, but they are also one of the mechanisms by which that change can be brought about. In the present manual handling culture employees are often reluctant to point out risks – remember our painter in case study 6?

If employees are to be engaged in risk assessment as fully as the Health and Safety Executive suggest then they need to know that their contributions will be valued, and that pointing out potential hazards will be appreciated rather than being seen as a nuisance.

### 3. Motivation

In chapters 5 and 6 of this Useful Guide we have considered what motivates behaviour, and what motivates people to change their behaviour. We have identified that people tend to be motivated by instant gratification – the immediate consequences of their actions.

One of the ways in which this can be provided is through positive reinforcement.

Sometimes this can be provided through tangible rewards, but more commonly – and more powerfully – it will be through social reinforcement – day to day praise and recognition for doing things right. Recognition from authority figures can be powerful but is sometimes a double-edged sword – nobody wants to be seen as a ‘teacher’s pet’.

It is therefore important to create a culture where people also receive recognition and reinforcement from their peers.

One of the most challenging aspects of maintaining motivation in the manual handling environment is that the work is often repetitive. This is a root cause of many of the problems we have seen in our case studies ...

**Case study 4** – ‘The Toppling Tower’ – the two workers’ primary motivation was to get a repetitive job finished quickly.

**Case study 10** – ‘Grease is the Word!’ – the workers could not be bothered with putting on and taking off their safety gloves each time they moved the sheets of metal.

**Case study 11** – ‘Sleeping on the Job’ – the worker lost concentration and did not think about the consequences of suddenly putting the railway sleeper down.

When work is repetitive we often develop habitual ways of carrying it out. The challenge in the manual handling environment is to encourage people to develop good habits rather than bad ones. In ‘The Toppling Tower’ the desirable habit would be for the workers to climb down and move the tower safely. In ‘Grease is the Word’ the desirable habit would be for the workforce to put on their gloves each time they moved the sheets of metal.

'Sleeping on the Job' is a more subtle example, because many of the habits displayed by the two workers were the right ones – until one of them became too bored to concentrate. In this scenario the trick may be to change things before they become boring, e.g. by switching roles so that the second worker takes over as the 'leader' of the task, forcing him to concentrate as he will be giving instructions to his colleague.

In most instances motivating people to change habits again requires positive reinforcement and instant gratification. It also requires creating a culture where the employer demonstrates genuine concern for workers' wellbeing – the *duty of care* in its truest sense. So instead of ...

"We expect you to wear safety gloves" (no explanation as to why)

or

"We expect you to wear safety gloves or the consequences will be..."  
(implied threat – negative reinforcement)

this approach would involve saying something like ...

"Thanks for letting us have your views in the risk assessment. One of the issues that came up is that a number of you have had problems with metal getting under the skin on your hands. Because we're concerned about this we've bought new safety gloves. Please make sure you wear them when handling the metal sheets in future."

This is Adult to Adult communication, which recognises and reinforces the employees' contribution to the risk assessment, and ends by specifying the required future behaviour. This approach is more likely to motivate people to change their behaviour.

There will still be people who continue with the habit of not wearing their gloves, possibly as part of a broader habit of resisting change or opposing authority. With these people you may need to fall back on rules and regulations, either to force them to comply or to remove them from your business. But this legislative approach is a last resort, not what you do first.

It is a big transition to move from being a hierarchical organisation, reliant on top-down, Parent-Child communication, to one which engages with its workforce in more motivational ways. It is a challenge which requires effective leadership.

## 4. Leadership

Cultural change requires effective leadership at all levels. In a big organisation national leadership must set a clear direction, but effective implementation

requires leaders at local level who can put plans into action through effective engagement with the workforce. We have also identified the importance of informal leadership, and winning over those members of the workforce who carry influence and credibility with their colleagues.

In chapters 5-7 of this Useful Guide we have identified many of the factors which are essential to effective leadership ...

- The ability to balance the needs of the task, individuals and the team.
- Understanding of human behaviour and how to influence others' behaviour.
- A high degree of self-awareness, and insight into the effects of your own behaviour on others.
- The ability to build relationships of trust and mutual respect.

Paying attention to these factors means that leaders are more likely to gain 'intelligent engagement' from their followers. As demonstrated in case studies 11 and 12 – 'Sleeping on the Job' and 'Listen to Your Father' – followers who unquestioningly do as they think they have been told are dangerous!

