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Contact details of specific team/ward involved in your care:

Name: \_\_\_\_\_

Contact number: \_\_\_\_\_

Please ask a member of staff if you would like a chaperone present during your procedure.

There may be students and observers present during your consultation as part of their ongoing training. Please let the staff know if you do not wish any students to be present during your

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## Thoracic / Lumbar spinal fractures and soft tissue injuries

### Patient information

If you need this leaflet in a different language or accessible format please speak to a member of staff who can arrange it for you.

اگر به این بروشور به زبان دیگر یا در قالب دسترس پذیر نیاز دارید، لطفاً با یکی از کارکنان صحبت کنید تا آن را برای شما تهیه کند.

Jeśli niniejsza ulotka ma być dostępna w innym języku lub formie, proszę skontaktować się z członkiem personelu, który ją dla Państwa przygotowuje.

Dacă aveți nevoie de această broșură într-o altă limbă sau într-un format accesibil, vă rog să discutați cu un membru al personalului să se ocupe de acest lucru pentru dumneavoastră

如果您需要本传单的其他语言版本或无障碍格式，请联系工作人员为您安排。

إذا احتجت إلى هذه النشرة بلغة أخرى، أو بتسبيق  
يسهل الوصول إليه، يرجى التحدث إلى أحد الموظفين لترتيب ذلك لك.

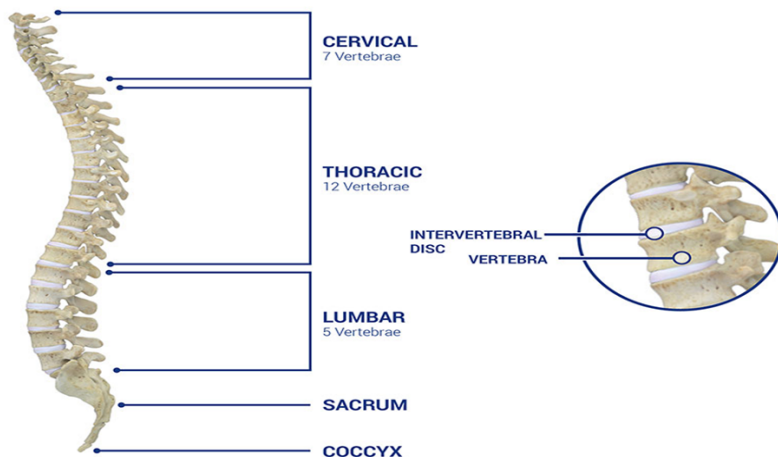
## What is a thoracic/lumbar spine injury?

This is an injury to the bone (a break, also known as a fracture) or soft tissues in your mid to lower back. A clinician will have explained the cause of your injury. Most are caused by a specific traumatic event and you will be aware of how this happened.

Sometimes spinal fractures can occur and you may not be able to pinpoint a specific injury or event. These can happen because your bones may be weaker than normal. This may be due to a condition called osteoporosis. If this is the case, the clinician will discuss this with you and arrange for further investigations and onward referrals as appropriate.

## What does my back look like?

Your spine runs from the bottom of your skull to your pelvis. It is made up of bones that are stacked on top of each other and supported by ligaments, with discs (intervertebral discs) in between each of the bones that act as shock absorbers.



## Notes

## Follow-up

You will receive a follow-up appointment at either Mersey and West Lancashire Teaching Hospital NHS Trust or the Walton Centre. It is important that you continue to wear your brace until advised otherwise.

Most people do not need routine follow-up physiotherapy. Once the injury heals and the brace has been removed, many patients regain the movement in their back through natural recovery and gentle movement throughout the day.

If follow-up therapy is required, this will be identified by the ward or at your follow-up appointment.

Depending on the type of brace used, when you no longer require the brace, you may be advised that this should gradually be removed, as the muscles supporting your back are likely to have become weak as the brace has been doing the work. Heavy lifting should be avoided initially and a return to activity should be gradual.

Some people require further input; 50% of people may experience pain which lasts longer than six months. If you have been discharged from inpatient and outpatient teams, it is best if this is discussed with your GP to determine if any onwards referrals are required.

The bones each form a circle (spinal canal), which the spinal cord and nerves pass through. The bones provide protection for the spinal cord and nerves which are important, as they pass information from the brain to your body about movement, pain, touch (sensation) and other important body functions.

