Induction of labour

Royal Berkshire NHS Foundation Trust

This leaflet explains what induction of labour is, why it may be needed, what the risks and benefits are, and what to expect if you are induced. It is hoped that this leaflet will help you make an informed decision about having an induction of labour.

What is induction of labour?

In most pregnancies labour starts naturally between 37 and 42 weeks, leading to the birth of your baby. Up to one in three women / birthing people will be admitted for induction of labour in the UK. (NICE July 2021). Induction of labour is a process designed to start labour artificially.

Why may induction be recommended?

There are a number of reasons why induction may be recommended. These are usually when it is felt you or your baby's health is likely to benefit from an earlier birth, rather than waiting for labour to start by itself. It is important that you are aware of the reason for your individual circumstances so that you can make an informed decision about induction of labour. The following information may be useful however speak to your midwife or obstetrician.

1. **If you have a medical condition**, for example gestational diabetes or pre-eclampsia (high blood pressure) or your baby is not growing as expected. Your obstetrician (doctor specialising in childbirth) or specialist midwife will discuss your individual circumstances with you.
2. **If you go "overdue".** Most women / birthing people will go into spontaneous labour by 41 weeks (NICE 2022). The chart overleaf shows the national average in the UK. The first column shows the gestational age of the baby, in weeks. The second column shows the percentage of babies born at each stage. The third column shows this percent if you take into consideration all babies born by that stage. So for example, while 32.5% of babies are born between 40+0 - 40+6 weeks, the third column shows that by 40+6 weeks, 82.8% of babies have been born.
   The risk of stillbirth is very low in healthy pregnancies; however, pregnancies that are induced at 41 weeks are less likely to be affected than those that are not induced until 42 weeks.
   The risk of stillbirth in a healthy pregnancy is small: studies have shown 4 per 10,000 babies (0.04 per cent) are stillborn at 41 weeks, compared to 35 per 10,000 (0.35 per cent) babies at 42 weeks. This means that more than 9,960 per 10,000 (99.6 per cent) are born alive irrespective of the timing of the induction. The risk of your baby needing admission to the neonatal unit is also slightly lower if you are induced at 41 weeks rather than continuing your pregnancy to 42 weeks (300 babies per 10,000 at 41 weeks and 440 per 10,000 at 42 weeks).
   The way you give birth is not affected by the gestation at which you are induced; therefore, we recommend considering induction of labour from 41 weeks.
3. **If you were 40 years or older when you became pregnant.** Women / birthing people who become pregnant after the age of 40 are known to have a similar risk of stillbirth at 40 weeks as a younger woman at 41 weeks. Again this risk is very small but significantly greater in

comparison. The overall risk of stillbirth at 40 weeks is 1 in 1000 for women / birthing people under the age of 35 and 2 in 1000 for women / birthing people over the age of 40.

Gestational age (weeks)	Proportion of spontaneous labours that started at this gestational age	Cumulative proportion of spontaneous labours that started by this gestational age
31 weeks and under	2.4%	2.4%
32+0 to 36+6 weeks	5.3%	7.7%
37+0 to 37+6 weeks	5.1%	12.8%
38+0 to 38+6 weeks	12.1%	24.9%
39+0 to 39+6 weeks	25.4%	50.3%
40+0 to 40+6 weeks	32.5%	82.8%

Women or birthing people over the age of 45 are at risk of other complications too and will be encouraged to have an individualised plan of care with their obstetrician.

4. **Special circumstances:**
   Large baby: If your baby is estimated to be large on the ultrasound scan and you do not have gestational diabetes, there is usually no reason to consider induction of labour. Although the risk of the baby's shoulders getting stuck (shoulder dystocia) is reduced, if you are induced, the overall outcomes for the baby are no different and the induction does increase your risk of significant perineal tearing (3rd and 4th degree tears).
   Previous CS: If you have had one previous Caesarean birth, you will have an opportunity to discuss your options around induction of labour or repeat Caesarean birth if you have not gone into spontaneous labour by your estimated due date. The risk of the scar opening (scar rupture) does increase during an induction; however, the overall risk remains very low, with only 2 out of 200 births after induction experiencing a scar rupture, as opposed to 1 out of 200 births for a spontaneous birth. We would aim to use the mechanical method of induction to minimize this risk further.

What are the alternatives to induction?