Leaders need to encourage their followers to think for themselves, by engaging them in processes such as risk assessment and providing positive reinforcement when they identify potential problems.

Changing workplace culture can seem like an overwhelming task.

If you conduct a proper risk analysis for the first time in years it may identify so many problems that you are left wondering where to start. The best approach may be to start with '**quick wins**' – steps that can be taken quickly, without too much cost, that are likely to be well received by the workforce.

Provision of equipment is a good example – as we discussed above in relation to case study 10, purchasing new safety gloves for the workforce is relatively low budget, can be done quickly and demonstrates your commitment to their health and wellbeing.

It would be nice if effective leadership was solely about building relationships, positive reinforcement and achieving quick wins, but we all know that the reality is much tougher than that. As we have already mentioned there will always be

people who refuse to follow the rules, even when it would appear in their best interests to do so.

In these circumstances effective leadership involves applying the rules, fairly but firmly, and being willing to use your organisation's disciplinary processes if necessary.

## 5. Regulation and Enforcement

The final part of our action plan involves understanding and applying relevant rules and regulations. While we have argued that the current health and safety culture is over-reliant on regulation, this does not mean that we under-estimate its importance. It is essential that anyone involved in managing manual handling processes has a thorough understanding of the 1974 Health and Safety at Work Act, and the 1992 Manual Handling Operations Regulations.

These must be applied and enforced in order to meet your *duty of care* to your workforce.

As we have already emphasised, your aim should be to encourage understanding of regulations and their purpose in protecting people from the kinds of incidents featured in the case studies throughout this Useful Guide. All of the steps we have discussed in this action plan – education and training, conducting risk assessments, identifying what motivates people and providing effective leadership – will help in getting this message across.

You **do** want intelligent engagement from your workforce in response to this. Questions may sometimes be difficult to answer, but they show that people are thinking! They will also promote discussion, meaning that concerns are more likely to come to the surface so they can be discussed openly.

What is unacceptable is a refusal to comply with legislative requirements. **Overt refusal**, while it may feel confrontational, at least allows you to address the issues. Someone declaring “I’m not going to wear your bloody safety gloves!” provides you firstly with an opportunity to ask them why, and secondly with the opportunity to explain why they are required to. If you have already been successful in getting the majority of the workforce on board, their colleagues may do this job for you.

**Covert resistance** is more difficult to tackle – the kind of scenarios we have explored where people comply with instructions when the boss is around, but behave differently when left to their own devices. Again, if you have been successful in winning over the majority, the rest of the workforce may tackle this

behaviour. But as we have already identified, a good leader keeps sufficiently in touch with their workforce to know what is going on.

Ultimately if employees refuse to comply with their terms and conditions of employment, including health and safety, you need to apply appropriate disciplinary processes in order to deal with them. These may ultimately result in dismissal but the necessary verbal and written warnings must be given first. You must comply with Employment legislation – but that's a different Useful Guide!

## Conclusion

Changing the way we manage manual handling is no easy task. There is a legacy of poor practice to overcome – a history of over-reliance on regulation which has led to a culture of minimum compliance on the part of employers, and often non-compliance on the part of employees. The tangible results of this are an unnecessarily high incidence of workplace accidents and long term physical damage resulting in musculoskeletal disorders.

The prevailing culture needs to change – and can be changed – by taking the steps set out in this action plan.

A plan for use in your own organisation can be found at Appendix 3.

Complete the Action Plan then start by implementing the quick wins – those simple, inexpensive measures that will instantly benefit your employees and help them to recognise that you have a genuine commitment to meet your *duty of care*. This will then help you to retain their co-operation if you have to implement less immediately popular measures later on.

We wish you well with changing the way you manage manual handling, and creating a better working environment for yourselves and your employees.



## About the Authors

### Steve Amos



Steve Amos is a freelance writer and training consultant. He is the author of [A Useful Guide to Interviewing](#), [Interviewing Essentials](#) and co-author of [A Useful Guide to Dealing with Difficult Behaviour](#).

He has worked with a wide range of clients, and is particularly experienced in working with government departments and local authorities. His specialist subjects include interviewing skills, performance management and communication skills.

