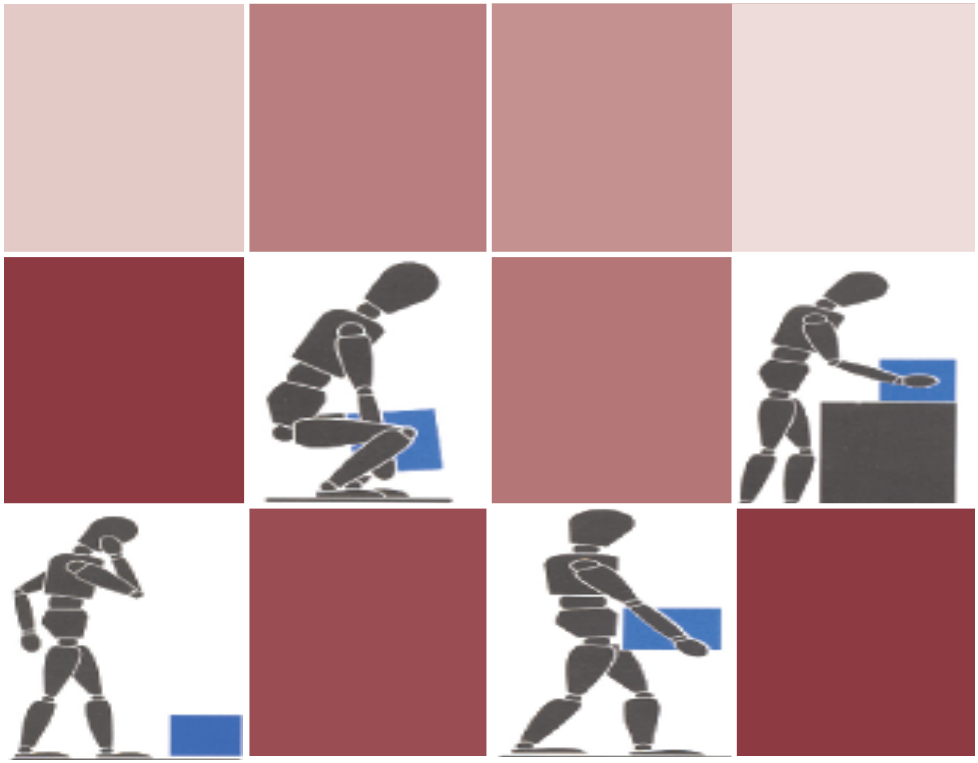
GOOD BACK CARE AND SAFER MANUAL HANDLING

Back problems are a major cause of disability in Britain.
It is a painful and debilitating condition.
By understanding how and why back problems develop steps can usually be taken to help prevent or reduce those problems.



Gwynedd Carers Partnership

www.gwynedd.gov.uk

CYNGOR GWYNEDD COUNCIL

Introduction

Whilst many people do not develop back problems, back injury, however, is the nation's biggest single cause of disability and statistics show that one in eight of us will visit the doctor with a back related problem at some point in a lifetime.

It is important to realise that some people are more at risk of developing musculoskeletal* type conditions than others and spinal injury is the most common and serious of these conditions. Back problems are often associated with types of occupations, for example many nurses have had to give up their work as a result of back problems. It was discovered that nurses are particularly at risk because of the heavy nature of their work i.e. assisting patients to mobilise, working in stooped postures over beds and also bed making.

(Musculoskeletal is a term describing the bones, joints and surrounding soft tissue including ligaments, muscles, tendons)*

As a carer you might also be at risk of developing back problems and the purpose of this leaflet is to provide information regarding good back care and the benefits of safer manual handling.

What is manual handling?

Using bodily force or effort to move or lift a load. The load can be an object, person or animal.

What is manual handling in relation to providing care?

It means physically helping another person to move, for example, assisting a person to stand up from a chair, helping the person into or out of bed, supporting the person to stand or walk etc.

What risks might carers be exposed to?

If you are involved with heavy lifting on a daily basis, then you could be at risk of developing back injury. Working in awkward or prolonged stooped postures also places strains and stresses on the spine that might be damaging.

Consider how physically vulnerable you are as an individual. For instance people who suffer from arthritis will be more exposed to musculoskeletal injury. Tiredness will sometimes stop us from concentrating on what we're doing and this is often a time when accidents can happen.

