Labour and birth

First stage

Every labour and birth is different and varies depending when it starts and how long it takes. Your midwife or doctor can answer any questions you might have about your labour and birth and what you and your partner can do to prepare. There are three main stages of labour. The time taken for each stage will vary from woman to woman. Everyone's different.

How will you know if you're going into labour? Most women experience one or more of these signs when labour's beginning:

- contractions
- a 'show'
- waters breaking.

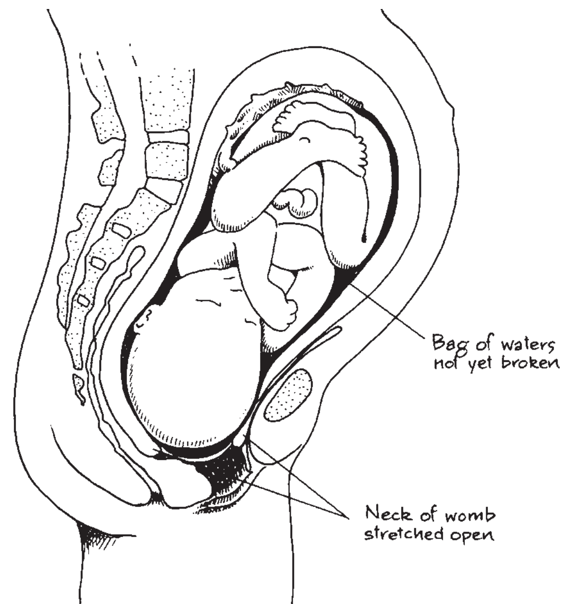
In early first stage of labour, your uterus is working to make your cervix shorter and thinner. For your first labour, this shortening and thinning of the cervix can be hard work and can make you really tired so it's important to rest when you can. This process may take up to a few days.

As the first stage progresses, your uterus begins contracting to open up your cervix (the neck of your womb). These contractions build until the cervix is about 10cm open, enough to let the baby through.

How long does it last?

On average, this first stage lasts from 10 to 14 hours for a first baby, and about eight hours for a second baby.

Position of baby at first stage



Remember your breath awareness technique!

When you're having early contractions in the first part of labour, try to relax with normal breathing. It's best to try to ignore contractions at this early stage and get on with your normal routine, moving about as much as possible.

When it gets hard to relax using normal breathing during first stage contractions, keep breathing deeply and slowly for as long as possible. Your breathing will become a little faster as the contractions get stronger, but try to slow your breathing down to your normal rate or a little slower.

At the beginning and end of each contraction take a deep breath in and out (like a big sigh) and relax your shoulders as you breathe out. This will help to cue your body to relax.

Remember to return to normal breathing as soon as you can after each contraction.

Contractions

Women describe and experience contractions in different ways. These may feel like:

- lower abdominal cramps that feel like a period
- persistent dull lower backache
- inner thigh pain that may run down your legs.

At first these contractions are short and may be far apart – sometimes they're as much as 30 minutes apart. But they get longer, stronger and closer together.

The contractions will gradually get closer together, become more painful and last longer until they're about a minute long and coming faster – about every two or three minutes.

You may feel anxious or even out of control when contractions become stronger and closer together. It helps to take a deep breath when the contraction starts then breathe rhythmically concentrating on the out breath. It may help to sigh or moan or make rhythmic noise. Try to concentrate on each contraction, one at a time. When the contraction has finished, take a deep breath and blow it away. This helps you relax in between the contractions. Many women say it helps to move around and find comfortable positions – during the contractions this may mean leaning on something and swaying your hips or rocking on all fours. A deep bath or shower can also be really helpful in easing labour pain and helping you feel more in control. Your midwife will suggest different things to help you as you progress through labour but it's worth remembering that your body will tell you what to do in terms of how to move and breathe.

A 'show'

You may also pass some bloodstained or pink-coloured mucus. This is the plug that's been sealing up the cervix. It means your cervix is starting to stretch. A show can appear hours or even days before contractions start.

