

Patient Information: Incentive Spirometry in CDU

Supporting Your Recovery After Chest Wall and Rib Fractures

Why is Spirometry Important?

Following chest wall or rib fractures, it's crucial to keep your lungs healthy and functioning properly. Pain from the injury may cause you to take shallow breaths, which can lead to complications like:

- Lung infections (e.g., pneumonia)
- Reduced lung capacity
- Fluid buildup in the lungs (atelectasis)

Performing spirometry helps prevent these issues and aids in your recovery by keeping your lungs clear, expanding lung capacity, and improving overall respiratory health.

What is Spirometry?

Spirometry is a simple breathing exercise that measures how well your lungs are working. It involves using a small handheld device called a spirometer to take deep breaths and monitor your lung performance.

How Does it Work?

1. The Spirometer Device: The spirometer has a tube connected to a mouthpiece. When you exhale into the mouthpiece, the device records the strength and volume of your breath.
2. Tracking Progress: Repeating spirometry exercises regularly can show how your lung function is improving over time.

When and How to Do Spirometry

Timing:

- Use the spirometer 4-5 times a day (or as directed by your healthcare provider)
- Perform spirometry after pain relief if needed, to help you breathe deeply without discomfort.



Steps to Follow:

1. Sit up straight in a comfortable position
2. Hold the spirometer in your hand and place your lips tightly around the mouthpiece to form a seal
3. Inhale deeply through the mouthpiece, filling your lungs completely. Make sure your tongue is not blocking the mouthpiece.
4. Hold your breath for at least 3 to 5 seconds (longer if you can).
5. Exhale slowly and steadily into the mouthpiece until your lungs feel empty.
6. Repeat the process as instructed, usually 10 breaths per session.

Tips for Success

- Use pain management strategies: Take prescribed medications or use ice packs to ease pain before starting spirometry
- Focus on your posture: Good posture helps you take deeper breaths
- Stay consistent: Regular practice ensures the best recovery
- Cough gently after using the spirometer: This helps clear mucus from your lungs

When to Seek Medical Help

Contact your healthcare provider if you experience:

- Increased chest pain during or after spirometry
- Difficulty breathing or worsening shortness of breath
- Signs of infection, such as fever or coughing up yellow/green mucus

Remember: Spirometry is a vital part of your recovery. It helps prevent complications, speeds healing, and restores normal lung function. If you have any questions about using the spirometer, please consult your doctor or respiratory therapist.

Content by [Dr Siobhán Bourke](#), CUH, 15/12/2024.

If you are concerned, please contact the
Emergency Department you first attended:

Mercy University
Hospital
(021) 4271971

M-UCC
(St. Mary's
Health
Campus)
(021) 4926900

CUH
(021) 4920200

Local Injury Unit
Mallow General
Hospital
(022) 58506

Local Injury Unit
Bantry General
Hospital
(027) 52900