Can risk of manual handling injuries be reduced?

Although it is not always easy or possible to avoid back problems, taking simple precautions and following some basic rules can help reduce the risks. Being aware of your own limitations and knowing when to ask for help is also an important factor.

Do you need to be physically strong to be a carer?

Not necessarily, but some people are less able to do certain things, for example if you suffer from any medical condition such as arthritis, back problems, heart or other condition your ability to carry out physical activities safely may be affected. Being aware of your limitations is important and if certain tasks are too heavy or demanding you may need to seek help or advice. Asking your doctor for advice is a good place to start.

Is it safe to lift the person you are caring for?

It is not considered safe for one person to bear the whole weight of another person. You should only assist the person with their mobility and encourage the person to do as much as possible for themselves. If the person is leaning

heavily upon you, or the effort required by you is excessive, then you need to get further advice. Assisting a person up in the way illustrated is hazardous because the carer is supporting most of the person's weight, and the person is holding onto the carer's neck.



Example of a hazardous lift

Is there a danger of hurting the person you are caring for?

Yes. People who require assistance with their mobility are generally more susceptible to injury. Their muscles and joints are weaker and may be painful. There is sometimes a danger of assisting someone by dragging on the arms or supporting under the axil (armpit) for instance when assisting someone out of a chair. This could exert excessive 'pull' on the shoulder joint causing injuries such as bruising and tearing of ligaments, muscles and tendons around the joint. More seriously the joint could be dislocated and the shoulder is particularly vulnerable.

Skin may be prone to tearing, shearing or bruising with the risk of developing pressure sores.

Be aware that if you are a particularly strong person, even though you feel no ill effects to yourself when assisting someone, you could be applying too much force on the joints of the person you are caring for.

Another hazard to be aware of is the risk that the person you are assisting could fall or slip with obvious serious consequences **(see 'THE FALLING OR FALLEN PERSON')**.

How will you know if you are causing harm to the person you are caring for?

- Encourage the person to tell you if they feel pain or discomfort – note where the pain is. Some people may put up with pain as an inevitable consequence of receiving care.
- Notice any bruising or signs of skin soreness or tenderness as a result of the handling.
- The person may develop pain in certain joints as a consequence of prolonged dragging on the joint e.g. shoulder, wrist etc.
- If communication is difficult be aware of other signs of pain e.g. facial expression, flinching, muscular tension etc.

How should you help the person with their mobility?

- Allow the person to move as independently as possible. If you offer too much assistance it may take away the person's independence resulting in loss of function, self esteem and confidence.
- Plan the move by creating a safe space; is the route clear? are the doors open etc?
- Consider if a change in routine or method would be helpful e.g. dressing and washing may be easier after breakfast; some tasks may be easier done sitting down e.g. washing at the sink, dressing etc.
- Prompt the person who has difficulty with concentration or memory dysfunction. Be consistent using short clear instructions. If you require the person to carry out a physical task avoid conversation that distracts from the activity.
- Develop a good routine, allowing enough time, which encourages the person to participate.

- Consider if the furniture is contributing to the difficulties e.g. a person might require more help to get out of a low chair. The provision of a higher chair with arm rests may allow the person to get up independently.
- Consider if the layout of the room can be changed to improve safety and independence e.g. it may be easier for the person to get out of the bed if there is more space by the bed.
- Remove obvious hazards e.g. loose cables, rugs, general clutter.
- Consider if any grab rails strategically positioned will enable the person be safer and more independent. Social Services may be able to advise or help you with some of these issues.

So what techniques should you use i.e. how should you assist the person you are caring for?

Every person is different so the help required will vary. As a general rule, and if the person is fairly independent requiring only minimal help, it is usually safe for you to do so by placing the flat palm of your hand on the torso (e.g. lower back for standing or behind the shoulder for leaning forwards when seated) and applying gentle pressure as the person starts to stand for instance.

Example: -

- The person must have the ability to stand and support their own weight.
- Check that the person's footwear is properly on the foot, laces done up.
- As a general rule the carer should position themselves on the person's weakest side.



- When assisting someone out of a chair ask the person to move forward on the seat placing their hands on the arm chair. Bringing their weight forward will make it easier for them to stand.