Waters breaking

'Waters breaking' means that the bag or amniotic sac that holds your baby breaks and the amniotic fluid leaks or gushes out. The fluid that comes out is the amniotic fluid that's been surrounding and protecting your baby while he or she grows inside you. The fluid will usually be clear but can be yellow or straw coloured. If it is green or red in colour, there may be a problem. Whatever the colour, you should put a pad on and ring your midwife, maternity unit or doctor, as you will probably need to go to your birthing centre or hospital so they can check you, your baby and your baby's position.

If your waters have broken and you still are not having regular contractions after 24 hours you may need your labour to be induced, as there is a risk of infection. Your midwife or doctor will talk to you about this.

How your partner or support person can help

There are lots of things your partner or support person can do to make labour more comfortable. But don't forget that they need to be prepared too. Make sure they understand what the birth will involve. Talk to them about your birth plan and about how they can help you in labour.

They can:

- stay with you and keep you company. (It can be good to have more than one support person. One can stay with you while the other has a break)
- hold your hand, talk to you, encourage you and remind you that the pain will pass
- bring you drinks of water and ice
- remind you to use relaxation techniques
- give you a massage
- help you change position
- get the attention of hospital staff if you need them
- help you make decisions about any treatment.

Some women, however, don't want to be touched or talked to when labour is strong. That's OK. Feeling supported and not fearful in labour is important. It helps your body to have a natural response that will help you manage the pain from contractions. You may feel yourself withdraw mentally into your body as you concentrate on each contraction but words of encouragement from your supporters are important throughout labour.

Should I go to hospital straight away?

Don't panic. It's a good idea to call your midwife or doctor and talk to them about your contractions and how you are feeling. Make sure you tell them if your waters break. It's usually best to try and rest at home for a while if you:

- are in the early stages of labour
- feel comfortable
- have had a healthy normal pregnancy.

During this time, it's helpful to:

- walk and move around between contractions
- get on with things around the house (easy things – no heavy lifting)
- have a shower or a bath.

It's okay to eat or drink normally. It's important to stay well-hydrated so drink regularly.

During your pregnancy, your midwife or doctor will have discussed with you when you should go to hospital, and who to contact when the time comes.

Generally you will need to call your midwife, doctor or maternity unit and go to hospital if:

- you pass any bright bloodstained fluid from the vagina
- you pass a gush or trickle of watery fluid (this may be amniotic fluid)
- the pains become more regular
- you or your partner have any concerns.

Let the midwife, doctor or maternity unit know you're on your way before you leave for the hospital. If you have a support person don't forget to call them if they are not already with you.

What happens when I get to hospital?

This depends on the hospital, but generally a midwife will:

- put an ID bracelet on your wrist
- talk about what's happening to you
- check your temperature, pulse and blood pressure
- check the baby's position by feeling your abdomen
- measure the baby's heart rate
- time your contractions
- test your urine
- perhaps do an internal examination (if the midwife thinks you are in labour) to see how much your cervix has opened, and to check the baby's position.

The midwife will continue to regularly check your progress and your baby's condition from time to time during the first stage. You may feel like changing positions frequently, using hot packs on your back or belly, a back rub, warm showers or hopping in the bath/spa/birth pool.

Ask your midwife and your support person to help you find a position that is comfortable for you and experiment e.g. standing, squatting or on hands and knees.

Helping your labour along

How quickly your labour progresses depends on a few things, including the baby descending or going down through the pelvis, and the cervix or neck of the womb opening up (dilating) with strong regular contractions. There are many ways that you can help your labour along.

Feeling as relaxed as possible

Things that may help include:

- music
- aromatherapy
- relaxation and breathing techniques.

Hot packs placed on the lower abdomen or back can feel good. Some hospitals don't allow them in case of burns, so check first with your midwife. Hot showers and baths can help too.