Steve is committed to delivering high quality learning and development solutions which respond to customer needs and achieve agreed objectives. He is a clear, succinct communicator with excellent listening and questioning skills.

In January 2006 Steve was awarded an MSc in Training and Performance Management by the University of Leicester. His dissertation was on the application of competency frameworks in the government sector.

When not working with clients or writing Steve spends his time playing with his children, listening to live music and walking by the sea.

### James Hammerton-Fraser



James is a Director of Jamberry Ltd specialising in providing performance development and consultancy for businesses.

He brings a strong business background to JamBerry, having worked in both corporate and industrial environments. His specialist areas are Business Consultancy and Health & Safety, and understanding how companies can implement processes in a pragmatic and practical way.

By helping clients to fully meet their obligations to their staff in this wide reaching area, James ensures that clients adopt good working practices which enhance the work environment, as well as avoiding the excesses of any potential litigation.

His recent projects have included working with major international commercial banks, a food manufacturer, a university college, and a large facilities management company.

His previous background includes working with 3 of the major manufacturers of Health & Safety equipment and Ministry of Defence.

When not working with clients or writing James spends his time renovating barns or digging the garden!

## Appendix 1 – Good Techniques

### Before You Start

- **The Object**
  - Check the weight
  - Look for sharp edges
  - Is it stable?
  - Is it equally distributed?
- **Plan**
  - Is there space?
  - Think about a safe route
  - Are there any tripping or slipping hazards?
  - Where will it be unloaded?
  - Will you need rest stops?
- **Grip**
  - How will you hold it?
  - Can you grip it firmly?
  - Will you need to change the grip?
  - Will you need gloves
- **Help**
  - Can you use mechanical aids?
  - Do you need help?
  - Do warm up exercises!



## Lifting

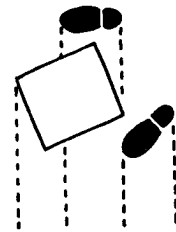
- **Stop and Think**

- The object
- Plan the job
- Grip
- Help



- **The Feet**

- Close as possible to the object
- Spread feet for stable base
- Slide object closer if possible
- Place leading leg forward if possible



- **The Posture**

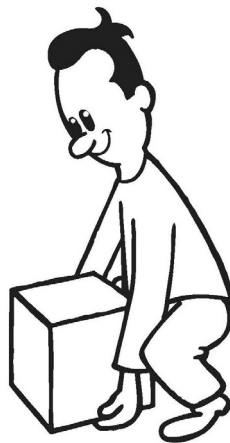
- Bend knees but not fully
- Keep back in natural line
- Keep back straight
- Lean forward slightly over load to get good grip



## Lifting

- **The Grip**

- Keep arms close to the legs
- Make sure you have a firm grip
- Use a hook grip if possible
- Hold object close to the body



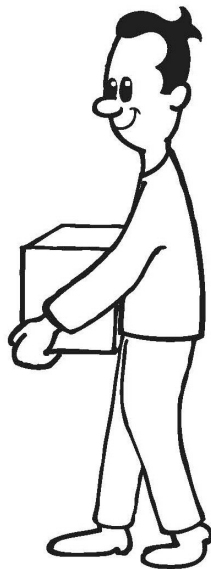
- **The Lift**

- Use the legs (straighten the knees)
- Keep it smooth (no jerks)
- Keep control of the load
- Move the feet rather than twisting



## Carrying

- Keep it close to body
- Hold at waist level
- Keep arms tucked in
- Try not to change grip unless the weight is supported
- Avoid twisting, stooping or leaning back
- Move feet to change direction
- Do not block your vision
- Face direction of movement



## Unloading

- This is the reverse of good lifting
- Bend knees
- Keep back straight
- Watch for trapped fingers or toes
- Slide the object into position if possible
- Make sure the object is secure and will not fall over or move





## Difficult Lifts

It might not be possible to adopt the best lifting method in all cases. This would apply when lifting a box from the back of your car, where it may not be possible to bend the knees or get close to the object.

Try to ensure that you ...