1. **Watch and wait**

   It is your choice whether to accept an induction of labour. If you choose not to, your midwife or obstetrician will talk to you about your individual situation; however, if the induction was recommended due to you being overdue, you will be offered additional monitoring within the Day Assessment Unit from 42 weeks (40 weeks if over the age of 40):

   - Alternate day checks of your baby's heartbeat using a piece of equipment called an electronic fetal heart rate monitor (CTG or cardiotocograph).
   - Twice weekly ultrasound scans to check the depth of amniotic fluid (or 'waters') surrounding your baby.

   These tests will help us to monitor the health of your baby at the time but cannot reliably predict future complications

2. **Planned Caesarean birth**

   If you are considering having a planned Caesarean birth rather than induction, we recommend you read the leaflet written by The Royal College of Obstetricians and Gynaecologists as this details the additional risks and benefits and then discussing it with your midwife or obstetrician https://www.rcog.org.uk/for-the-public/browse-all-patient-information-leaflets/choosing-to-have-a-caesarean-section/

Can I be induced before my due date?

We do not usually offer induction of labour for women / birthing people and babies without clinical indication before 39 weeks as there is some evidence to suggest that there are risks to the baby. For example, babies born between 37 and 38 weeks are twice as likely to be admitted to the neonatal unit for specialist care than those born after 39 weeks. There is also some evidence to suggest that long term outcomes are affected by the gestation at which a baby is born, due to the ongoing development of their brain, which continues throughout pregnancy. The risk of the baby having special educational needs when compared with birth at 40 weeks, is thought to increase by 36% if born at 37 weeks (indicating an actual risk of 6%) and drops progressively to a risk of 4.4% at 40 weeks. Recent data from the UK Millennium Cohort Study confirmed the finding that children born between 37-38 weeks were more likely or fail to achieve the expected level of attainment in primary school but there was no association between early term birth and poorer attainment at secondary school.

What are the benefits of an induction?

- You are given a date to come into hospital to give birth which is important for some women / birthing people.
- You are likely to give birth earlier than if you wait for labour to start by itself.

What are the negative aspects of having an induction?

- The induction process can be long and there can be delays in your induction journey, particularly when the maternity unit is busy. You will usually start the induction process on the Induction of Labour Suite and move to Delivery Suite when you are ready to have your waters broken (see 'What happens' below). Local data tells us that the average length of time between admission for induction and moving to Delivery Suite to have your water s broken is 30 hours. Your baby will then be born within the next 24 hours.
- Studies have shown that women / birthing people often report being less satisfied with their birth experience when they undergo an induction of labour compared with those who do not have an induction.
- Your labour is more medicalised especially if you need the hormone drip. Your choices around where to give birth and using the birthing pool are likely to be affected.
- You are more likely to need help to birth your baby. Women / birthing people who are induced have a greater chance of needing to have an emergency Caesarean. 40% of first time mums will need a Caesarean birth following induction of labour, compared with 16% who do not have an induction. 10% of women / birthing people who have given birth vaginally before may need a Caesarean birth during induction, compared with 3% in spontaneous labour. There is no significant difference in the chance of having an instrumental birth (forceps or ventouse).

	Induction of labour	Spontaneous labour
Chance of emergency CS – women / birthing people giving birth for the first time	40%	16%
Chance of emergency CS – women / birthing people who have had a previous vaginal birth	10%	3%

What happens when you decide to have an induction of labour?

Your community midwife or obstetrician will talk to you during your pregnancy about induction of labour. This is so that you have an opportunity to think about whether this is something you would like to consider should it be suggested for you and your baby. If induction is recommended and you are happy to go ahead the midwife or obstetrician will request this within your electronic records. The induction team will then schedule the exact date for your induction and contact you by phone or email to let you know. As this is a planned situation we usually need to arrange inductions several weeks in advance therefore it is quite common for women / birthing people to go into labour spontaneously before they reach their induction date. On the day of your induction you will be contacted to confirm if we are in a position to start your induction, as planned. You will be informed by the Induction of Labour (IOL) midwife immediately when a space is available, please note that this could be during the day or night. While you are waiting at home we advise you to relax and rest, eat and drink normally.
You will be admitted to the Induction of Labour Suite on Marsh Ward Level 4 (IOL suite) where

you will usually remain until your labour has progressed or you are ready for the next stage of your induction, and you are transferred to the birthing environment for ongoing labour care. When you arrive the midwife will show you to your bed, and check your blood pressure, temperature and pulse. Your baby's heartbeat will be monitored electronically.