Keeping active
Walk around the room or up and down corridors while you can. Being active can help keep your mind off the pain. Lean on your partner or support person if it helps.

Changing positions
Try:

- standing
- squatting
- rocking on your hands and knees
- sitting back to back with your support person.

Massage
Massage can help ease muscle tension in labour, and help you relax. Your partner or other support person can use long, flowing strokes, or large circular strokes. For low back pain, they can try smaller movements with firm pressure. Keep the hands touching the body all the time.

Groaning or grunting
There are no prizes for keeping quiet in labour (if athletes and weightlifters can grunt when they push themselves, so can you). Trying to keep quiet may only make you tense.

"Walking around when I was having contractions helped me to handle the pain a lot more than when I was lying down."
Lynette

Why water?

Being in the water during labour can be very effective for comfort and pain relief during labour. Water provides support and buoyancy that helps you to relax.

Lying in warm water during labour can reduce stress hormones and pain by helping your body to produce natural pain relievers (endorphins). It can ease muscular tension and help you to relax between contractions. Labouring in water may:

- provide significant pain relief
- reduce the need for drugs and interventions, particularly epidurals
- help you feel more in control in labour and happier about how you're coping
- provide a feeling of weightlessness-relieving tired muscles and stress
- speed up labour
- promote relaxation and conserve energy.

Pain relief in labour

Everyone is different when it comes to how they feel pain and how they handle it. There are many things that can help you cope with pain in labour. But until you're dealing with the pain of childbirth, you don't know how you'll cope or what works best – so be prepared to try different ways.

Other things can also affect how you cope with pain including:

- how long labour lasts and whether you're labouring in the day or night. If you're tired from a long overnight labour, it can be harder to cope with pain
- feeling anxious. Anxiety makes you tense – and that makes any kind of pain or discomfort worse. Knowing what to expect in labour, having people with you to encourage and reassure you and being in an environment that makes you comfortable can help you relax and feel more confident.

Many of the suggestions above, such as staying active and changing positions, will help you to cope with pain. But sometimes you may need medication. Here's a summary of the common types of medication available. For more information about different options and side effects, talk to your midwife or doctor.

"I was able to rest in a warm bath, pulling myself upright as each contraction hit. Between pains I lay back in the warm water. I think my pregnancy yoga classes helped me to work with each contraction, rather than fighting the pain."
Karen

Pain relief in labour

Drug	Description	Main advantages	Main disadvantages	Effect on baby
Paracetamol	Tablets or capsules.	• You can take them at home. • Safe to use in pregnancy.	• Only mild analgesic effect.	No known effect.
Nitrous Oxide (Gas)	Mixture of nitrous and oxygen gas, which you breathe through a mouthpiece or mask.	• You control how much you use. • Short-term effect. • Only works when inhaling the gas.	• Takes edge off pain, rather than blotting it out. • May make you feel nauseous, drowsy or confused.	No known effect.
Morphine	An injectable narcotic drug.	• Provides good pain relief in early labour. • Starts to work after about 20 minutes and the effect lasts for 2-4 hours.	• May make you feel nauseous or drowsy.	Occasionally, the baby may be a little sleepy and slow to breathe when it is first born which may affect his/her ability to start breastfeeding.
Epidural	Anaesthetic, which numbs you from the waist down. A small tube is inserted into your lower back and the epidural is 'topped up' when needed.	• Gives more long-lasting pain relief. • Most reliable and effective form of pain relief especially in second stage of labour.	• You won't be able to move around during labour. • Can make it harder for you to push the baby out during labour. • Increases the likelihood of other interventions, e.g. oxytocin to progress labour; forceps delivery or vacuum extraction. • May leave your legs numb for a while after the birth.	Effect depends on other interventions related to baby's birth. Some drugs used in the epidural may cross the placenta and may affect the baby's breastfeeding in the first few days.

