

Advice after a chest wall injury

Other formats

If you need this information in another format such as audio CD, Braille, large print, high contrast, British Sign Language or translated into another language please contact the PALS desk on 01271 314090 or at rduh.pals-northern@nhs.net.

Who is this leaflet for?

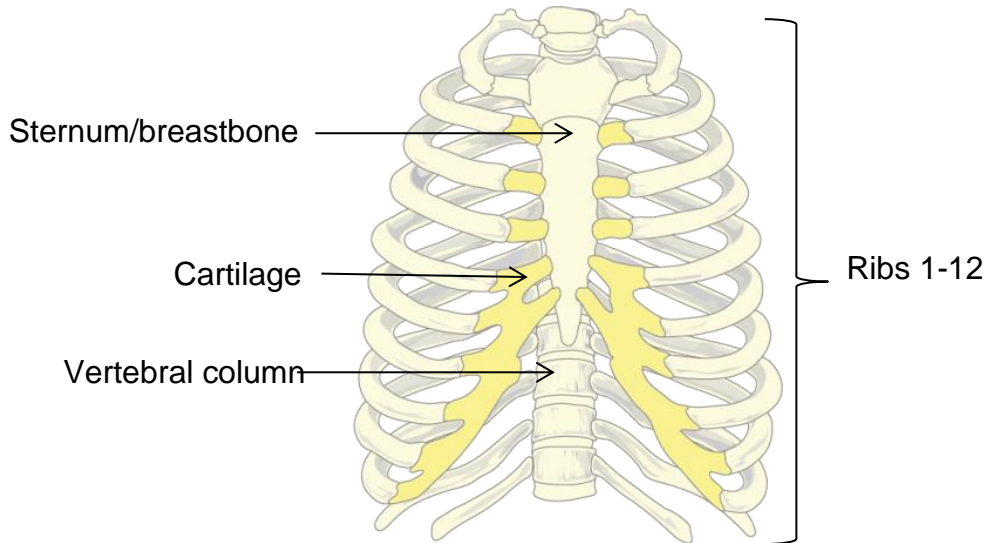
This information leaflet gives general advice to patients with any of the following chest wall injuries:

- **Fractured ribs** (break in one or more of your ribs)
- **Fractured sternum** (break in your breast bone which connects your ribs to form the protective rib cage)
- **Chest wall contusions** (bruising to your chest wall which may involve the skin, muscle or ribs of your chest wall)
- **Pulmonary contusions** (bruising or bleeding to your lung tissue)
- **Flail chest** (multiple ribs broken in more than two places)

The leaflet explains what to expect during your stay in hospital and provides information about the importance of good pain relief and deep breathing exercises to aid your recovery.

If you have any questions that are not covered in this leaflet, please do speak with any of the health professionals looking after you. Use the box provided below to write down any questions or thoughts you have for discussion with your team.

Background information



The ribcage supports the upper body, protects internal organs (such as the heart and lungs), and assists with breathing.

Chest injuries normally happen after an 'impact' trauma to the chest. For example, these may happen as a result of falling from a height, a road traffic accident or during contact sports. Unlike other parts of the body, it is difficult to rest your chest as you use it when you breathe. It also supports you when you sit up, lie down and move around. Pain is one of the main problems experienced after chest injuries and can often take several weeks to improve.

Who may see me?

Here at Northern Devon Healthcare NHS Trust, you will see a range of specialists working together to ensure you get the best care and management. These could include:

- Doctors
- Nurses
- Pain team
- Physiotherapists/occupational therapists
- Radiographer

Treatment

Chest wall injuries are managed differently depending on the severity of injury and the symptoms experienced. Most chest wall injuries are managed without surgery and heal spontaneously over a period of weeks.

Occasionally, patients require additional oxygen, usually because the pain limits the ability to take deep breaths.

Pain

From the time you are admitted to hospital your pain will be regularly assessed. The staff will ask you if you have pain and whether that pain is mild, moderate or severe. The staff will assess how pain is affecting your ability to do certain things such as breathe, cough and move. It is important that you let the staff know how your pain feels and how it is affecting you so we can do something to help you sooner and prevent any complications, such as a chest infection.

Chest wall injuries can be painful but many patients experience only mild to moderate pain and can still do some normal activities and manage well with regular paracetamol or an anti-inflammatory.

If your pain is moderate to severe and your pain is limiting your ability to breathe, cough or move, you will be offered stronger pain relief, such as morphine or oxycodone. These medications are very strong and so will only be used in small doses for a short period of time.

Some pain medication such as codeine, tramadol, morphine and oxycodone can cause you to feel sleepy or light headed, nauseous or constipated. All of these things are common and can be managed, so please let the staff know.

