

# Thoracic range of movement (ROM) exercises

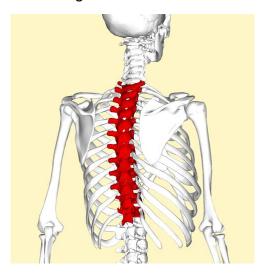
### Other formats

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.

# What are thoracic range of movement (ROM) exercises?

Range of movement exercises are gentle exercises which help to maintain the flexibility and movement of your joints. This is important as it helps to prevent them from getting stiff.

The thoracic spine is the longest section of spine, with 12 vertebrae, and the only part of the spine which attaches to the rib cage.



# Why are thoracic ROM exercises necessary?

When taking a deep breath your ribcage and thoracic spine move. In some conditions, particularly neuromuscular diseases, the respiratory (breathing) muscles become weak and therefore you cannot take as big a breath. Your ribcage and thoracic spine can become stiff further limiting the ability to get a good amount of air into the lungs. Other respiratory conditions can also restrict the ribcage and lung expansion. Stretching out the tissues and joints may help to preserve the range of movement.

## How are thoracic ROM exercises carried out?

These exercises can be carried out in either a standing/seated position or lying down; whichever is deemed safest and most effective for you as an individual.

# **Seated exercises**

For these exercises, you will need a chair and a walking stick, pole or broom handle.

### S1) Overhead raise:

- 1) Sit in an upright position
- 2) Start by holding the stick on your lap
- Aim to slowly raise the stick above your head, inhaling as you go and keeping your arms straight
- 4) Hold above your head for \_\_\_\_\_ seconds
- 5) Then exhale as you lower your arms
- 6) Repeat \_\_\_\_\_ times in one go this is called a set.





Complete: \_\_\_\_sets \_\_\_times daily

### S2) Seated twist:

- 1) Start by sitting upright in a chair
- 2) Slowly and gently twist to look over your right shoulder, inhaling as you go
- 3) As you exhale, use your left hand on the outside of your right knee to pull yourself round for a deeper stretch
- 4) Hold for \_\_\_\_\_ seconds
- 5) Return to centre, then repeat towards the other side





Complete: \_\_\_\_sets \_\_\_\_times daily

### S3) Seated side flexion:

- 1) Start in a seated, upright position
- 2) Slowly and gently lean towards the right side, inhaling as you go,
- 3) As you exhale, aim to reach your right hand down towards the floor (with your left hand, hold on to the chair seat if needed to keep your balance)
- 4) Try to keep your shoulders facing forwards
- 5) Hold for \_\_\_\_\_ seconds
- 6) Return to centre, then repeat towards the other side





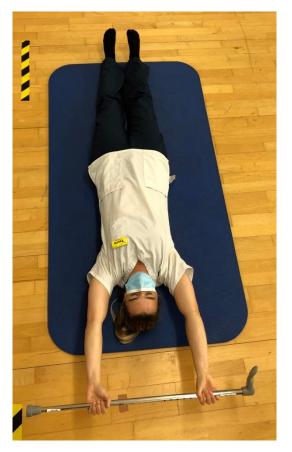
Complete: \_\_\_\_sets \_\_\_times daily

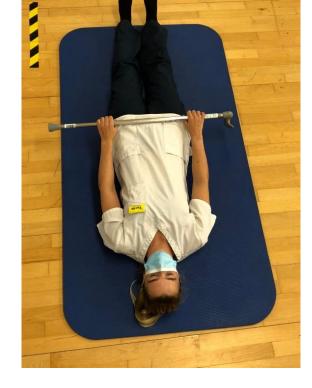
# Lying down exercises

For these exercises you will need to be lying on a comfortable, flat surface e.g. a yoga mat and have a walking stick, pole or broom handle.

### L1) Overhead raise:

- Start by lying comfortably on your back. You may need to bend your knees slightly to be comfortable
- 2) Rest the stick on your lap
- 3) Aim to slowly and gently raise the stick above your head, inhaling as you go
- 4) Hold above your head for \_\_\_\_\_ seconds
- 5) Then exhale as you lower your arms
- 6) Repeat \_\_\_\_\_ times in one go this is called a set.





Complete: \_\_\_\_sets \_\_\_times daily

### L2) Spinal twist:

- 1) Start in a comfortable position lying on your back
- 2) Bend your knees so that your feet are flat on the mat. Inhale.
- 3) Keeping your knees together, exhale as you slowly and gently, lower your knees towards the right. Inhale.
- 4) Exhale as you reach your arms towards the left, to increase the stretch
- 5) For a deeper stretch turn your head towards the left too
- 6) Hold for \_\_\_\_\_ seconds
- 7) Return to centre, then repeat towards the other side





Complete: \_\_\_\_sets \_\_\_times daily

# When should thoracic ROM exercises be used?

These exercises can be built in to your daily or weekly routine. A minimum of 3 times a week is suggested, but if you are experiencing stiffness, 2-3 times a day may be indicated.

## When should thoracic ROM exercises NOT be used?

If you have new pain in your chest/back, any new changes to your sensation, or any new changes to your bladder/bowel (e.g. being unable to go or having incontinence), you should stop the exercises and seek urgent medical attention.

# Are there any risks when doing thoracic ROM exercises?

Consideration needs to be given if you are osteoporotic or have any musculoskeletal issues such as a scoliosis. The technique may need to be modified or contraindicated in such cases.

Also, modifications may be given if you have weakness which impacts you being able to safely do these movements (because you may not be able to control them adequately or you may get stuck in these positions).

| Specific advice for you as an individual  |  |
|---|--|
|   |  |
|   |  |
|   |  |
| IMPORTANT   |  |
| If you have any pre-existing injuries or health conditions, please speak to your physiotherapist.   |  |
| If you experience pain during any of these exercises, stop and seek advice.   |  |
| Further information   |  |
| If you have any questions or concerns, please contact the Respiratory Advanced Pract Physiotherapists at North Devon District Hospital on 01271 322577 (ext. 3785 or bleep 315) |  |
| Your local Community Health and Social Care Team:   |  |
| Tel: Email:   |  |

### References

AMERICAN COLLEGE OF SPORTS MEDICINE, & Liguori,G (2021). ACSM's guidelines for exercise testing and prescription. Philadelphia, Wolters Kluwer/Lippincott Williams & Wilkins Health.

NICE guideline NG42 (2016) - MND: assessment and management

#### **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.

Royal Devon University Healthcare NHS Foundation Trust
Raleigh Park, Barnstaple
Devon EX31 4JB
Tel. 01271 322577
www.royaldevon.nhs.uk

© Royal Devon University Healthcare NHS Foundation Trust This leaflet was designed by the Communications Department. www.royaldevon.nhs.uk/get-in-touch