Tests and diagnosis

If your doctor thinks you might have leukaemia or another blood cancer, they will arrange for you to have blood tests. Once the results are back, you might also have a bone marrow test. You may have other tests too, depending on your symptoms.

> **Many people who have these tests turn out not to have leukaemia. There are many conditions with similar symptoms and signs, like infections, low vitamin levels or autoimmune conditions.**

Blood tests



You might have a few blood tests. These could be at your GP, your hospital or in A&E.

These might include blood tests to:

- Measure your numbers of red blood cells, white blood cells and platelets
- See how your blood cells look under a microscope
- Look for gene changes in your blood cells
- Find out what proteins your blood cells are making
- Check how your blood clots
- Check for infections
- Check your general health, including how well your liver and kidneys are working

Back to top

Bone marrow tests



If your blood tests show you might have leukaemia or another blood cancer, you may need a bone marrow test to confirm it. This is also called a bone marrow biopsy or bone marrow aspiration.

Leukaemia Care Registered Charity Number 1183890. Scotland Registered Charity Number SC049802
Helpline: 08088 010 444

You go to hospital for this test. Unless you are already staying in hospital, you can usually go home the same day. You should not drive yourself.

- First, you have medicine to numb your skin. Some people may have a sedative too, to help them feel sleepy and relaxed.
- Then a doctor uses a special needle to take a sample of the spongy marrow from inside a bone. This is usually from the back of your pelvis.
- Your samples go to the lab, where scientists look at them under a microscope. They may also test your bone marrow for gene changes.

Bone marrow tests help doctors make an accurate diagnosis and choose the most suitable treatment for you.

Back to top

Lumbar puncture



Depending on your symptoms, you might need a test to collect a sample of the fluid that surrounds your brain and spinal cord. This is called a lumbar puncture. Doctors use it to check if there are any leukaemia cells in your central nervous system.

You go to hospital for this test. Unless you are already staying in hospital, you can usually go home the same day. You should not drive yourself.

- You have an injection to numb a small area of your lower back first.
- Then your doctor puts a needle between the bones in your spine to collect a sample of fluid.
- The sample goes to the lab for testing.
- You need to lie down for at least 30 minutes after the test.

It may be uncomfortable during and after a lumbar puncture, and you might get a headache. Ask your doctor or nurse what painkillers you can use if you need them.

Back to top

Leukaemia Care Registered Charity Number 1183890. Scotland Registered Charity Number SC049802
Helpline: 08088 010 444

Other tests

Depending on your symptoms, you might have other tests. These could include:



X-rays or scans



Tests to check your heart and breathing, or take a sample of a lymph node (a biopsy)

Back to top

Lab tests



Your doctor might send your blood and bone marrow samples to the lab for specialist tests. They may check what proteins are on the surface of your leukaemia cells, or what genetic changes they have.

Back to top

About our information

This information is aimed at people in the UK. We do our best to make sure it is accurate and up to date but it should not replace advice from your health professional. Find out more about our information.

Page last reviewed: 31 January 2026
Updated January 2026
Next review due: 31 January 2029