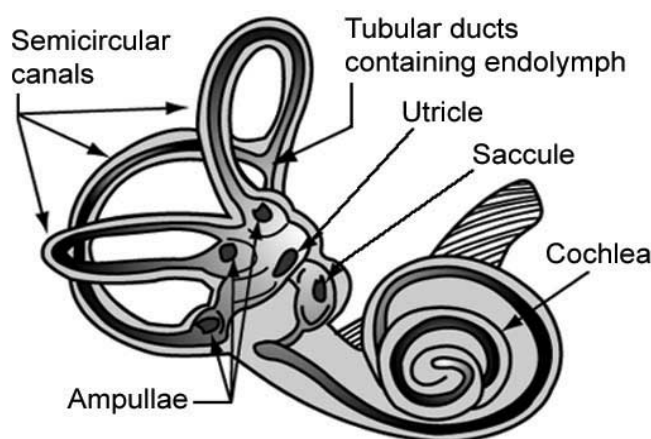


# The Head Impulse Test (HIT)

This leaflet is for patients with symptoms of dizziness who are about to undergo the Head Impulse Test (HIT). It is one of the tests we can use to evaluate the function of the ears and their contribution to your balance. The tests we choose to evaluate your dizziness will depend on your individual symptoms. This leaflet covers what you can expect during the test.

## What is the purpose of the Head Impulse Test (HIT)?

Some types of dizziness and balance problems can originate in the inner ear or the structures (nerves) attached to the ear, called the 'vestibular system'. Each of our tests explores this system in a different way. The inner ear has three sets of semi-circular canals which sense motion in three dimensions. The HIT measures the function of these canals and the nerves connected to them in response to fast head movements, to establish if there is a reduction in function. It may not tell us the exact cause of your dizziness but the test can help locate if your dizziness is coming from these structures. This can help narrow down the possible causes for your symptoms.



## What you can expect during the test

If you are sent these instructions, we may consider using this test at your appointment. These instructions aim to explain the procedure to help reduce the time it takes to perform and to answer more common questions, in advance of your appointment.

- You may be required to wear video goggles, although in some cases we may perform the test without goggles. These goggles will measure your eye movements. Our ears play an important role in how we move our eyes and we use this information to work if your symptoms are coming from changes in the function of your semi-circular canals.
- Your clinician will adjust the goggles for you to make sure they fit correctly. While the goggles may be a little heavy, the testing is only for a short period and **you should not touch the goggles**.
- You will be seated. You will be asked to focus on a point (for example a dot on the wall) while we turn your head rapidly, in different directions This will be to one side or the other;

but may be up and down, all the time keeping your vision fixed on the dot.

- This testing will typically take 5 minutes or less.
- When we have collected enough measurements for each direction that we require, to ensure our measurements are consistent, this will be the end of HIT test.



### What you may experience

You may have no symptoms at all during testing, but some patients can experience dizziness with the head movements (which may be similar to their symptoms, particularly if they occur on head movement).

It is less typical for you to experience neck discomfort and if this occurs, you should tell us as we may need to stop the test.

### Are there precautions for performing the HIT test?

There are times where the HIT procedure should not be performed. In particular it may not be suitable to perform in patients with some types of neck, back or blood circulation problems or those who have had a recent stroke. If you have any concerns you should raise these with your clinician before your appointment or before undertaking the test.

In addition to asking about these conditions, you will be asked if you are able to perform the movements passively, in order to check your suitability.

### Are there any potential risks?

As with any procedure, there can be some small risks to performing HIT test. These risks are rare but still possible:

- **Damage to the spine** – a disruption to the nerve supply and the function of those nerves below the injury, causing permanent injury;
- **Stroke/ischemic event** – disruption of the blood supply to your head / brain, causing permanent injury;
- **Loss of consciousness** – through a disruption of the blood supply or the nerve supply to the neck.

Although there is a possibility of these risks occurring in principle, the likelihood of them happening is very low and reports of these events are uncommon. Therefore these risks should be balanced against the fact the procedure may help us locate the problem of your dizziness or balance, in your ear.

If you have any questions, contact your clinician to discuss them before you attend the clinic, so we are able to use the time effectively in clinic to perform testing.

### **Can I decline to have the HIT procedure performed?**

If you do not want to go ahead or have any questions about the HIT manoeuvres, please contact the clinician before attending your appointment, to reduce the time taken in the clinic and reduce the risk of COVID-19 infection to you and others.

### **Contacting us**

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**Please ask if you need this information in another language or format.**

Audiology Department, August 2022.

Next review due: August 2024