- This carer has placed her hand and right arm behind the person across the lower back and the nearest hand is placed gently in front of the nearest shoulder.

- The person is encouraged to do as much as possible for themselves and the carer provides only as much help as is required. Both work and move together.

- As the person stands the carer moves forward with the person.



- The carer should maintain a good posture throughout the activity bending at the knees and hip and not twisting or bending the back.

- If the person needs to sit down i.e. is not able to stay standing, the carer should allow the person to sit back into the chair.

- Allow the person time to gain a standing balance before walking.

- If the person is not able to participate in this activity then further assessment is required. The handling becomes problematic when you have to use too much force and effort to help the person move. This is when you might start to drag on the arms or under the shoulder and it may be an indication that an assessment is required to determine the best methods of supporting the person receiving care and you, the carer.

When should you ask for help?

Caring for another person is not always easy especially when the person becomes less able and there is no one else to help or support you. The task of caring can be hugely rewarding but it can also be both mentally and physically exhausting. You may find yourself unable to leave the house for any length of time. If night time becomes problematic and your sleep is regularly disturbed, then this will very likely affect your health and ability to cope as can many other circumstances.

Asking for help does not mean that you have failed or that you must stop being a carer. The main aim of any assessment will be to establish how best to meet the needs of the person receiving the care and how best to support your role as the carer.

There are many reasons why you should ask for help but from a manual handling point of view here are some examples: -

- You think you might be causing harm to the person for instance, by dragging or applying force on limbs or joints, especially the shoulder or neck areas.
- When the person experiences pain as you help him or her.
- The person's condition or mobility is deteriorating.
- You think that you're taking away the person's independence.
- When the task demands too much effort or force.
- When you identify signs that the person might fall.
- When you are supporting too much of the person's weight.
- When the person is dragging on you, especially your neck.
- When you yourself feel adverse symptoms or discomfort as a result of the manual handling e.g. back pain or shoulder pain etc.

- The person you are caring for wants you to ask for help.
- When you simply feel the need for help or advice.

Where can you get advice?

Your doctor is the obvious initial place to go for advice. Other professionals working in the community such as nurses, occupational therapists, physiotherapists and social workers, can help or direct you to obtain help. Organisations such as Carers Outreach Service can give valuable advice and signpost you to the relevant agencies.

Hospital discharge: - If the person you are caring for is in hospital then hospital staff i.e. nurses, physiotherapists, occupational therapists, social workers, can help advise you on many things including moving and handling issues and it may be a good idea ask staff on the ward for advice before the person comes home.

THE FALLING AND FALLEN PERSON

What should you do if the person you are supporting starts to fall?

This is a very distressing situation for everyone involved with high risks of harm to both the falling person and possibly to you, the carer.

When a person begins to fall unexpectedly there is usually no time to think, and it is unlikely that much can be done to save the situation. The falling person may try to hold on to you in an attempt to stay on their feet, or you may try to hold the person up and stop them from falling. Both scenarios are hazardous as it is likely that you will both fall to the floor in an uncontrolled way. Unfortunately this situation could happen out of the blue and the best you can do is to try and keep yourself from bending or twisting

your back and possibly allow the person to slide to the floor. Whilst this is a very difficult thing to do please bear in mind that if both you and cared-for are injured, who is going to be able to call for help?

Taking action BEFORE the person falls!

As a carer you may well become aware that the person is becoming less steady on their feet. You might experience an incident where the person nearly fell or tripped. If this is the case it is important that you take action **before** a serious incident occurs.

There are a few things you can do: -

- Seek medical advice when you suspect the person is more unsteady when walking or transferring. The GP will be able to help determine the best course of action and might decide further medical investigation or referral for rehabilitation. There are local falls clinics which may help and, again, your doctor can advise you about this.

- Remove obvious tripping or falling hazards e.g. loose mats, loose wiring, floor clutter and slippery floors. Check footwear is safe. If walking aids have been provided, are they being used? Can the furniture be re-arranged or removed to create a safer space?

- If the person you are looking after is unpredictable and there is concern about the risks of falling, there are devices available that can alert the carer that the person has got out of bed or up from a chair for example. To find out more about this equipment and others please contact Teleofal Service through Social Services, Advice and Assessment Team on 01286 682888.

What should you do if the person has fallen to the floor?