The midwife will offer you a vaginal examination to see if the neck of the womb (cervix) is open or ripe and advise you of the recommended method of induction. We will give you a 'Welcome to the Induction Suite' leaflet, which details further useful information about being an inpatient in this ward.

Delays during the induction process

Induction of labour is a two-part process. The first part involves preparing your body by softening your cervix and preparing it to open. The second part involves breaking your waters and in some cases having an oxytocin drip to encourage your contractions. Sometimes, there are unavoidable delays between your given induction date and the day you actually deliver your baby. A bed is first required on the Induction of Labour Suite to start the induction process, and then a room is required on either the Delivery Suite/Rushey Ward (if appropriate) where you actually give birth.

We will always wait until it is absolutely safe for both you and your baby before we can move you from the induction suite to delivery suite. At these times the IOL midwife and the consultant obstetrician will constantly be reviewing the situation to ensure safety for you and other women / birthing people. The IOL midwife will aim to keep you updated throughout the day/night on the bed capacity and will invite you in once a bed is available.

As well as peaks of activities, we can also have periods when the IOL suite has beds available with no admissions due. On occasions like this, we will look at the next days planned inductions and may call you to ask if you would like to come in a day earlier to start the process if it is right for you and your baby clinically indicated.

Different ways an induction prepares your body for labour

Next we will take you through the different methods of induction that we offer at the RBH.

Using CRB – cervical ripening balloon

If the cervix feels closed it needs to be prepared for labour as the first step of the induction process. This can be done by using a hormone pessary (see prostaglandin below) or a drug free method. The cervical ripening balloon is a drug free device which is gently passed through the cervix. This usually does not begin contractions, but should help your cervix to open and thin out which is the first part of labour beginning.

Two balloons are then inflated with salty water so that gentle pressure is applied to both the inside and outside of the cervix. The tail of the balloon can be tucked into your underwear and you may wish to wear a second pair of pants so that it can be tucked in comfortably between the two.

Over a period of 12 to 24 hours, this gently softens and opens the cervix so that it is ready for the next stage. You may experience some mild to moderate period-like cramps following

insertion. However this method of cervical ripening is unlikely to cause any uterine contractions or start labour and therefore you are free to mobilise or rest as you wish once the balloon has been inserted.

Image courtesy of Cook Medical

You may find the process to insert the balloon a little uncomfortable however your midwife will offer you Entonox (gas and air) to use if you wish.

You may also experience some abdominal discomfort, usually 4-6 hours after the balloon is inserted and you will be offered some simple pain relief such as paracetamol. This should settle after a few hours, but if it doesn't then please speak to the midwife who will be able to advise you.

It's very important to make sure you have a wee at least every 3-4 hours and we would encourage you to eat and drink as normal.

If the balloon falls out within 24 hours, this is usually because your cervix has now opened enough to have your waters broken. Otherwise, the balloon will be removed between 12 and 24 hours after it has been inserted and you will be assessed to see whether it is possible to break your waters. At this point there needs to be a room on the delivery suite and a midwife to provide one to one care which is why there is sometimes a delay until this can be provided.

You may need to have your legs in the stirrups in order to have your waters broken but you will again be offered gas and air to help you to relax and reduce pain. For some women / birthing people, it may not be possible to break your waters after the balloon has fallen out or is removed. We will then talk to you about the next course of action which may be to offer you one of the pessary options as described below.

Using prostaglandins (Propess)

This is an alternative method of preparing your cervix using an artificial hormone. This is given in a pessary which contains prostaglandins that are released at a steady rate. This should start to soften and open the cervix.

The pessary looks like a small tampon and has a long tape attached to it, which enables the midwife to remove the pessary after 24 hours has passed. The tape may be tucked into your vagina so you should be careful not to pull on it.

Once the pessary have been inserted, you will be asked to lie on your side for 30 minutes to allow the pessary to absorb moisture from your vagina, which will make the pessary swell and prevent it from falling out. After this time, you will be able to move around as normal.

24 hours after insertion of the pessary, the midwife will check if your cervix has ripened and remove the pessary. If it has, you are ready to have your waters broken. This will be done as soon as a midwife, and the room on the delivery suite are available. Please note there may be a delay if there is no midwife or delivery room available.

