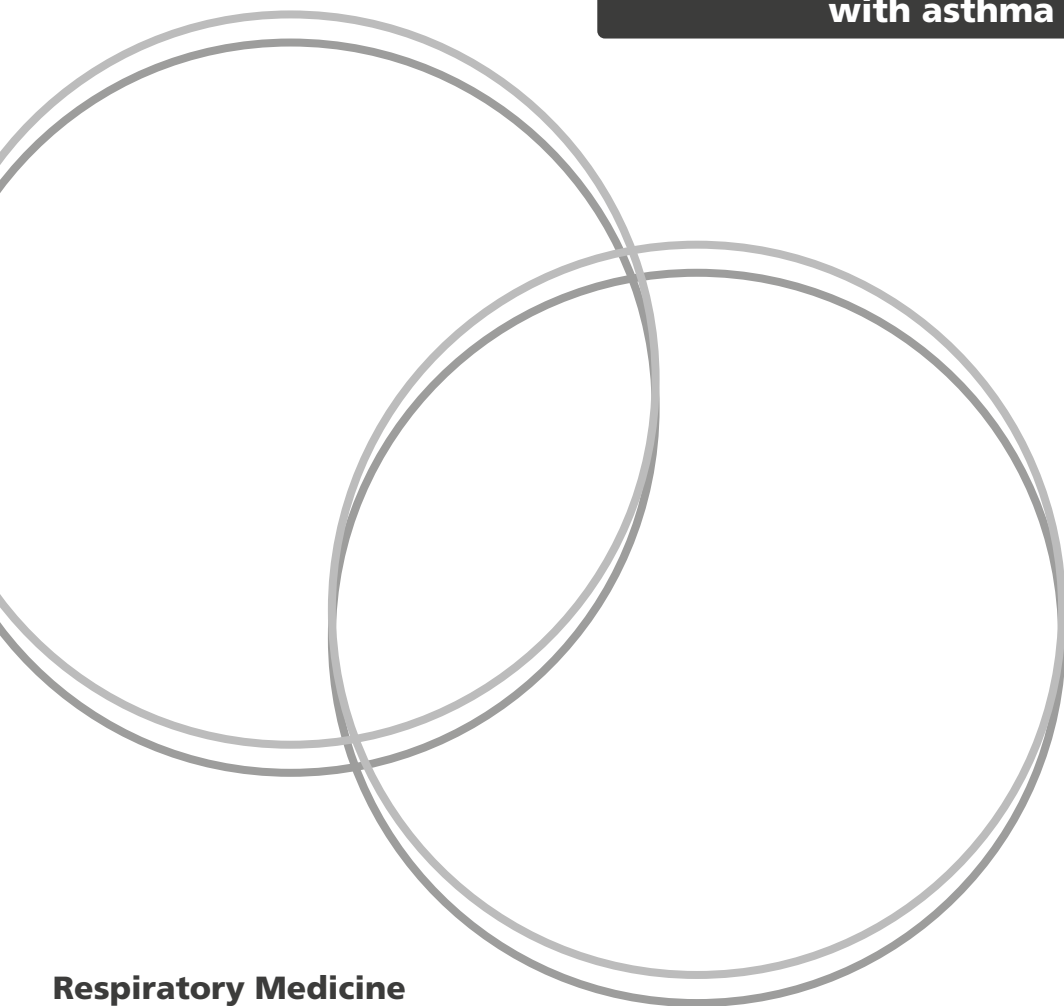


Sputum Induction Test

**Information for patients
with asthma**



What is a sputum induction test?

This is a simple test which involves producing a fresh sample of sputum so it can be analysed in a laboratory. Sputum is the mucus produced in the lungs.

The sputum induction test is a painless procedure. It involves breathing in different concentrations of saline (mild salty water) through a nebuliser which creates a fine mist. You will then be asked to carry out cough-like movements to produce a sample of sputum. There is no other way of collecting this sample.

The respiratory physiologist or severe asthma nurse will explain the test to you in detail beforehand, and will answer any questions you may have.

The full test takes between 30 to 60 minutes.

Why do I need this test?

Your doctor has requested this test to analyse your sputum for different cells that are found in your lungs. The main cell we look for is the eosinophil. This is a cell in the blood that is a marker of inflammation. We will carry out an eosinophil count, to see how much inflammation is in your lungs. This can provide helpful information, which can be used to plan your personalised asthma treatment.

Preparing for the test

Before the test, to help us get the most accurate results, please follow these instructions:

- If you are taking any inhalers, please stop taking them 4 hours before the appointment time, but bring your usual inhalers with you.
- Wear loose fitting clothing to your appointment, to allow your chest to expand freely. You will be asked to take deep breaths in and blow out hard during the test.
- Do not take part in any vigorous exercise for 30 minutes before the appointment. This may tire you out too much before the test.
- Do not eat a large meal within 2 hours before the test. This may make you feel uncomfortable whilst taking the test.

Coming for the test

Before the test starts, the respiratory physiologist or specialist asthma nurse will ask you some questions. These are to check whether there is medical reason why you should not do the test.

Please tell us if any of the following apply to you:

- You have coughed up any blood in the last two months.
- You have had any surgery in the last two months (including eye surgery).
- You have taken any medicine for chest pain in the last month.
- You have been told by a doctor that you have a blood clot.
- You have had a heart attack in the last three months.
- You have had a stroke in the last three months.
- You have a current chest infection requiring antibiotic treatment, or have had a chest infection within the last two weeks.
- You have uncontrolled blood pressure.
- You have certain types of blood vessel problems (e.g. aortic or cerebral aneurysm).
- You have been told by your doctor that you have a collapsed lung, a broken or cracked rib, or a problem with your neck vertebrae.
- You have chest pain on the day of the test.
- You have had to go to the Emergency Department (for your own care) in the last 3 days.
- You are pregnant or breastfeeding.
- You feel unwell on the day of the test.

Are there any risks or side effects?

There are no known risks associated with this test, and we would not expect you to have any side effects during or after this test. However, if you have asthma you may find it causes a temporary sensation of chest tightness. For this reason, the test is done step by step, with careful monitoring. You will be given reliever medication (salbutamol) before the test, to help prevent this sensation.

After the test you may also feel a little tired, as you are likely to have to do the test a number of times. This is normal and you should recover quickly.

If you have any chest pain or other problems, such as dizziness or feeling light-headed during the test, please tell the respiratory physiologist or severe asthma nurse. They will stop the test and wait until you feel well enough to continue, or give you treatment if necessary.

Results of the test

If you are able to produce a sample, it will be sent for analysis.

You will be told your results at your next hospital appointment, or a letter may be sent to your GP or the doctor who referred you for the test.

Contact details

If you would like more information, please contact the **Oxford Severe Asthma Clinic**.

Telephone: **01865 227 242**

(9.00am to 5.00pm, Monday to Friday)

Answerphone available outside of hours.

Email: orh-tr.severeasthmaclinic@nhs.net

Further information

If you would like an interpreter, please speak to the department where you are being seen.

Please also tell them if you would like this information in another format, such as:

- Easy Read
- large print
- braille
- audio
- electronic
- another language.

We have tried to make the information in this leaflet meet your needs. If it does not meet your individual needs or situation, please speak to your healthcare team. They are happy to help.

Author: Respiratory Medicine Team
January 2024
Review: January 2027
Oxford University Hospitals NHS Foundation Trust
www.ouh.nhs.uk/information



Making a difference across our hospitals

charity@ouh.nhs.uk | 01865 743 444 | hospitalcharity.co.uk

OXFORD HOSPITALS CHARITY (REGISTERED CHARITY NUMBER 1175809)