If your pain is severe and you are unable to take a deep breath or cough and cannot move around, you may be offered a procedure where a small tube is placed in your back. This will allow us to give you medicine that numbs the nerves and reduces your pain (like when you go to the dentist). This will enable you to move, cough and breathe more comfortably. Before you go home we will take the tube out and ensure you have tablets to go home with that will keep your pain at a manageable level.

Other things that can help with pain are:

- ✓ A comfortably hot heat pack – this can help muscles relax and improve blood supply to area – avoid if any obvious bruising or you have been told you have a haematoma
- ✓ A comfortably cold cold pack – this can be effective for sternal fractures and helps with bone pain and swelling/bruising
- ✓ Rolled towel – this should be used to apply support to the area of pain and can help make it easier to cough, take deep breaths and move
- ✓ TENS – these can help if pain is going on longer than a few weeks or if you have chronic pain as well as a new chest injury
- ✓ Distraction/relaxation – it can be really helpful to do things that make you happy and feel good, to take your mind off the pain and help your body produce its own natural pain medication

Are there any risks or complications?

Chest infections are one of the most common complications after suffering a chest injury. You would normally take deep breaths, cough and move around, which helps prevent getting a chest infection.

If pain from your injury limits your ability to **cough**, take a **deep breath** or **move**, phlegm can build up in the lungs. If the phlegm is not regularly cleared, it can lead to a chest infection or pneumonia. The risk is greater in smokers and people with chest disease.

Less common complications:

- **Pneumothorax** (air in the space surrounding the lung) – this may cause shortness of breath and increasing pain in the lower chest. In some cases, a chest drain may be required.
- **Haemothorax** (blood in the space surrounding the lung) – this may cause shortness of breath and pain in the lower chest. In some cases, a chest drain may be required.
- **Surgical emphysema** – air trapped under the skin can cause a bubbly swollen area on the chest wall and may be linked to a pneumothorax
- **Pulmonary contusions** (bruising or bleeding of your lung tissue) – this may cause one or more symptoms of chest pain, changes or difficulty in breathing or coughing up blood or watery sputum (spit).

Physiotherapy

A respiratory physiotherapist will assess your chest and mobility. This includes looking at your ability to take deep breaths and the effectiveness of your cough to clear phlegm. They will teach you breathing exercises, as explained below.

Breathing exercises

Deep breathing exercises



Deep breaths are a simple way to fill your lungs up with air and clear any phlegm that builds up in your lungs. Practice the following exercises **hourly** throughout the day.

Start in a comfortable position, ideally sitting upright in the bed or chair with your shoulders relaxed.

- 1) Take a slow, deep breath in through your nose to fill up the bottom of your lungs
- 2) Hold this breath for a count of 3 (if you are able)
- 3) Breathe out slowly through your mouth.
- 4) Repeat steps 1-4 a total of **10 times** (don't do more as you may get dizzy)
- 5) **Repeat every hour during the day when you are awake.**

Supported cough

Coughing is the normal way to clear phlegm from your lungs. **Following your deep breathing, you should perform a cough.** When you need to cough, use a pillow or rolled up towel to support the area of your chest wall that is uncomfortable to help reduce the pain.

Moving and function

It is very important that you sit out in your chair and start walking around on the ward as soon as you are able to. The nurses and physiotherapists will guide you with this.

Maintaining your function and independence after a chest wall injury is vital for recovery. If you are struggling with day-to-day activities such as showering, washing and dressing, and have any concerns about managing at home, please inform a member of staff and we can refer you to an occupational therapist. An occupational therapist can assess how you are managing and provide strategies and support to assist you in getting back to independence.

Incentive spirometry

You may be given an incentive spirometer. This is a device that is used to encourage deep breathing. It aims to help you increase the amount of air that you breathe in and improve the way your breathing muscles work.



Before you start:

- ensure you have had adequate pain relief
- consider using a pillow or rolled up towel/blanket to hug while taking the deep breaths

How to use:

- 1) If possible, sit upright in a comfortable position, on the edge of a chair or bed
- 2) Hold the incentive spirometer upright
- 3) Breathe out normally
- 4) Place the mouthpiece in your mouth and seal your lips around it
- 5) Take a slow deep breath in through the mouthpiece, like sucking in through a straw

- 6) You should aim to raise one, two or three balls up and hold for 2-3 seconds
- 7) Exhale slowly through your nose, while removing the mouthpiece from your lips
- 8) Relax after each deep breath and breathe normally
- 9) Repeat this process as directed by your physiotherapist, usually 5-10 times. Take a few normal breaths between your deep breaths
- 10) When you have finished your group of deep breaths, it is important to clear any phlegm by doing a cough. Please discuss with your team if you are unable to do this because of pain from your injuries.