## What will happen with my spinal injury?

Injuries in the spine can be stable or unstable. Stable means that the majority of the spinal structure is still intact so it is unlikely to move. These fractures are usually managed conservatively. Conservatively means there is no need for an operation. You may be managed in an orthosis, such as a spinal brace.

Unstable means the spinal structure has been significantly affected, and could have moved, or is at risk of moving, which may cause further complications. An operation may be offered for this type of fracture in order to provide support to the spinal structures. In this case, you would be transferred to a different Hospital Trust.

## How does a fracture heal?

Fracture healing is a complex process and can be influenced by a number of factors such as how your injury occurred, your general medical condition or any other health conditions. Some factors to take into consideration include age, nicotine intake, long term steroids use, poor diet and also conditions such as osteoporosis, diabetes, hypothyroidism and excessive chronic alcohol use.

Most fractures heal naturally without any intervention such as surgery. Fractures usually take up to 12 weeks to heal.

## What should I expect after my injury?

Whilst the doctors are assessing how best to manage your fracture, or whilst you are awaiting investigations such as x-rays or scans, you may be asked to stay flat in bed (bed rest).

The clinician overseeing your care may also liaise with the Walton Centre for their opinion and management plan. It is essential that you follow all advice given to you. If bed rest advice is not followed, there is a risk the injury may worsen and lead to damage to the spinal cord itself. This can have serious consequences that affect strength and sensation in your limbs, bladder, bowel and sexual function or could lead to paralysis.

Bed rest can result in joint stiffness or weakness. You may be provided with bed exercises to complete whilst on bed rest. Once the team has decided on a plan of how to manage your fracture/injury you may be allowed to get up, move about and sit out in a chair. Support will be offered, if required, to ensure you are safe.

## Spinal braces

Spinal braces can be required for a number of reasons, the most common being a thoracic or lumbar spine fracture.

The spinal brace is a device that limits the movement of the bones and soft tissues in the back, providing support and pain relief which promotes and aids healing and reduces the risk of developing further problems.

## Driving

Driving a vehicle is not permitted whilst in the brace.

Your consultant will inform you when you can consider resuming driving. You should inform the DVLA and your insurance company about your injury via the following link: [www.gov.uk/spinal-problems-driving](http://www.gov.uk/spinal-problems-driving)

You must feel comfortable and confident to drive, ensure you are able to perform an emergency stop and have sufficient back movement in order to drive. It is advisable only to drive short distances initially.

## Working

You are likely to need some time off work initially, though there is no set time for this as it will depend on your occupation.

Check with your clinician and employer before you return to work. You may need to modify your activities at work for a while when you return, especially if your job is active or involves a lot of driving.

Please ask for a fit note if you require one, before you go home.

## Everyday tasks

Continue to complete your day-to-day activities such as dressing, washing, cooking but try to avoid any tasks that require repeated or heavy lifting initially.

In order to support your body to heal, you should eat a balanced healthy diet and avoid alcohol and smoking.

## Mobility

Providing you are not in pain, walking can be a good form of general exercise to help after your injury. Try to gently build up the amount of walking gradually. It is important to regularly change your position and moving around will also help with any pain. Normal day-to-day activity is acceptable, but refrain from physical activity such as sport or gym work.

## Avoid

- Lifting any heavy objects. Make sure any item you need is within easy reach or ask someone to do this for you. A sensible approach needs to be adopted whilst the injury is healing as what is 'heavy' varies from person to person.
- Twisting or bending.
- Lying on your stomach.

The need to wear a brace will be determined by the multi-disciplinary team. The type of brace needed will be determined by your injury. You will need to wear the brace to support your back whilst it heals.

## Types of spinal braces that we use:

Different types of braces support different levels in your back:

**Thoracic Lumbar Sacral Orthosis (TLSO)** - this is the most commonly used spinal brace, providing support from the upper/mid and lower sections of your back.

**Cervical Thoracic Orthosis (CTO) and Cervical Thoracic Lumbar Sacral Orthosis (CTLSO)** - include a collar section and are for multiple fractures, that may be present at different levels throughout the back. If you require this brace, an additional booklet will be provided.

**Lumbar Sacral Orthosis (LSO)** - provides stability to the lower back only.

The brace support is provided by plastic on the outside and soft pads on the inside. The soft pads protect your skin from the plastic. Straps are used to achieve and maintain the correct position.

## When to wear the brace?

You will be given individual instructions about when and how long the spinal brace should be worn for.

