

Nerve Conduction Studies (NCS)

Information for Parents and Carers



This leaflet will provide you with information about attending for a Nerve Conduction Study (NCS).

Why has my child been referred for this test?

Your child has been referred to the department by their consultant or GP. Children are referred for Nerve Conduction Studies (NCS) for a variety of reasons but most commonly they are used in the investigation of children who complain of weakness or strange sensations in their arms or legs.

Your child does not have to be experiencing their symptoms at the time of the test.

What is an NCS and what does it involve?

NCS are a way of testing nerves and muscles to see how well they are working. This is likely to include nerves and muscles in the hands and feet.

Usually a doctor will perform the test. He/she will explain the procedure to you and take any relevant medical history. Feel free to ask questions about the test.

Small stickers are applied on the skin over the nerve or muscle to be tested. A nerve stimulator (a handheld device with two soft felt prongs or special metal rings) is pressed over another part of the nerve a small distance away.

It is often necessary to move the stickers and stimulator to test different nerves. Sometimes it is necessary to do additional testing called Electromyography (EMG). This is a test of muscles and involves inserting a very fine needle into a muscle and recording its electrical activity. The activity is played back on a computer and can be noisy!

What will my child feel during the test?

To test the nerve pathway in the hand/foot, the test will involve a small electrical pulse being applied to either your child's wrist or foot. This will make their muscle twitch for a short while, but is not painful.

What preparation is needed?

It is useful to make sure hands and feet are not too cold, as this can affect the test.

If your child is on treatment, they should take their medication as normal and at the usual time.

Please ensure your child is wearing loose-fitting clothing.

Bracelets, rings and watches will have to be removed during the test.

How long will the test last?

The test takes between 30-60 minutes.

What are the side effects of the test?

There are no after effects associated with this test and after the investigation your child will be able to go home or to school.

When will I receive the results?

You will not receive the results on the day of the test. A full report will be sent to the consultant/GP who referred your child for the test.

Additional information

Occasionally some children will find the test difficult to tolerate. If you feel that your child will struggle with any aspect of the test, please telephone the department. We are happy to accommodate any special arrangements.

The 'What? Why? Children in Hospital (WWCIH)' charity has made a video to show you what happens in hospital. You could watch the video alone or with your child, depending upon their age and ability. Type the following link into your internet browser to watch the video:

www.wwcih.org.uk/nerve-conduction

Remember that the videos are an example and that your child's test might be a bit different.

Keeping your appointment

If you cannot keep your appointment, or have been given one that is unsuitable, please change it by phoning the number on your appointment letter. Your call will give someone else the chance to be seen and will help us keep waiting times to a minimum.

Public transport and travel information

Bus details available from: Lothian Buses on **0131 555 6363** or www.lothianbuses.co.uk
Traveline Scotland on **08712002233** or www.travelinescotland.com

Train details available from: National Rail Enquiries on **03457 484 950** or www.nationalrail.co.uk

Patient Transport

Patient Transport will only be made available if you have a medical/clinical need. Telephone **0300 123 1236** *calls charged at local rate up to 28 days in advance to book, making sure you have your CHI Number available (this appears on your appointment letter). Hard of hearing or speech impaired? Use text relay: **18001-0300 123 1236*** (calls charged at local rate). To cancel patient transport, telephone 0800 389 1333 (Freephone 24 hr answer service).

Interpretation and translation

Your GP will inform us of any interpreting requirements you have before you come to hospital and we will provide an appropriate interpreter. If you are having this procedure as an existing in patient, staff will arrange interpreting support for you in advance of this procedure. This leaflet may be made available in a larger print, Braille or your community language.

Contact information

Department of Clinical Neurophysiology
Royal Hospital for Children and Young People
Edinburgh

Telephone: **0131 312 1506**