When help is needed: medical interventions

An 'intervention' is an action taken by a midwife or doctor that literally intervenes in the birthing process. There is some concern that interventions are used too often in childbirth in Australia. Again, there are different opinions. Some people say using interventions make childbirth safer. Others say that having one intervention can mean you end up needing extra interventions. For example, induction of labour may make it harder to cope with contractions because they start quickly and strongly. This means you may need stronger pain relief than if you went into labour naturally.

If you're healthy and your pregnancy and labour are normal, you may not need any intervention.

This section discusses some of the more common interventions used in labour and birth. Talk to your midwife or doctor about them while you're pregnant. You might want to ask some of the following questions:

- why would I need this intervention
- what are the risks and benefits to me and my baby
- are there any alternatives
- is it likely to increase my need for more interventions
- can I do anything while I'm pregnant to decrease my chances of needing the intervention
- what is the hospital's policy on this intervention and the evidence to support this
- will it hurt
- will it affect my recovery
- will it affect my ability to breastfeed
- will it affect any future pregnancies?

Your midwife or doctor should discuss the pros and cons of any intervention with you before you agree to it.

Induction of labour

Sometimes, your doctor may recommend inducing labour – bringing it on artificially instead of waiting for it to begin. The reasons for inducing a baby may include a multiple birth, diabetes, kidney problems, high blood pressure or when a pregnancy is past 41 weeks.

If your labour is being induced it is important that you discuss this procedure with your doctor or midwife. The benefit of being induced must outweigh the risks. An induction of labour has some risks, for example there is a higher risk of forceps or vacuum delivery and caesarean section operation.

Ways to induce labour and start contractions:

- **Sweeping the membranes is a relatively simple technique.** During a vaginal examination, the midwife or doctor makes a circular movement with a finger to disturb the membranes. The evidence suggests that sweeping does promote the onset of labour and reduces the need for other methods of induction.
- **Prostaglandin is a hormone your body produces.** It helps your cervix soften. Prostin® and Cirvidil® are two synthetic forms of prostaglandin. They are inserted in the vagina near the cervix to soften it. This may also start contractions. They can take 6 to 18 hours to take effect. One of the risks is that this method of induction can over-stimulate your uterus and create difficulties for the baby.
- **Mechanical cervical ripening** uses a small plastic catheter to help soften and open the cervix.
- **Breaking the waters** (called an amniotomy) involves a doctor or midwife inserting an instrument into the vagina and through the open cervix, to gently puncture the membrane holding the amniotic fluid. This allows the baby's head to press down on the cervix more, increasing the hormones and contractions.

- **Oxytocin is a hormone your body produces naturally in labour**. It makes the uterus contract. Giving synthetic oxytocin (Syntocinon®) through an intravenous (IV) drip helps contractions start. The downside of oxytocin is that it can make contractions harder to cope with. This may mean you're more likely to need pain relief. Ask to have the drip attached to a mobile stand so you can move around if you want. The risks of oxytocin are similar to prostaglandin except that the effect is more pronounced and more immediate, but also more reversible, than prostaglandins. You and your baby will need to be continuously monitored during labour to check for side effects.

A combination of these medical interventions may be needed to start labour.

Augmentation

This means making the labour move along more quickly. It may be done when labour has begun naturally, but is progressing slowly. It is usually done by your midwife or doctor breaking your waters or by inserting an IV drip with oxytocin (a medication to increase contractions). The risks are the same as those when oxytocin is used for induction of labour.

Monitoring the baby in labour

It's important to check the baby's heartbeat in labour to make sure the baby is coping. A change in the baby's heartbeat can be a sign the baby isn't getting enough oxygen. This is called 'fetal distress'.