If after 24 hours your cervix is not open, the pessary will be removed and the midwife will discuss further treatment with you and arrange for you to see a doctor. The options at this time

would be a further attempt to induce labour with a second propess pessary and potentially a prostin gel or delivery by caesarean section.

Please inform the midwife if the colour of your vaginal loss changes, if you experience any bleeding or if you start to have contractions.

While the Propess is in place and after it has been removed, please continue to eat and drink normally until you go into labour or are transferred to the Delivery Suite.

Possible side effects of using prostaglandins

Some women / birthing people have minor side effects. Most do not experience any pain until contractions begin; however, some do experience period type pains. This is normal and it is an effect of the hormone in the pessary. You may have some nausea or diarrhoea. Studies involving this method of induction have found it to be safe for both women / birthing people and their babies. Some women / birthing people experience very frequent contractions; this is called hyperstimulation. If this occurs, it may be necessary to remove the pessary. In rare cases, this may cause the baby to become distressed and delivery by caesarean section may be necessary.

Some women / birthing people will be offered the opportunity to go home, but some will need to stay in the Induction of Labour Suite, depending on their individual circumstances. The midwife will discuss this with you. The midwife will check your blood pressure and pulse and listen to your baby's heartbeat every 4 hours.

If the string from the pessary comes out of your vagina, you must be careful not to pull or drag on it, as this may cause accidental removal of the pessary.

Please take special care

- when wiping yourself after going to the toilet.
- after washing yourself.
- getting on and off the bed.

In the unlikely event that the pessary should come out, please inform the midwife immediately. The pessary will need to be reinserted.

Inform the midwife if:

- you experience regular contractions (1 contraction in every 5 minutes).
- your waters break.
- you are worried.

Is it possible to go home following insertion of balloon or pessary?

If your pregnancy has been uncomplicated and you have just been under the care of your community midwife, then following insertion of the balloon or the pessary, and if you and your baby are well, the midwife can offer you the option of returning home to await the next assessment.

You will need to have your own transport available and a responsible adult with you at home at all times.

Please make sure that the hospital has your correct contact details before leaving the hospital including your phone number. The midwife will arrange for you to return for the next assessment.

You will be asked to return to the hospital between 12 and 24 hours later.

You must telephone the IOL Suite if you experience any of the following while at home:

- you start contracting (more than period-like cramps)
- you are unable to pass urine
- your waters break
- the baby is not moving as usual
- you feel unwell
- you have a raised temperature or flu like symptoms
- the balloon or pessary falls out
- you are worried for any reason

Please phone the induction midwife on **0118 322 7825**. If you are unable to get through to the midwife, please call the triage line on **0118 322 7304**.

Pain relief during induction

It is unlikely that you will require any pain relief until your waters are broken and your contractions start. There are various forms of pain relief available to you. Information leaflets 'Pain relief in labour' and 'Epidural for pain relief in labour' are available from the Trust website. Ask your midwife for a copy or visit the Trust website at https://www.royalberkshire.nhs.uk/our-services/maternity/?showAllLeaflets=true&catlogue=services

What happens once your body is ready for established labour?

If you go into established labour at any time following insertion of either the balloon or pessary it will be removed, and you will be transferred to Delivery Suite for ongoing support once a bed is available. If you have no other, complications and you start to go into labour following the balloon or pessary you may be transferred to the Birth Centre if you wish to do so.

Breaking your waters and using oxytocin

If your cervix is open, or once it has been softened ready for labour, we can induce labour by breaking the waters around the baby and, if needed, starting a hormone drip (oxytocin) to bring on the contractions. Breaking your waters involves the midwife or doctor performing a vaginal examination; they will use a small instrument to make a hole in the bag of waters around your baby. This will cause no harm to your baby, but the vaginal examination needed to perform this procedure may cause you some discomfort.

Even if you are known to carry the bacteria Group B streptococcus, it will still be necessary to break your waters in this way.

You may need to be given oxytocin if your contractions have not started once your waters have been broken. Oxytocin is given in the delivery room and is a drug that encourages contractions.

Oxytocin is given through a drip and enters the bloodstream through a tiny tube into a vein in the arm. Once contractions have begun, the rate of the drip can be adjusted so that your contractions occur regularly until your baby is born. While you are being given the oxytocin, the midwife will monitor your baby's heartbeat continuously. If you require oxytocin, you will not be able to go the Birth Centre.