There are many reasons that cause people to fall: - illness, loss of balance, tripping accident etc. Depending on the situation your best course of action will be to **call for emergency help by dialling 999 immediately**. If you are in doubt as to what to do, and confident that the situation is not an emergency, then call the NHS Direct on 08454647. They can give you advice and help you decide the best course of action.

While you wait for help do not attempt to physically lift the person up from the floor as this could cause a serious injury to you and the person you are lifting. During the fall the person may have incurred an injury which might be made worse by your attempt to lift them. The person is probably safer remaining on the floor and if you can, make the person comfortable and warm with blankets. Be as reassuring and calm as possible. If it's possible, call a relative or friend to support you.

It is useful to have emergency phone numbers to hand because in these stressful situations it is very difficult to think clearly what to do. You will find some useful numbers at the end of this pamphlet.

If the person is insisting on getting up, then they must be made aware that it is not safe for you to lift them. Getting up off the floor is not easy and requires a fair amount of strength and physical ability. It will be necessary for them to get over onto their hands and knees and pull themselves up with the aid of a chair or something sturdy to lean on. If you are in doubt about their safety or ability to do this then try to persuade them to stay on the floor and wait for help.

Carers Outreach Service can supply you with a useful file free of charge which includes useful information regarding emergency situations.

What is a manual handling assessment?

A manual handling assessment is carried out to determine how best to assist the person with their mobility taking into account all aspects of the person's circumstances i.e. their condition and their abilities.

The assessor will determine if there are any serious risks to either the person receiving care or the carer, and will try to find solutions to reduce those risks.

Useful contacts: -

• Emergency Services	999
• NHS Direct	0845 4647
• GP Surgery	
• Social Services, Advice and Assessment Team	01286 682888
• Social Services/Occupational Therapy	
- Arfon	01286 682646
- Dwyfor	01758 704429
- Meirionnydd	01341 424539
• Carers Outreach Service	
- Arfon & Dwyfor	01248 370797
- Meirionnydd	01766 772954
• Gofal a Thrwsio/Care and Repair	
- Arfon & Dwyfor	01286 881576
- Meirionnydd	01766 830777
• British Red Cross, North Wales	01745 828330
• Teleofal (through Advice & Assessment Team)	01286 682888
• CIL (Centre for Independent Living)	01766 514249
• Age Concern	01286 677711
• Emergency Out of Hours Service	0845 8501362

GOOD BACK CARE

How does the spine work?

The spine is a complex structure consisting of: -



- 24 small bones (vertebrae) supporting the weight of your upper body and form a protective canal for the spinal cord.
- Shock-absorbing discs (intervertebral discs) cushion between the bones and allowing the spine to bend.
- Ligaments holding the vertebrae and discs together.
- Tendons connecting the muscles to the vertebrae
- A spinal cord, which carries nerve signals from the brain to the rest of the body.



- Muscles enable movement and provides strength and protection

The lower part of the spine is known as the lumbar region made up of five vertebrae. The lumbar supports the entire weight of your upper body and is under constant pressure, particularly when you are bending, twisting and lifting.

Lower back pain

Lower back pain affects seven out of ten people at some time in their lives. It can come on suddenly or gradually, and is sometimes the direct result of a fall or injury. The complex structure of your lower back means that even

small amounts of damage to any part of the lumbar region can cause a lot of pain and discomfort.

Pain in your lower back is usually a symptom of stress or damage to your ligaments, muscle, tendons or discs. In some cases if a nerve in your back is pinched or irritated the pain can spread to your buttocks and thighs. This is known as sciatica (a main nerve running down your leg).

In most cases of back pain your back will heal itself, and staying active and continuing with your usual activities (avoiding heavy work) will normally promote healing. Most back problems will heal after a few weeks or could possibly take as long as six weeks to clear up.

However, in severe and persistent cases of back pain, it is important to seek medical advice so that the correct diagnosis can be reached and appropriate treatment given. Treatment for back pain will usually depend on the underlying causes of the condition. For example, pain that is caused by some types of arthritis may be treated using specific medicines.

How to avoid back problems

Most back problems are not caused by serious disease but if you have persisting pain then it is important to see your doctor to establish a correct diagnosis.

Our spine has been designed to be strong and efficient but problems can develop most commonly as a result of our own neglect or lack of understanding of how the back works.