The heartbeat can be monitored by:

- **Listening** The midwife does regular checks (every 15-30 minutes) by pressing an ear trumpet (Pinard's) or doppler to your abdomen to listen to the baby's heartbeat. This monitoring is recommended if your pregnancy has been healthy and normal and you are well.
- **Continuous external fetal monitoring** Using an electronic monitor attached to a belt around your abdomen. This continuously records the baby's heartbeat and your contractions on a paper printout. External monitoring is used if there are complications or there are risks of complications. Some monitors restrict your movements. If you are advised to have continuous monitoring, ask if there's one available that lets you move around.
- **Internal fetal monitoring** This uses an electronic monitor that attaches a probe through the vagina to the baby's head. It should only be used if the external monitoring is problematic, the quality of the recording is poor, or in a twin pregnancy. It should not be used if you are HIV positive or hepatitis C positive.
- **Fetal scalp blood sampling** A few drops of blood are taken from your baby's scalp (like a pin prick). This kind of monitoring gives an immediate report on the baby's condition in labour. This test would be done if the doctors need more information than continuous monitoring provides. Sometimes this test needs to be repeated. The result will indicate if the baby needs to be born immediately.

Transition period

What's the best position for giving birth?

The best position is the one *you* find most comfortable. Positions that use gravity, such as sitting, squatting, straddling a chair or standing, are better than lying down on your back. Gravity helps you push and helps the baby's head to come through the birth canal. You might prefer to be on your hands and knees. This position can help with pain relief as it takes the pressure off your back. Compared to giving birth lying down, these positions may make labour a little shorter and less painful. Lying on your back can be especially uncomfortable if you have lower back pain with the contractions.

This is a changeover time near the end of the first stage. Your cervix is nearly fully opened. Soon, the baby will start to move down into the vagina.

Some women say this is the hardest part of labour. Strong contractions can last for 60 to 90 seconds and come one to two minutes apart. You may feel:

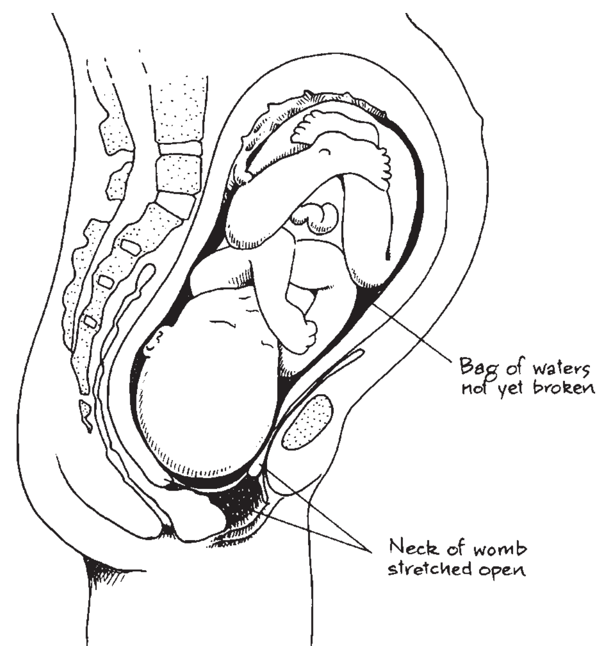
- shaky
- hot and cold
- nauseous (you may even throw up)
- irritable or anxious
- as if you can't cope any more
- out of control.

These are all normal feelings, but you may not experience any of these symptoms.

How long does this last?

Transition can take from five minutes to more than an hour.

