

Incentive Spirometry

For adults living with Sickle Cell Disorder



Information for patients, families and carers

Haematology - Haemoglobinopathy
Coordinating Centre



PROUD TO MAKE A DIFFERENCE

SHEFFIELD TEACHING HOSPITALS NHS FOUNDATION TRUST



Incentive Spirometry and Sickle Cell Disease

Why we provide you with an incentive spirometer

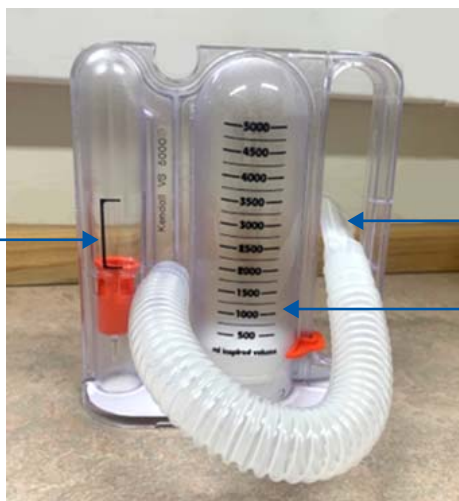
An incentive spirometer is a device that helps maintain healthy lungs for patients who are admitted with complications from Sickle Cell Disease. It works by encouraging you to take regular deep breaths to prevent small airway closure and pneumonia.

The aim is to keep the airways clear and good levels of oxygen to prevent the development of chest problems.

How to use your incentive spirometer

1. Set the incentive spirometer up as per picture and attach the elephant tubing
2. Place the mouthpiece in your mouth and make sure there is a good seal around the mouthpiece
3. Take a long slow deep breath in through your mouth
4. Make sure the orange cylinder on the left stays within the marked area if possible. Try to note how high up the volume scale you reach so that this is a target for the next breath.
5. Try to keep breathing in for as long as possible
6. Rest after the breath and repeat
7. Repeat x10 times every 2 hours

Measurement of breath should stay within black markings for the full breath



Mouthpiece

Measurement of the volume of air inhaled

Considerations with use

- Try to use the incentive spirometer when your pain feels ok i.e. use 20 minutes after pain relief
- Take your time to do x10 breaths to prevent tiredness, breathlessness, and pain
- If the pain is too much to use the device, take regular deep breaths x10 every hour and let your doctors and nurses know that your pain is not controlled
- If you are on oxygen, make sure you feel comfortable using the device whilst you are on the oxygen. If not please ask for further assistance
- If there are any secretions that you need to clear, try to cough and clear these as it is better to do this than let them remain in the lungs

Please use the QR code or link below to take you to the Patient Information Leaflet (PIL) section of the North East and Yorkshire Haemoglobinopathy Co-ordinating Centre Website

Patient Information - NEYHCC



To help support your local hospitals visit
sheffieldhospitalscharity.org.uk

Registered Charity No. 1165762



For alternative formats please see
www.sth.nhs.uk/patients-visitor-information

© Sheffield Teaching Hospitals NHS Foundation Trust 2026

Re-use of all or any part of this document is governed by copyright and the "Re-use of Public Sector Information Regulations 2015" SI 2005 No.1515. Information on re-use can be obtained from the Information Governance Department, Sheffield Teaching Hospitals. Email sth.infogov@nhs.net