What are the causes of chest wall injuries?

- Fractured ribs (broken ribs)
- Fractured sternum (breast bone)
- Chest wall bruising
- Muscular sprains.
- Sprained inter-costal muscles (the muscles between and supporting the ribs)

The most common cause of chest wall injuries in elderly people is a fall from height or from standing. In adults, road traffic collisions are the most common cause. Rib fractures in young people usually happen as a result of accidents arising from recreational and athletic activities. Because children have more elastic ribs, they are less likely than adults to sustain fractures following blunt chest trauma.

What symptoms might I have?

- strong pain in your chest area, particularly when you breathe in.
- swelling or tenderness around the affected ribs.
- sometimes bruising on the skin.
- feeling or hearing a crack if it's a broken rib.
Why do I have pain?

Injuries of the chest wall can be very painful. To breathe you have to move your chest wall, so deep breathing and coughing will hurt, but they are an important part in making a full recovery. It will normally take around 4 weeks to get better. As a guide, if you have one broken or bruised rib you can expect to be in pain for three weeks and to be in discomfort for several more weeks and even longer if more than one rib is involved. It may be helpful to sleep sitting upright for the first few nights.

What is the treatment?

Ribs cannot be easily splinted or supported like other bones, so they are usually left to heal naturally and it is not always necessary to x-ray the chest. You may have a tracing of the heart taken (ECG) if the clinician thinks it necessary. The main complication is that chest injuries may affect breathing: pain from rib fractures can stop you from breathing as deeply as normal and this can lead to a chest infection.

This risk is higher in those who smoke and have chronic chest conditions such as chronic obstructive pulmonary disease (COPD) or heart failure.

Broken or bruised ribs heal in the same way and usually get better by themselves within 3 to 6 weeks.

When do I need to get medical help?

Go to your nearest Emergency department at once if:

- You become short of breath.
- You start to cough up coloured or blood stained phlegm (sputum).
- If your cough increases dramatically, you develop a temperature or feel generally unwell with a temperature.
What do I take for Pain?

Pain relief taken regularly is the most important treatment, so that you can breathe and cough properly.

<table>
<thead>
<tr>
<th>Take regular <strong>Paracetamol</strong>, rather than every now and then. They can be bought over the counter from a pharmacy or local shops. Make sure you do not take any other product containing Paracetamol. If Paracetamol does not help at all despite taking the recommended dose then try changing to Ibuprofen 400 mg three times a day. You can also take both drugs – speak to a pharmacist about the best way to do this. If you have been advised not to take Ibuprofen in the past or are on any blood thinning tablets then avoid Ibuprofen.</th>
<th><strong>Anti-inflammatory painkillers</strong> can also be used. These relieve pain and may also limit inflammation and swelling, however if you are pregnant or trying to get pregnant you should not use them. Side effects sometimes occur with anti-inflammatory painkillers - stomach pain and bleeding from the stomach, are the most serious. Some people with asthma, high blood pressure, kidney failure or heart failure may not be able to take them either. You can buy Ibuprofen at pharmacies.</th>
</tr>
</thead>
</table>
| **With all medication it is essential that you follow the instructions on the packet or bottle carefully.** | }

Exercises to help you recover

1. **Rotation:** Sit up straight, with your arms across your chest Keeping your legs still, gently rotate to one side as far as you can go without pain and provided you feel no more than a mild to moderate stretch. Repeat for the other side.
   - Hold for 1 – 2 seconds.
   - Repeat 10 times to each side.
2. **Deep Breathing:** Every hour take 10 long, deep breaths to make sure that air gets to every bit of the lung. First, breathe in to the bottom of your lungs, and then breathe deeper, making your ribs move upwards and outwards. Breathe out.

3. **Shoulder Blade Squeezes:** Begin sitting or standing tall with your back straight. Squeeze your shoulder blades together as far as you can go without pain and provided you feel no more than a mild to moderate stretch. Hold for 1-2 seconds. Repeat 10 times.

4. **Huffing:** Take a deep breath in, and then force your breath out quickly - as if you were steaming up a mirror before wiping it clean - making a ‘huffing’ sound. Do this exercise twice a day.

The following advice should help you to recover.

<table>
<thead>
<tr>
<th>Things you should do:</th>
<th>Things you should not do:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Keep moving around your home</td>
<td>• Try to lift heavy things or strain yourself.</td>
</tr>
<tr>
<td>• Hold an ice pack (or bag of frozen peas in a tea towel) to the affected ribs regularly in the first few days to bring down swelling.</td>
<td>• Stay in bed.</td>
</tr>
<tr>
<td>• Rest and take time off work if you need to.</td>
<td>• Smoke.</td>
</tr>
<tr>
<td>• Breathe normally and cough when you need to – this helps clear mucus from your lungs to prevent chest infections.</td>
<td>• Try to strap up or bind your ribs. We now believe that this can be harmful.</td>
</tr>
<tr>
<td>• Do regular deep breathing exercises - take a very deep breath in through your nose, out through your mouth slowly. Do this 10 times every hour.</td>
<td>• Play any contact sports or do any exercise that makes your pain worse for 4 weeks.</td>
</tr>
<tr>
<td>• Cough if you need to. Press firmly on the sore part of your chest (hold a pillow against your chest) if coughing hurts.</td>
<td>• Try to suppress any cough – it is important to clear the sputum so it does not collect and cause an infection.</td>
</tr>
<tr>
<td></td>
<td>• Take a cough syrup.</td>
</tr>
</tbody>
</table>
• Try to sleep more upright for the first few nights
• **Aim to alternate periods of rest with gentle activity over the next few weeks - keeping mobile will help to drain the normal lung secretions and prevent complications.**

**When should I contact the Emergency Department?**

If you are concerned about your progress, or if you have not improved within 10 days, we advise you to contact your local Emergency Department.

If you are at all concerned about your injury please contact the relevant Emergency Department/Minor Injury Unit (MIU):

- **Royal Gwent Hospital**: 01633 234056
- **Nevill Hall Hospital**: 01873 732073
- **Ysbyty Ystrad Fawr (YYF) MIU**: 01443 802353 or 802349
- **Ysbyty Aneurin Bevan (YAB) MIU**: 01495 363318

References:

- [https://www.nhs.uk/conditions/broken-or bruised-ribs/](https://www.nhs.uk/conditions/broken-or-bruised-ribs/)

“This document is available in Welsh / Mae’r ddogfen hon ar gael yn Gymraeg”