If the brace is not worn as advised, there is a risk to the healing of the bone, as well as a risk, although rare, that you may damage your spinal cord as previously highlighted on page 3 and 4.

## How long will I need it?

The reason why you require the brace will determine the length of time you need to wear it for. This will be determined on an individual basis as healing rates can vary. This is typically 6-12 weeks. It is important that you keep using your brace until a clinician has advised otherwise.

## Fitting the brace and brace care

You will be measured and fitted with an appropriately sized spinal brace by an experienced healthcare professional. The brace will feel firm around the waist, but should not restrict breathing. It is important to wear your spinal brace properly to get the maximum benefit.

You will be given individual instructions regarding how to change your brace. Depending on the type of injury, you may need assistance one or two people to fit and position the spinal brace.

## Discharge planning

This starts early on following your admission to hospital. The team of health professionals involved in your care will discuss your discharge with you.

We encourage you to speak with family and friends to identify any concerns that you may have and determine what support they may be able to offer you once at home.

## Washing and dressing - key points

- The brace will need to be removed at least daily, to clean and dry your skin - you will be advised on what position this should be completed in.
- With your brace on you will be able to wash at a basin, sitting or standing as able.
- Dress whilst sitting on a chair/bed, do not stand as you will be more likely to fall due to restricted movement.

## Sitting

Try to sit in a supportive upright chair and maintain good posture. Avoid soft chairs and sitting for prolonged periods.

## Sleeping

A firm bed is desirable. You can sleep either on your back or side. However, some braces may limit your comfort in certain positions.

To get on and off the bed, use the side lying method you were shown in the hospital to reduce twisting.

## What important symptoms do I need to be aware of?

Please seek medical advice if:

- You experience severe pain which is not relieved by painkillers (though mild to moderate pain is expected).
- The brace becomes damaged.
- The skin under the brace has broken down.
- The brace has become poorly fitted and you are unable to achieve a satisfactory fit.

If you experience any of the symptoms below, then you should seek urgent medical attention for further assessment.

- Numbness or weakness in your arms or legs.
- Changes in sensation to the saddle area (the area you would wipe when toileting ie genital or anal area).
- Difficulties in passing urine.
- New incontinence (loss of control) to your bladder or bowels.

You will be informed of how many people are needed to help you and it is essential that you follow this advice. This may mean additional family/carer support is required in order to do this, though this will be identified and discussed on an individual basis.

Where applicable, we will demonstrate the fitting of the brace to family/carers, who can then practise this to ensure they are able to do this correctly. You will be advised about the specific position of that brace and the skin care associated with it.

It is important that you are aware of your posture in lying, sitting and standing to prevent slouching. Regularly change your position and ensure that the brace is fitted tightly enough to give your back support.

## Pressure care

Wearing a spinal brace can make the skin underneath it become hot and cause sweating. This moisture can lead to skin breakdown. Pressure from the brace itself can also cause skin problems. The brace must be kept free from debris as this can rub and cause pressure sores or skin irritation.

We recommend:

- Checking the skin daily when washing/dressing.
- Be vigilant for skin discolouration, redness and/or pain. These are indicators of pressure and could lead to an ulcer. If you experience any of these symptoms then seek medical advice.
- Following the brace care plan you have been issued with.



## Pain management

The healthcare team will work with you to ensure your pain is controlled as effectively as possible. You will be sent home with the appropriate medications, but if you require more or further advice about your pain control you should talk to your GP.

## Early exercises

It is important to reduce the risk of developing a chest infection or a blood clot (deep vein thrombosis or pulmonary embolism) and to limit how much your muscles may weaken. The following exercises will help reduce this risk:

To assist good circulation:  
Move both ankles and toes up and down as much as possible for 30 seconds.



To maintain muscle strength:  
Pull your toes towards you and push the back of your knees into the bed.  
Hold for 5-10 seconds.



Repeat 5-10 times a day.

To keep your chest clear:  
Take three deep breaths in and hold for 2-3 seconds before breathing out fully. Follow this with a huff, which is a short, sharp breath out with the mouth wide open and then a cough.

Repeat this every hour.

## Mobilising

Once you are allowed to get out of bed, you may need to be seen by the therapy team to assess your mobility and determine any equipment you may need for discharge. You may feel dizzy or weak when you first get up. This should improve as you become more mobile.

Depending upon your ability to move, the therapists may provide you with a walking aid. They will also assess your ability to complete the stairs if needed.