Position of baby at transisition

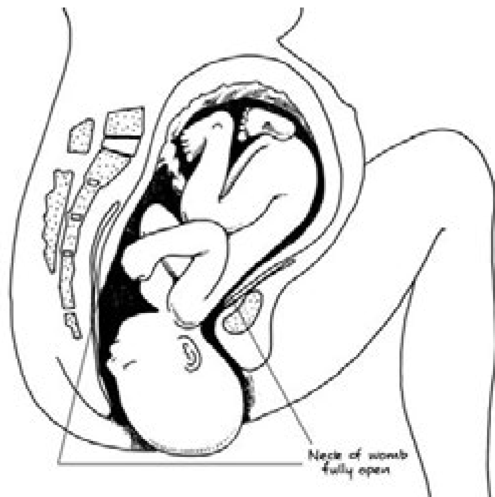


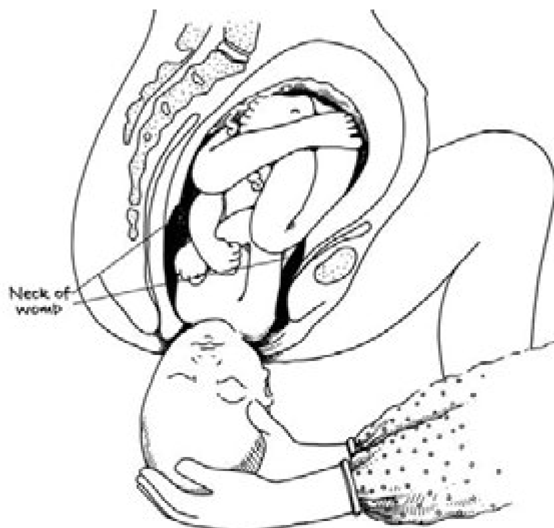
Second stage

In the second stage, you help to push your baby out. You'll probably feel a strong urge to push as if you need to go to the toilet. There may be a stretching, burning feeling as the baby's head gets to the entrance of the vagina.

How long does it last?

The second stage usually lasts up to 2 hours for a first labour and up to an hour in a second labour, but an epidural can lengthen this stage.





Episiotomy – the pros and cons

An episiotomy is a surgical cut in the woman's perineum (area between the vagina and anus). During the birth, there's a chance that your perineum may tear when the baby's head comes through. This is more likely to occur when forceps are used. Research has shown that the selective use of episiotomy may reduce more severe vaginal or perineal tear. Perineal tears are more likely to occur with a forceps birth. Women who have an episiotomy or a tear that involves muscles will require stitches. Talk to your midwife or doctor about this before labour.

"I liked labour. The pain was really bad, but I felt fantastic knowing that I could get through it."
Katrina

Delivery using forceps or vacuum extraction (instrumental delivery)

Sometimes babies need to be delivered with the help of forceps or vacuum extraction. This may be because:

- the mother is having difficulty pushing the baby out
- the baby is in an awkward position
- the baby isn't getting enough oxygen and needs to be delivered quickly.

There are two methods of instrumental delivery:

- **Forceps** are like tongs that fit around the baby's head. They are used to help the baby out of the vagina. If you need a forceps delivery, you will usually need an episiotomy too.
- **Vacuum extraction (ventouse)** is an instrument like a cup attached to a pump. The cup is put into the vagina and onto the baby's head. The pump creates a vacuum effect. This holds the baby's head to the cup so the doctor can then gently pull the baby out, usually when you are having contractions and pushing.

Your doctor will choose the method depending on what's happening during the birth – sometimes forceps are best, and at other times it's better to use vacuum extraction. It's often a decision that needs to be made at the time, rather than something you can plan for. Before any of these procedures, your midwife or doctor will explain what will happen and any possible side effects.

Caesarean section operation

When a caesarean section operation is performed, the baby is born through a cut made through the abdomen into the uterus. The caesarean section operation is usually done with a low horizontal cut two or three finger breadths above the pubic bone so the scar is hidden by pubic hair. Some caesarean section operations are 'elective' (this means they're planned), others are emergencies.

Elective caesarean section operations are done before labour begins. They should not be scheduled before 39 weeks unless there's a medical reason as it may create problems for the baby.

Caesarean section operations may be necessary because:

- the baby is in an awkward position – bottom or feet first, or lying sideways
- it's a multiple birth (in some cases)
- the baby is distressed during labour
- you or your baby are at risk for some reason, and birthing needs to be quick
- the placenta is in the way of the baby's exit
- labour is not progressing.

A caesarean section operation is usually done with an epidural or spinal anaesthetic, or sometimes under general anaesthetic. If you need a caesarean section operation, you'll find it helpful to have information about the procedure including anaesthetic options.