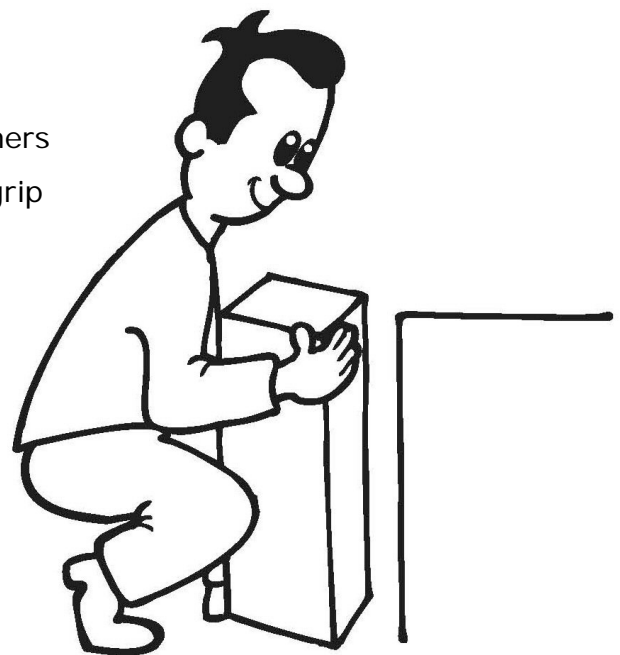
- Stand as close as possible
- Where possible, bend the knees or brace yourself against a solid object or use your arm as a supporting strut
- Bend at the hip and keep head and back as straight as possible
- Lift gradually using legs, buttocks and stomach muscles
- Check

## One Handed Loads

- Only try if absolutely necessary.
- Brace your body with the opposite arm (if possible).
- Reach and grasp the load firmly. Bend knees and waist and keep back straight. Use the handle if attached to the object.
- Lift using your legs and use the other arm for balance.
- Keep shoulders level when carrying – change hands if necessary.

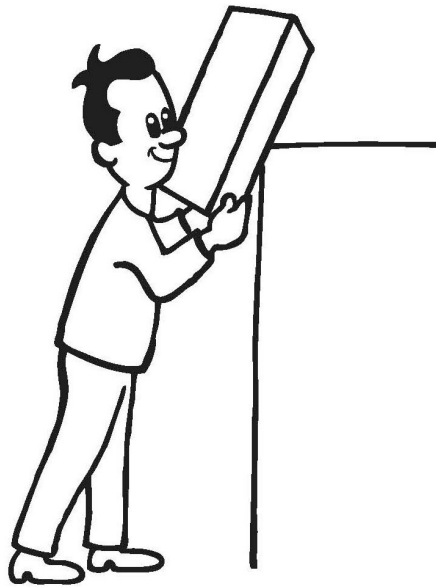
## Awkward Objects

- Stand over one corner of object
- Place feet comfortably apart
- Grip both the inside and outside corners
- Bend knees and lift using the same grip
- Seek help if in doubt



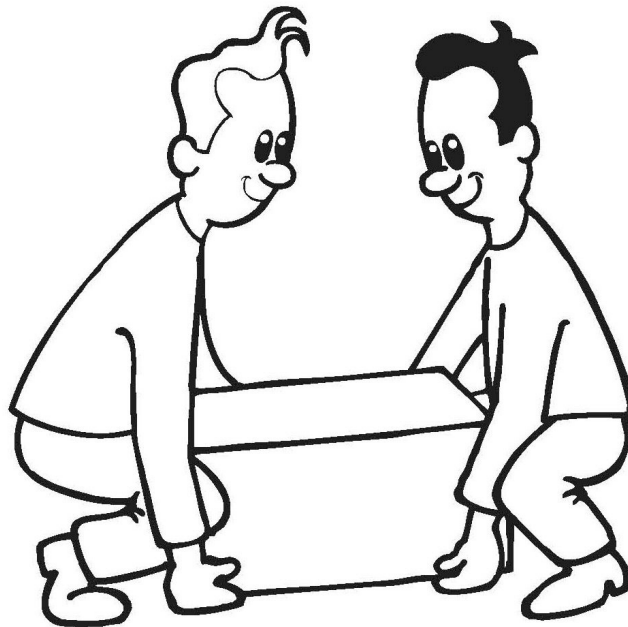
## High Places

- Lighten the load if possible
- Ensure good balance
- Test the weight and stability of the object before lifting down
- Stand close as possible
- Grasp firmly
- Slide it up or down your body
- Get help if in doubt