Possible side effects of using oxytocin

Oxytocin can make your contractions stronger and more regular and can start to work quite quickly, so your midwife will talk to you about your options for pain relief. Some women / birthing people choose an epidural at this stage. Please read our leaflet 'Pain relief during labour' to understand more about the pain relief options available to you.

Because oxytocin is given by a drip, being attached to this can limit your ability to move around the room. It is possible to use many different positions for labour and birth whilst on a drip, please discuss good options for you with your midwife.

Very occasionally, oxytocin can cause the womb to contract too much, which may affect the pattern of your baby's heartbeat. For this reason, we need to monitor your baby's heart rate continuously using a CTG. We have telemetry (wireless) monitors in all our birthing rooms.

What happens if the induction does not work?

If it is not possible to break your waters once you have had the balloon or pessaries the doctor will talk to you about whether it is appropriate to wait a little longer and try the induction process again or whether we would recommend having a caesarean birth.

Practical advice

What to bring

Please bring your overnight bag and your baby's clothes, nappies etc., also some loose change for vending machines and the telephone, or a long charger for a mobile phone

As the Induction process can sometimes take some time, please feel free to bring in some books/magazine/card games etc. to help pass the time and do not forget any chargers needed.

We do provide food and refreshments for women / birthing people being induced, but we cannot feed partners. Vending machines or shops within the maternity department offer sandwiches, crisps and cold drinks so remember your wallet and some loose change.

Arrangements for partners

You may have one birthing partner stay with you at all times in the IOL Suite. The facilities for partners are limited with only a chair being available for rest. Partners will also have to provide their own food and drink. Toilets for partners are available on Level 4 but there are no showering facilities.

Car parking

Parking is pay on foot (take a ticket at the barrier and use a pay point machine before leaving). However, your birthing partner is entitled to free parking during induction and labour.

Take an entry ticket at the barrier, park your car in the multi-storey car park in Craven Road, and then ask the induction midwife for a concessionary permit. Your partner will need to take this with the entry ticket to the security desk in the hospital main entrance when they leave in order for their ticket to be validated.

Useful contact numbers

Induction of Labour Suite **0118 322 7825** or via Main Switchboard **ext. 7825**.

Is there anything I can do to avoid or help the induction process?

Membrane sweeping

Membrane sweeping involves you having a vaginal examination whereby your midwife or doctor places a finger just inside your cervix and makes a circular, sweeping movement to separate the membranes from the cervix. It can be carried out at home, at an outpatient appointment or in hospital. It can be carried out from 39 weeks of pregnancy.

This has been shown to increase the chances of labour starting naturally within 48 hours of having this done and can reduce the need for other methods of induction of labour. One in eight women / birthing people will start labour within 24 hours.

You may find the internal examination uncomfortable/painful and you may experience some bleeding similar to a 'show' following the procedure. This is because the internal examination involves stretching your cervix. This is normal and will not cause any harm to your baby nor will it increase the chance of you or your baby getting an infection.

Eating six date fruits per day (non-diabetic women / birthing people)

There is some limited evidence to suggest that eating 6 date fruits a day for 4 weeks prior to your due date may increase your chance of spontaneous labour, reduce the length of latent phase of labour, help the cervix to be ripened and therefore shorten the duration of induction. Caution is stressed for women / birthing people with diabetes or food intolerances and further research is needed in this area.

See the following link for more information https://pubmed.ncbi.nlm.nih.gov/21280989/

Nipple stimulation

For women / birthing people who already have a ripe cervix, doing nipple stimulation for several days prior to your due date or induction date may help labour to start by itself. This is done for between one and three hours a day for 3 days. It can be done using a breast pump or by hand.

https://evidencebasedbirth.com/ebb-125-evidence-on-acupressure-acupuncture-and-breast-stimulation/

Complementary therapies

You may want to look into reflexology and acupressure, which are offered by trained complimentary therapists outside of the NHS, as there is also some evidence that these may help.

Further information

For further information about induction of labour and all other aspects of pregnancy and childbirth, talk to your midwife or doctor or use the links below:

1. NICE induction of labour guideline available at https://www.nice.org.uk/guidance/ng207
2. NHS England » Saving babies' lives version three: a care bundle for reducing perinatal mortality updated 21 June 2023

To find out more about our Trust visit www.royalberkshire.nhs.uk

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

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