A caesarean section operation performed with an epidural anaesthetic means you'll be awake when your baby is born. Your partner or support person should be able to be present in the operating theatre so you can both see the baby when it's born. The epidural also provides excellent post-operative pain relief.

You can ask to have skin-to-skin contact with your baby immediately after birth in the operating theatre or in the recovery room. This improves mother baby bonding, keeps your baby warm and helps him or her to begin breastfeeding. If you are not able to hold your baby skin-to-skin at first, ask that your partner does, and then place the baby to your chest as soon as you are able.

After a caesarean section operation, your baby may need extra care and you may need a longer time in hospital. You'll usually have an IV drip and a catheter (a tube to drain urine) for one or two days. Once you are at home you'll need extra time to recover as a caesarean section operation is a significant surgical operation. Recovery can take up to six weeks and may make it difficult to care for your baby. Exercises are very important after a caesarean section operation to get your muscles working again. Your midwife, doctor or physiotherapist will advise you when to start.

Breastfeeding in the first few days after birth is very important for mother and baby. If you have had a caesarean section operation, or are very tired or sleepy after the birth, you'll need to take extra care to ensure you can safely breastfeed your baby.

Health alert!

There are increased respiratory problems in babies when caesarean section operations are carried out before 39 weeks and where there is no labour. Therefore, planned caesarean section operation should not routinely be carried out before 39 weeks.

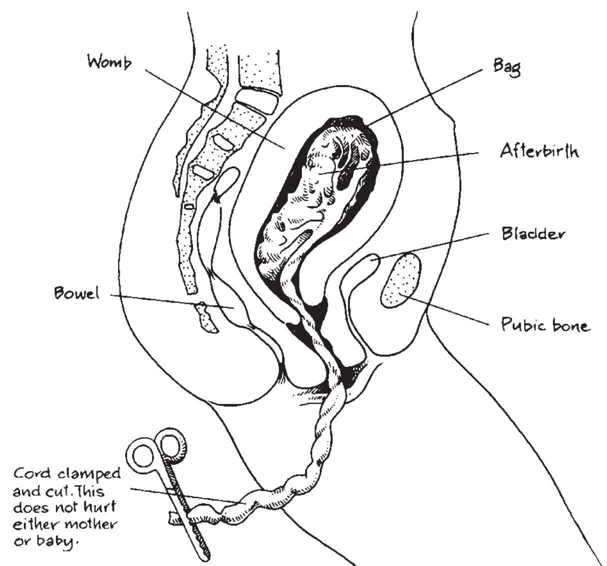
Third stage

The third and final stage of labour starts when your baby is born and lasts until the uterus pushes out the placenta. This stage is usually much shorter and less painful than the other two. However, it is a very important stage and must be completed before everyone can relax.

How long does this last?

Most women have an injection of synthetic oxytocin (Syntocinon®) to help the uterus push out the placenta more quickly. This is called active management and is the best way to prevent excessive postpartum bleeding. Following the injection, this stage often takes about 5-10 minutes.

Some women prefer to wait and let the placenta come out naturally without an injection (called a natural third stage). A natural third stage can take up to an hour or so. Talk to your midwife or doctor when you are pregnant about which option is best for you. This will help you make an informed decision.



What happens after my baby is born?

All being well, your baby will be given to you and you can have skin-to-skin contact, touch and stroke the baby's skin, and be close. Skin-to-skin contact means that the baby is naked and lying on your naked chest. This is good for you and the baby because it:

- promotes bonding
- keeps the baby warm
- lets the baby feel your heartbeat and smell your skin. This tells the baby you're there and helps him or her adjust to life outside your body
- encourages the baby to breastfeed (but this early skin-to-skin contact is important even if you're not breastfeeding)
- encourages your body to produce oxytocin which keeps your uterus contracted, to minimising blood loss.

