

# Monitoring BhCG hormone levels in early pregnancy

## Early Pregnancy Assessment Unit

Last reviewed: March 2026

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Information for Patients

Leaflet number: 1350 Version: 2

### Introduction

When you are pregnant, a hormone called  $\beta$ hCG (pronounced “beta-HCG”) is made by the placenta. Its full name is Beta-human Chorionic Gonadotrophin. Checking the level of this hormone in the blood gives important information about your pregnancy.

This leaflet will give you some information about why we are checking your  $\beta$ hCG levels.

### Why do I need to have a $\beta$ hCG blood test?

You have had an ultrasound scan because you have had pain or bleeding in the pregnancy or you have previous miscarriage(s) or ectopic pregnancy. The ultrasound was unable to clearly see where the pregnancy is growing. This is called a pregnancy of unknown location.

**There are 3 possibilities with a pregnancy of unknown location:**

1. The pregnancy is in the womb. It is in the right place but it is too small for us to see it. It might be too early in the pregnancy to see.
2. It is possible that you may have had a miscarriage. This maybe why we cannot see the pregnancy on the scan.
3. The pregnancy is not in the space inside the womb (cavity). It is growing outside the womb. This is called an ectopic pregnancy.

### What is an ectopic pregnancy?

This is when a pregnancy grows outside the womb cavity. This happens about 1 in 50 pregnancies. Most of the time the pregnancy did not move along the fallopian tube as it should. Instead it begins to grow inside the tube. Rarely the pregnancy can be growing in other places like on the ovary or in a caesarean section scar.

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.uhleicester.nhs.uk](http://www.uhleicester.nhs.uk) for maps and information about visiting Leicester’s Hospitals  
To give feedback about this information sheet, contact [uhl-tr.informationforpatientsmailbox@nhs.net](mailto:uhl-tr.informationforpatientsmailbox@nhs.net)

If an ectopic pregnancy is not treated, the growing pregnancy might burst (rupture). This will cause severe bleeding inside the body that can be life threatening. The  $\beta$ hCG blood tests along with the ultrasound scan can help pick up ectopic pregnancies so we can offer you treatment before the tube bursts.

## What does the test involve?

We will take a sample of blood. We send it to the laboratory to measure the amount of  $\beta$ hCG.

We will need at least 1 more sample of blood 2 days later. We compare the amount of  $\beta$ hCG in each sample to see if there has been a rise or fall in the hormone level.

## What happens now?

Most patients will be able to go home after the 1st blood test. You will then come back after 2 days and have a 2nd test. The nurse from the Early Pregnancy Assessment Unit (EPAU) will contact you with the result of the 2nd test. They will also check to see if you are well. Depending on the results of the  $\beta$ hCG tests, your symptoms, and the most likely of the 3 possibilities, the nurse will talk about the plan with you.

They will tell you when to return for a more  $\beta$ hCG blood test or scan. If we are concerned about your blood test result, we may ask you return to hospital for review by a consultant.

## What do the $\beta$ hCG results mean?

- In a normal healthy pregnancy the  $\beta$ hCG levels rise quickly. Often nearly doubling in 48 hours (2 days).
- After a miscarriage the  $\beta$ hCG levels will often fall quickly.
- In an ectopic pregnancy, the  $\beta$ hCG levels may rise or fall or stay about the same.
- Sometimes the first  $\beta$ hCG level is more than 2000, so an ectopic pregnancy is much more likely even before the 2nd  $\beta$ hCG test. At this level we should be able to see the pregnancy if it were growing in the right place inside the womb cavity if the scan is done internally through the vagina. If the first result is more than 2000, and you have not had a scan yet, the EPAU team will quickly arrange this for you.
- If we think you might have an ectopic pregnancy, we will ask you to return to hospital for review by the consultant. You may need to stay in overnight.
- If you have had 3  $\beta$ hCG blood tests that are not falling quickly and we still do not know where the pregnancy is developing, you will be asked to come in to be seen by a consultant or the Advanced Nurse Practitioner. They may do a review, a scan and talk about other test. For example, taking a biopsy from inside the womb to work out where the pregnancy is growing.

**If there is anything you do not understand, please talk to a member of the Early Pregnancy Assessment (EPAU) or Gynaecology Assessment Team (GAU).**



## What symptoms should I look out for?

1. Any new or increasing / worsening pain in your tummy.
2. Feeling light headed / dizzy or fainting especially if you are also being sick (vomiting).
3. Pain at the tip of your shoulder.
4. Vaginal bleeding which is heavier than your normal period. Needing to change pads more often every hour.

If you have any of these symptoms or are worried at all, please call the **Gynaecology Assessment Unit** at any time, day or night phone: **0116 258 6259**

## What shall I do over the next few days?

- You should rest as much as you are able to.
- Contact the Gynaecology Assessment Unit **0116 258 6259** at any time, day or night if you notice any worsening in your symptoms or are worried at all.
- Keep your phone close by you so that we can contact you and stay within easy reach of the hospital at all times.

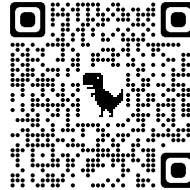
If you have not had the results of your blood test by 3pm the next day please call Early Pregnancy Assessment Unit (EPAU) to speak to the Nurse Specialist: **0116 258 6322**

## Support groups

Miscarriage association:

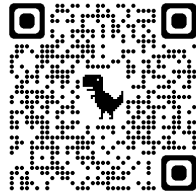
[www.miscarriageassociation.org.uk/](http://www.miscarriageassociation.org.uk/)

Phone: **0192 420 0799** (Monday to Friday, 9am to 4pm)



Ectopic pregnancy trust:

[ectopic.org.uk/](http://ectopic.org.uk/)



اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।

Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email [uhl-tr.equalitymailbox@nhs.net](mailto:uhl-tr.equalitymailbox@nhs.net)