

### Further sources of information

NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)  
Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

### Patient Experience Team (PET)

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

**King's Mill Hospital:** 01623 672222

**Newark Hospital:** 01636 685692

**Email:** [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net)

If you would like this information in an alternative format, for example large print or easy read, or if you need help with communicating with us, for example because you use British Sign Language, please let us know. You can call the Patient Experience Team on 01623 672222 or email [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net).

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you. External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them. If you require a full list of references (if relevant) for this leaflet, please email [sfh-tr.patientinformation@nhs.net](mailto:sfh-tr.patientinformation@nhs.net) or telephone 01623 622515, extension 6927.

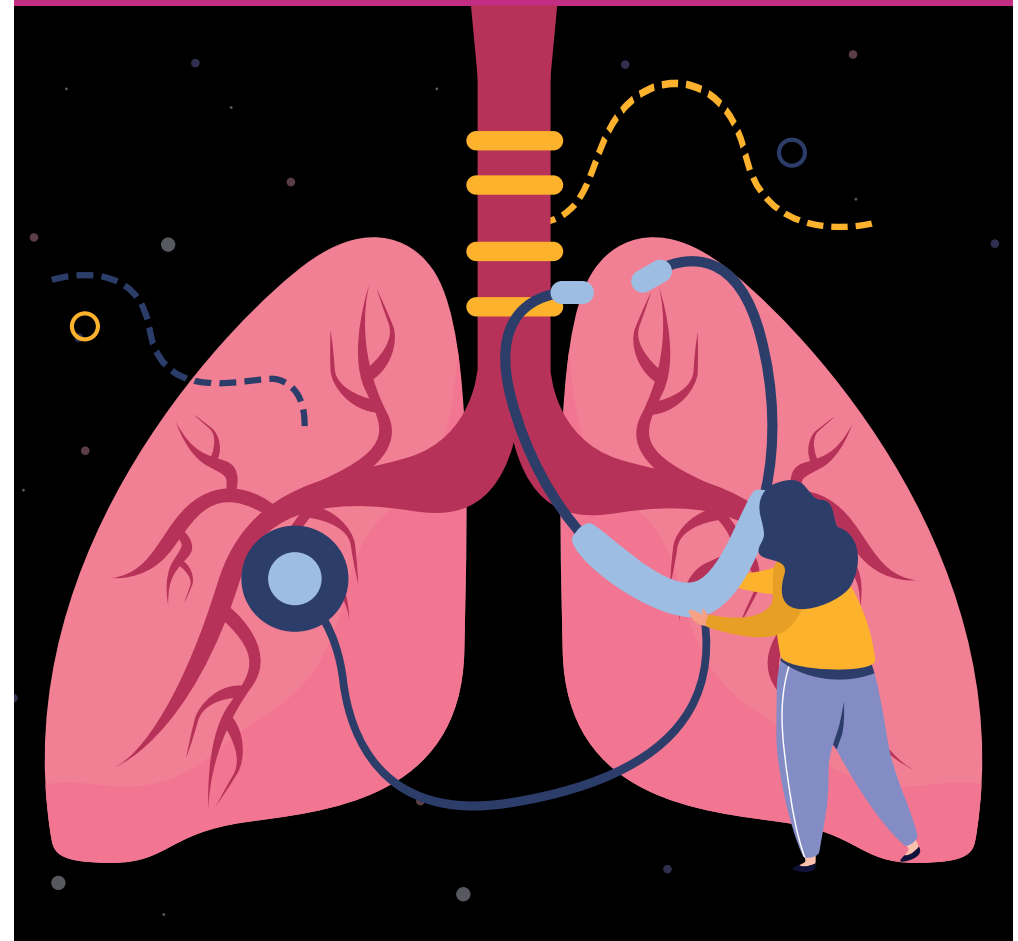
To be completed by the Communications office  
Leaflet code: PIL202407-04-ISS  
Created: October 2022 / Revised: July 2024 /  
Review Date: July 2026

Healthier Communities,  
Outstanding Care

**NHS**  
Sherwood Forest Hospitals  
NHS Foundation Trust

# Induced sputum sampling in paediatrics

## Information for patients, parents, guardians and carers



## What is an induced sputum sample?

Induced sputum samples assist in the diagnosis of certain fungal and viral infections that cannot be diagnosed via mouth or cough swab.

It is a procedure that requires you to inhale a hypotonic saline (salty solution) through a nebuliser, which encourages coughing and the production of sputum (phlegm) from the bottom of the lungs.

Several samples of sputum are then collected, which are sent for testing.

## Why do I need an induced sputum sample?

If your doctor suspects you have a chest infection or wants to check the effectiveness of treatment, sputum samples can be sent for testing.

By testing the sputum samples, it lets us see which, if any, organisms are causing the infection or see whether the organisms are still present in the lungs.

This allows your doctor to select the appropriate treatment for the infection.

## What to expect on the day

Please do not eat anything six hours before your appointment – you can have plain water. It is ok to take your normal medications before the procedure however, the procedure can occasionally cause vomiting so you might want to take them afterwards.

If you normally take an inhaler or have any equipment which you use for chest physiotherapy (e.g. acapella or PEP mask) please bring them with you to your appointment.

The appointment is based at King's Mill Hospital in the Children's Therapy Centre on Level 2. When coming out of the lifts, turn back on yourself to the left, ring the bell outside the double doors and someone will come to let you in.

Your appointment will last up to an hour.

## The process

At the start of your appointment, you will take two puffs of a salbutamol inhaler (this will either be from your own inhaler or will be provided by the physiotherapist).

You will then wait 15 minutes before starting the nebuliser.

The nebuliser will then run for 15-20 minutes. This will involve wearing a facemask and inhaling a salty mist. The physiotherapist will listen to your chest throughout, and your oxygen saturations will be monitored. This is so we can detect any wheeziness.

During the nebuliser you will be asked to complete airway clearance techniques to collect the sputum samples. This may be similar to what you already complete at home or will be guided by the physiotherapist.

We will aim to collect six samples in total but this may be less depending how much sputum is produced. The samples will look watery like saliva; this is normal.

## Possible complications:

- **Nausea/vomiting**
- **Wheeziness**
- **Dizziness/light headedness.**

If any of the above occur, we will be able to stop the procedure.

After the procedure, you will be able to continue with your normal daily activities.

## Further questions?

We're happy to answer any questions you may have prior to your child's procedure.

### Contact details

**King's Mill Hospital: 01623 622515, extension 3256 or 3307.**