Helpful hints:

- If you start to feel dizzy or light-headed, slow down your breathing and give yourself more time between deep breaths.
- Keep the incentive spirometer within reach, so you remember to use it.
- If you need help, please ask your nurse or physiotherapist
- Fill in the chart attached so that you can keep track of your progress
- When plans for your discharge from hospital is being discussed with you, please ask if you should continue with these exercises when you get home.

Incentive spirometry log book

How many balls should I aim to rise?		
Number of repetitions		
How often?		
Prescribed by:	Date:	
Designation:	Time:	

Date	Time	How many repetitions did you do?	How many reached your target?

Date	Time	How many repetitions did you do?	How many reached your target?

Before you go home

The need for continued pain relief at home is very individual. Please discuss this with a member of the pain team or your nurse/doctor. If you have any worries or concerns about how you can manage pain at home, please talk to the ward physiotherapist / occupational therapist or nursing staff.

Advice on discharge

Pain

It is very important to continue to take regular pain relief as prescribed. This is so you can deep breathe, cough effectively and move around whilst the injury heals. If you find that your pain medication is not working, contact your GP or speak with a pharmacist.

Exercise and activity

Keep mobile (e.g. walking) – this is the most effective way to help you to take deep breaths and clear any phlegm. Gradually build up your level of physical activity. You may need practical help with some tasks from family and friends but aim to complete everyday activities as much as possible.

To reduce the risk of developing pain or stiffness in your shoulder or spine, it is important that you continue to move around as usual and that your pain is sufficiently controlled to allow this.

Rest

Your body is using energy to heal itself so you may feel more tired than normal. Allow yourself rest time each day to aid your recovery. You will feel better on some days than others; this is normal. Avoid spending prolonged periods of time in bed.

Lifting

Avoid heavy lifting, pulling or pushing for 6-8 weeks

Sleep

You may find it helpful to sleep sitting upright for the first few nights, but this is different for each individual. The best way to achieve this, is in bed with additional pillows.

Smoking

Smoking is best avoided; it is recognised that smokers have a higher risk of developing complications, such as chest infections, after chest wall injuries. For advice on how to stop smoking, please ask a member of staff or contact:

- OneSmallStep – service set up and funded by Devon County Council to guide and support you through small steps to change.

Website: onesmallstep.org.uk/resources/stop-smoking

Tel: 01392 908139 or

Text: QUIT to 60777

- NHS One You – provides tips, tools, support and encouragement every step of the way, to help improve your health right away.

Website: www.nhs.uk/better-health/quit-smoking

- Smokefree National Helpline on 0300 123 1044

Driving

Make sure you can wear a seatbelt comfortably and perform manoeuvres and an emergency stop without undue pain. You should not drive while under the influence of opioids; please be aware the pain relief you are prescribed may contain opioids. If you have any questions regarding your ability and safety to drive, please contact your GP before attempting any journey.

Work

Depending upon your job and injury severity, you may need to take some time off work whilst the fracture heals. If your job involves a lot of manual handling/lifting, it may be necessary to discuss with your employer whether you can do other duties while your injury heals.

If you have any concerns about when you can return to work, it may be helpful to discuss these with your doctor or GP.

Further advice

This leaflet is a general guide to chest injuries. If you have any further queries about your current injuries, please contact your GP.

Even after following the above advice, some people may still develop a chest infection after being discharged home.

When should I contact my doctor?

- If you become unwell with a temperature
- If you develop an uncontrollable cough
- If you are coughing up thick, discoloured phlegm
- If your pain is uncontrolled

When should I seek immediate help?

- If you begin coughing up blood
- If the pain in your chest is so severe that it stops you from deep breathing or coughing
- If your breathing becomes more difficult or you develop increased shortness of breath or chest tightness
- If you develop abdominal pain

PALS

The Patient Advice and Liaison Service (PALS) ensures that the NHS listens to patients, relatives, carers and friends, answers questions and resolves concerns as quickly as possible. If you have a query or concern call 01271 314090 or email rduh.pals-northern@nhs.net. You can also visit the PALS and Information Centre in person at North Devon District Hospital, Barnstaple.

Have your say

Royal Devon University Healthcare NHS Foundation Trust aims to provide high quality services. However, please tell us when something could be improved. If you have a comment or compliment about a service or treatment, please raise your comments with a member of staff or the PALS team in the first instance.

Tell us about your experience of our services. Share your feedback on the Care Opinion website www.careopinion.org.uk.

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