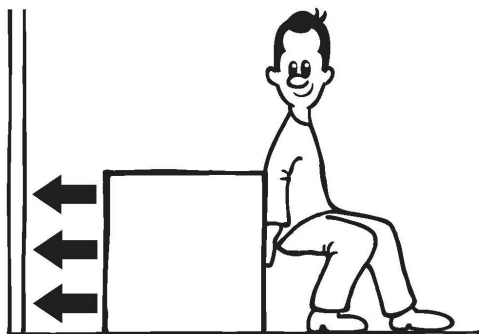
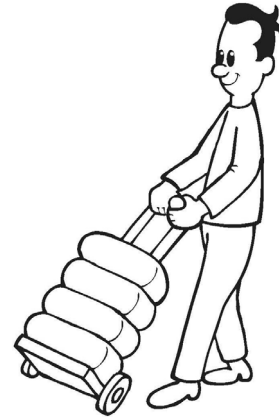
## Team Lift

- If possible, work with someone of a similar build and height
- One person to give directions
- Lift from hips at same time to the desired height
- Move smoothly together



## PUSHING & PULLING

- Stay close to object
- Get a good grip
- Keep back straight
- Keep stomach in, knees bent and elbows in
- Lean in direction of travel
- Watch for obstructions



## Special Handling

- **Boxes and Cartons**

- Grasp opposite corners
- Keep close to the middle of the body
- Keep arms as straight as possible

- **Barrels and Drums**

- Roll heavy barrels
- Rock barrel to get started

- **Sacks**

- Carry on shoulder braced by your hand on hip, or
- Hold at opposite ends and rest against your hip and stomach.
- Watch for slippery plastic sacks.



## Appendix 2 - What does it weigh?

For Best Out loud Readers: The following table has 2 columns and 12 rows

Item	Weight in kg
Desk – single drawer set	31 - 55
Executive chair	19 - 30
Filing cabinet – 4 drawer (Empty)	40 - 52
Filing cabinet – 4 drawer (Full)	90 - 125
Meeting table	17 - 37
19 litre water bottle (1l water $\approx$ 1Kg)	19
Paper – box of 2500 sheets, A4, 80 gsm, 5 reams	13
Archive box with average content	13 - 26
Plasma screen TV – 42" - 50"	38 - 42
Computer monitor – 17"	17-26
LaserJet Printer	25 - 55 kgs depending on the model of printer

For Best Out loud Readers: The table has 12 rows

## Appendix 3 - Manual Handling and Leadership

### The Checklist

This checklist should be used in conjunction with Chapter 7 – Changing Behaviour in the Manual Handling Environment.

This checklist is in your MS Word toolkit which you can download from [here](#).

Aspects of Leadership	Yes	No	Action Required
<b>Training</b>			
Does the training have clearly specified outcomes?			
Do learners understand why the training is required?			
Are learners clear how the training will help them to do their jobs?			
Have the training approach and methods been explained to learners?			
Do learners know what is expected of them when attending training?			
Is the training provider clear about their role and responsibilities?			
Is there a clear plan to ensure that required actions resulting from training will be implemented in the workplace?			
<b>Reinforcing Desired Behaviour</b>			
Do you invest time in getting to know team members?			
Do you seek opportunities to 'catch people doing things right'?			



Aspects of Leadership	Yes	No	Action Required
Do you provide positive reinforcement of desired behaviour on the part of team members?			
Do you ensure that the consequences of desired behaviour at work meet the PIC criteria (Positive, Immediate, Certain)?			
<b>Appointing the Right Leaders</b>			
Do the people with lead responsibility for Health and Safety have the necessary personal credibility?			
Do the people with lead responsibility for Health and Safety occupy appropriate positions in the organisation?			
Are sufficient steps taken to genuinely highlight the importance of good Health and Safety practice?			
Do leaders at all levels model good Health and Safety practice themselves?			
Do leaders balance the needs of task, team and individuals effectively?			
Are steps taken to promote good 'followership' throughout the organisation?			

For Read Out and Readers: The table has printed

## Appendix 4 - Changing the Culture of Manual Handling in Your Business

### Action Plan

This Action Plan is in your MS Word toolkit which you can download from [here](#).