As well as holding us upright the spine flexes and extends allowing us to do numerous things in our daily lives. Sometimes however we can twist or bend the spine for too long a period, too many times a day. Tasks such as getting washing out of the machine, making the bed, reaching into low cupboards all

involve bending and possibly twisting. This is when muscles, tendons and ligaments overstretch, become weakened and become torn and damaged.



Regularly handling or supporting heavy loads is without doubt a strong contributory factor to the development of back problems and if you add to these elements of twisting, stooping and overstretching those risks are increased.

Another common cause of spinal problems is having a poor posture. Simply standing or sitting in a slouched way can become a habit that we're unaware of which causes the structure of the spine to be out of alignment. Consider what your posture is like when sitting, standing, walking or sleeping.

What is a slipped disc

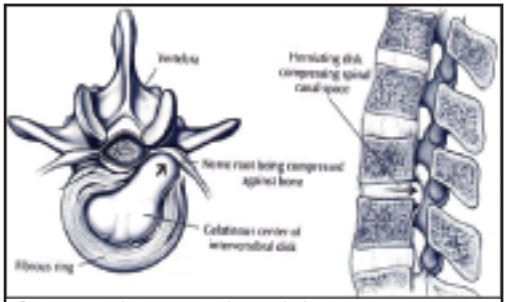


Diagram showing a slipped disc

The discs lie between each vertebrae. They are made of a tough outer fibre called the annulus fibrosis and an inner soft gelatinous substance called the nucleus pulposus. The discs act as cushioning or shock absorbers between the bones allowing the spine to bend. Discs are usually damaged through long term wear and tear. The outer fibre may deteriorate and rupture allowing the gelatinous centre to herniate out of the disc causing pressure on the spinal cord or neighbouring nerves.

How will I know if I am developing back problems?

Usually back problems creep upon us slowly. In the initial stages you might become aware of a little discomfort usually in the lower spine or perhaps at the back of the neck. In some cases discomfort or stiffness is felt only after

resting e.g. after sitting down or sleeping and typically the pain may ease off when you start to move about. This might be a good time to take action i.e. consider what's causing the symptoms. **NB Don't wait for the pain to get worse allowing the condition to become a long term or chronic problem.**

In some instances people will say their 'back went' whilst doing some innocent thing such as putting on their socks. Very often in these cases there was already a weakness in the spine which was then exacerbated by the one activity i.e. putting on the socks.

Common symptoms of back problems are therefore: - pain or burning sensation, loss of movement, numbness and 'pins and needles'. The symptoms may be constant or sporadic and felt in any part of the body. The problem can develop slowly or happen instantly as a result of an accident or one careless action.

How can I avoid spinal problems?

It is possible to reduce the risks of damaging the spine although not always easy. Understanding how the back works and taking common sense precautions especially with respect to load handling will help.

Most back problems are short term and in many cases will recover by adopting sensible precautions such as limiting unnecessary heavy duties and trying to avoid unnecessary bending and twisting of the spine. It is no longer recommended that a person should lie still or take to their beds in order to overcome back problems, but continuing with normal daily life and gentle activity will help recovery much more. Medical advice should be sought if in any doubt and the pain persists.

Consider the following points:

1. **Posture:** Consider whether you can improve your posture

    - **Working posture:** Try doing most things in a good upright stance. Don't lean over surfaces for long periods. Some low level activities are best done sitting down or kneeling. Don't twist your spine but move your feet instead.

    - **Sitting posture:** Are you sitting well? Does your chair support the base of the spine (lumbar support)? A small cushion at the base of your spine might be all that is necessary to help you sit better. Is the cushion you are sitting on too squashy causing you to slump? Do your feet rest comfortably on the floor when you sit, or is your chair too high?

    - **Sleeping posture:** Check that your mattress is neither too soft nor too hard. Don't use too many pillows causing pressure on the neck area. Remember that any change may be uncomfortable to start with but your body will adapt given time. Get medical advice if in any doubt.

