

Willesden Community Diagnostic Centre

Community Diagnostic Centre (CDC)

Information for patients, relatives and carers

Welcome to the Community Diagnostic Centre (CDC)

Our Community Diagnostic Centre (CDC) provides specialist respiratory and allergy testing for children aged 5 to 17 years. The tests help diagnose and monitor asthma, allergies, and airway inflammation, and make sure your child gets the treatment they need.

What tests will you do?

Your child might have one or more of the following tests:

- **FeNO (Fractional Exhaled Nitric Oxide) test**, which measures airway inflammation linked to asthma.
- **Spirometry with bronchodilator response**, which checks lung function before and after using an inhaler.
- **Skin prick testing (SPT)**, which identifies allergic triggers such as pollen, dust mites, and pets.
- **Point-of-care eosinophil count (finger-prick test)**, which measures inflammation linked to allergic asthma.

All these tests are safe and give us quick results to help guide treatment decisions. We will give you more information about each of the tests your child is having.

Why are these tests important?

These tests are important because they:

- confirm an asthma or allergy diagnosis
- make sure we give your child the right treatment
- monitor whether medication is working
- help stop your child using unnecessary medication by identifying the true cause of symptoms.

How should we prepare for the tests?

To get accurate results, please follow these guidelines before your child's appointment:

FeNO test – no food, drink, or exercise 1 hour before testing. Avoid smoking or smoke exposure 2 hours before.

Spirometry and bronchodilator response – no asthma reliever inhalers (like Salbutamol/Ventolin) 6 hours before testing unless we tell you otherwise. No caffeine for 4 hours before.

Skin prick test – stop antihistamines and cough medicine 7 days before testing. Wear short sleeves for easy access to the forearm.

POCT eosinophil count – you don't need to do any special preparation. Make sure your child is well-hydrated.

If you are unsure whether your child can stop any medication before testing, please check with your healthcare provider when you register at the CDC.

What can we expect on the day?

1. Registration

When you arrive at the CDC, we will confirm your child's identity, GP details, and current address.

2. FeNO test (estimated time: 5 minutes)

Your child will breathe slowly and steadily into a special device to measure airway inflammation.

This is painless and only takes a few minutes.

3. Spirometry with bronchodilator response (estimated time: 30–45 minutes)

Your child will take a deep breath in and then blow out as hard and fast as possible into a mouthpiece.

We'll do the test again after using a reliever inhaler (if needed) to see if lung function improves.

4. Skin prick testing (estimated time: 25 minutes)

We will put 10 to 12 tiny drops of common allergens on your child's forearm.

Then we use a small lancet (tiny needle) to gently prick the skin (this is not painful but they might feel a small scratch).

After 15 minutes, we check for small bumps (wheals) that indicate an allergic reaction.

5. Point-of-care eosinophil count (estimated time: 10 minutes)

We make a small prick in your child's finger to collect a tiny drop of blood.

We test the sample immediately to measure eosinophil levels. These levels help us find out if your child has allergic asthma.

What do the results mean?

Your referring doctor will explain your child's results, which will help guide their treatment plan.

The normal range for **FeNO test (ages 5 to 16 years)** is FeNO less than 20 ppb. If your child has FeNO more than 35 ppb, this suggests airway inflammation.

The normal range for **FeNO test (ages 16 and over)** is FeNO less than 25 ppb. If your child has FeNO more than 50 ppb, this suggests airway inflammation.

The normal range for **spirometry** is normal lung function. If your child has reduced airflow, this could mean they have asthma.

The normal range for the **bronchodilator response** is no significant change before and after using the inhaler. If their lung function improves significantly after the inhaler, it's likely they have asthma.

The normal range for **skin prick testing** is no reaction. If your child has a raised bump bigger than 3mm, they have sensitivity to that allergen.

The normal range for the **eosinophil count** is less than 300 cells/ μ L. If they have more than 500/ μ L, this suggests allergic asthma.

Your child's doctor will talk to you about the best next steps based on their results.

After the tests

Your child can return to normal activities immediately.

We review the results on the same day and share them with you. We'll also send a report to your child's GP or the doctor that referred them. They might adjust their treatment plan if they need to.

Are there any risks?

These tests are very safe and well-tolerated. Some mild side effects may include:

- **FeNO and spirometry:** light-headedness after blowing out forcefully (goes away quickly)
- **skin prick testing:** mild itching or redness on your child's forearm (goes away within 30–60 minutes)
- **eosinophil count:** minor discomfort from the finger prick (heals quickly)

Severe allergic reactions from skin prick testing are extremely rare, and emergency medication is always available on-site.

Frequently asked questions (FAQs)

1. How long will the whole appointment take?

You can expect to be at the CDC for 2 to 3 hours, depending on how many tests your child needs.

2. Can my child eat before the test?

Yes, but they should avoid caffeine, large meals, and fizzy drinks before spirometry and FeNO testing.

3. Will my child need all four tests?

Not always. The team will decide which tests are needed based on their symptoms and medical history.

4. What if my child is nervous?

The tests are painless, and we will explain everything carefully. You can stay with your child throughout all the tests.


5. When will we get the results?

Results are usually available immediately and will be sent to the referring doctor.

More information

If you have any questions, please ask your healthcare provider or contact:

 Willesden Community Diagnostic Centre (CDC)

 Phone: 020 370 46578

 Email: Imperial.CDCLungFunctionLab@nhs.net

 Website: <https://www.imperial.nhs.uk/our-locations/willesden-community-diagnostic-centre>

How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3312 7777** (10.00 – 16.00, Monday to Friday). You can also email PALS at imperial.pals@nhs.net The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street
London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: **020 3312 1337 / 1349**

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team:

imperial.communications@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Willesden Community Diagnostic Centre
Published: June 2025
Review Date: June 2028
Reference Number: 5264
© Imperial College Healthcare NHS Trust