Item	Yes/No	Actions required	Target Date
<b>Policies and Procedures</b>			
Do you have written Risk Assessment policy?			
Do you have written Manual Handling policy?			
<b>Risk Assessment – Step 1 Identifying the Hazards</b>			
Have you reviewed manual handling operations and identified the risks associated with the task?			
Have you reviewed manual handling operations and identified the risks associated with the load?			
Have you reviewed manual handling operations and identified the risks associated with the working environment?			
Have you reviewed manual handling operations and identified the risks associated with the people?			

Item	Yes/No	Actions required	Target Date
Have you consulted employees about hazards in the workplace?			
Have you consulted accident records?			
Have you consulted ill health records?			
Have you considered long term hazards to health?			
Have you checked manufacturers' instructions for equipment?			
<b>Risk Assessment – Step 2 Deciding who might be harmed and how</b>			
Have you identified and recorded which groups might be at risk?			
Have you identified and recorded which individuals might be at risk?			
<b>Risk Assessment – Step 3 Evaluating the risks and deciding on precautions</b>			
Have you considered if the hazard can be eliminated altogether?			
If 'Yes' – have you planned the steps you will take to eliminate the hazard?			

Item	Yes/No	Actions required	Target Date
If 'No' – have you planned the steps you will take to control the risks so that harm is unlikely?			
<b>Risk Assessment – Step 4 Recording your findings and implementing them</b>			
Have you written down the findings of your risk assessment?			
Have you shared your findings with your staff?			
Have you implemented reasonable precautions so that remaining risks are low?			
<b>Risk Assessment – Step 5 Reviewing and updating your assessment</b>			
Have you taken steps to ensure that your risk assessments will be regularly reviewed and updated?			
<b>Training – Provision</b>			
Have you organised basic manual handling training for all staff?			
Have you organised specific training for managers?			
Have you organised induction training for new staff?			

Item	Yes/No	Actions required	Target Date
Have you organised refresher training for experienced staff?			
<b>Training – Use of handling aids</b>			
Have staff been trained in safe use of handling aids and equipment?			
<b>Training – Quality</b>			
Does the training cover 'why' as well as 'what'?			
Does the training include a range of methods (e.g. case studies, discussion, demonstration, videos, acted scenarios) to maintain learner engagement?			
Is the training reinforced by day to day practices in the workplace?			
<b>Equipment</b>			
Have staff been provided with protective clothing to ensure their safety (E.g. gloves, boots, etc)?			
Has basic equipment been provided to minimise risks in manual handling processes (E.g. strapping, trolleys, sliders, etc)?			

Item	Yes/No	Actions required	Target Date
Have mechanical aids been provided to minimise or eliminate risks (E.g. lifting gantries, hydraulic hoists, vacuum lifts, etc)?			
<b>Leadership and Motivation</b>			
Do leaders, at all levels, pay equal attention to the needs of the ... <ul style="list-style-type: none"> <li>• Task?</li> <li>• Team?</li> <li>• Individual?</li> </ul>			
Do leaders, at all levels, take time to build effective working relationships with team members?			
Do leaders, at all levels, have regular one to one meetings with their team members?			
Do leaders, at all levels, hold regular team meetings, including discussion of health and safety issues?			
Do leaders, at all levels, adopt appropriate styles of communication (generally Adult-Adult) in discussions with team members?			

Item	Yes/No	Actions required	Target Date
Do leaders, at all levels, communicate in ways which encourage 'intelligent engagement'?			
Do leaders, at all levels, provide prompt positive reinforcement of desired behaviours at work?			
Do leaders, at all levels, empower team members to make decisions for themselves (including involvement in assessing risk)?			
Do leaders, at all levels, effectively tackle undesired behaviour at work – particularly if it creates a risk to the health and safety of the individual or his/her colleagues?			
Do leaders, at all levels, vary work where possible to minimise the risks associated with repetitive work?			
Do leaders, at all levels, look for 'quick wins' when changing working methods?			
<b>Regulation</b>			
Are leaders, at all levels, aware of their responsibilities under the Health and Safety at Work Act 1974?			



Item	Yes/No	Actions required	Target Date
Are leaders, at all levels, aware of their responsibilities under the Manual Handling Operations Regulations 1992?			
Does your organisation have clear policies regarding poor performance, inefficiency and misconduct?			
Are leaders, at all levels, clear about their responsibilities and steps to follow under these policies?			

For Read Out loud Readers: The table has finished

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