2. **Exercise:** Taking regular exercise can help you avoid musculoskeletal problems and improve your posture. Physical activity strengthens the whole structure of the body and strengthens the muscles. Having strong core muscles is crucial to support the back and protect the joints. Exercise also improves the cardiovascular system and improves the flexibility of the joints. Walking, cycling and swimming are excellent ways of exercising. There are many exercises that can be done at home, and exercises specifically designed to help strengthen the back e.g. Pilates. **NB Do bear in mind however that people can injure themselves doing some exercise programmes without proper supervision/instruction. Get medical advice if you are in any doubt about exercising.**

Useful contacts: *Physical Activity Network Wales; Health Challenge Wales, Her Iechyd Gwynedd.*

3. **Nutrition:** A healthy diet and plenty of fluids is as important as exercise. Keep your weight in check because being overweight can contribute to musculoskeletal problems especially lower back problems.

4. **Manual handling:** Are you involved in daily heavy or awkward handling? Do you twist or stoop when doing things? Be aware of your own capabilities and avoid handling heavy loads as much as possible. Consider using a trolley rather than physically carrying everything. Get help with moving items that are difficult or heavy. Store items with a thought to the safety of handling i.e. avoid placing very heavy things on the floor if you have to pick them up regularly. Avoid storing heavy awkward loads on high shelves. Assisting a person to move can also be hazardous depending on the circumstances.

PRINCIPLES OF SAFER LOAD HANDLING

There are basic rules or principles to follow that can help you be safer when dealing with loads. Please note however that they cannot tell you how to 'lift' or 'handle' everything. Each load requires a slightly different application of the principles. For instance picking a small box up from the floor will obviously require a different method to moving a large table. Remember also that there is a limit to what we all can do safely and some loads will be beyond our capabilities.

Definition of manual handling

Manual handling is using the body (hand or body) to move a load by lifting, putting down, pushing, pulling, throwing, holding and carrying.

A load is defined as an object, person or animal.

Basic principles when handling a load

1. **Think!** Look at the load, feel it, test it and decide before you move it whether or not it is too heavy for you. Also consider from what level or height you are picking the load up from as this will affect the way you can or can't do it. Can you make the load lighter by splitting it? Do you need another person to help you? **NB Remember one ill-advised lift could permanently damage your back**



2. **Orientate the load** i.e. by looking and testing it find out which side of the load is the heaviest and make sure that the heaviest side is closest to your body when you move it.



3. **Position your feet.** Create a good base of support by having your feet apart, one foot slightly in front of the other at a slight angle, knees slightly bent.

4. **Spine in line.** As you move the load (lift, lower, push or pull etc) keep your spine in as neutral a position as possible. Don't twist and don't stoop. If the load is low down it is better to bend your knees and hips rather than bending the spine. Lifting from low down may be difficult for some people for instance those with knee, hip or ankle problems and they will need to consider alternative strategies such as getting help. As you lift the load use the stronger muscles in your legs for power and the core abdominal muscles to support the spine in its neutral position. Relax



your body into the move and avoid muscular tension. Aim to lift smoothly and avoid jerky movements.

5. **Keep the load close.** As you hold the load keep it as close to your body as possible. Holding something at arm's length places increased stresses and pressure on the lower spine especially the discs.



6. **Arm and hand position.** Keep elbows tucked in and support the load using the palm area of your hand. Avoid using finger-tip hold as this could damage tendons not designed for strength.



7. **Lowering the load.** Requires as much care as lifting. Avoid placing the load on the floor if you can. Putting it down on a higher surface will be safer (but not higher than waist level) Position feet as before, keep spine in line, bend your knees and hips and not your back.



Team handling

Large heavy or awkward loads may require more than one person to move it. When more than one person is doing the task there are a few extra things to bear in mind.

1. Can everyone do their bit or will one person let you down jeopardising the safety of the others? Consider everyone's capabilities.

2. Plan and discuss how this task will be done.

3. Think about the route, are there doors or awkward steps etc?

4. Discuss what is expected of each person.

5. Apply the principles as above.

6. Select a team leader to co-ordinate the task with all team members.

7. Co-ordinate the move using clear commands e.g. Ready, Steady, Go.

8. Do not rush and allow rest periods during the move according to the needs of the weakest person.

Further information: -

NHS Direct
www.nhsdirect.nhs.uk

Back Care (The Charity for Healthier Backs)

www.backcare.org.uk

Health and Safety Executive
www.hse.gov.uk/

Produced by Gwynedd Council Manual
Handling Team, Corporate Health and Safety in consultation with: -
The Social Services Staff Development Unit,
Occupational Therapy Team