Around the same time, the cord is clamped and cut (this doesn't hurt you or the baby). Usually, your partner will be asked if they would like to cut the cord. If you plan a natural third stage, discuss this with your midwife or doctor in the pregnancy or early labour as the cord is not cut until it stops pulsating and the placenta is out.

When should I feed my baby?

If you and the baby are well, help your baby find the breast soon after the birth. This helps:

- get breastfeeding off to a good start
- your uterus contract and push the placenta out
- reduce your bleeding
- keep your baby's blood sugar levels normal.

But don't worry if the baby doesn't want to breastfeed or if there's a medical reason you can't feed straight away – you can still breastfeed successfully without this early feed.

Checks after your baby is born

While you are cuddling your baby, your midwife or doctor will do a check called an Apgar score. It will be done twice (at one minute and five minutes after birth). It tells the midwife or doctor if your baby needs any special help adjusting to life. The Apgar score is based on the baby's:

- breathing rate
- heart rate
- skin colour
- muscle tone
- reflexes.

You probably won't even notice it's being done as the midwife or doctor can do it without disturbing the baby very much. You and your partner will be given time with your baby so that you can get to know one another. It's important that you and your baby stay together if you are both healthy.

After a while, your baby will be examined, weighed, measured and given identification bracelet/s. If you consent, he or she will also be given vitamin K and hepatitis B injections. The baby will be dressed and wrapped in a blanket. If there are concerns about your baby keeping warm even after prolonged skin-to-skin contact then he or she may be put on a warmer (a little bed with a heat lamp).

Bathing your baby

It is recommended that newborn babies are not routinely bathed immediately after birth.

However, bathing of the newborn baby is recommended when the baby's mother has active hepatitis B/C or HIV.

Injections to protect your baby

Experts recommend that newborns have two injections soon after they are born. These are a vitamin K injection, and vaccination against hepatitis B. It's up to you whether the baby has these injections – but they're strongly recommended to protect your baby. These injections will be provided free to your baby. You will usually receive information about these injections – vitamin K and immunisation against hepatitis B – during your pregnancy.

Why is vitamin K important?

Vitamin K helps prevent a rare but serious disorder called Haemorrhagic Disease of the Newborn (HDN), which can cause serious bleeding and may affect the brain. Newborn babies may not have enough vitamin K in their bodies to prevent HDN. By six months of age, they have usually built up their own supply. It's particularly important for babies to have a vitamin K injection if:

- they are premature or sick
- they have bruising from the birth or caesarean section operation
- their mothers took medication in pregnancy for epilepsy, blood clots or tuberculosis. Tell your doctor or midwife if you take any of these medications.

Vitamin K can be given by mouth or by injection. An injection is the preferred method, because it lasts for months and is a single dose. Vitamin K given by mouth doesn't protect for as long. If you want your baby to have vitamin K by mouth, your baby will need three separate doses – at birth, at 3 or 5 days old and at 4 weeks of age. The third dose is very important for parents to remember! Without it, the baby may not be fully protected.

Does vitamin K have side effects?

Vitamin K has been given to babies in Australia since 1980 and Australian health authorities believe vitamin K injections are safe. Parents who decide against vitamin K should look out for any symptoms of HDN. These include:

- unexplained bleeding or bruising
- any yellowing of the skin or whites of the eyes after three weeks of age.

Babies with these symptoms should see a doctor, even if they've had vitamin K.

Why does my baby need to be vaccinated against hepatitis B?

Hepatitis B is an infection of the liver caused by a virus. Some people with this virus may have no symptoms or only mild symptoms. But up to 25 out of a 100 people who are affected may get serious liver disease later in life, especially if they caught hepatitis B as a child. Immunisation helps prevent this.

It's important to start hepatitis B vaccination as soon as possible after birth to make sure it's as effective as possible. Babies need three more hepatitis B vaccinations at two months, four months and six months of age.

If you are a hepatitis B carrier, your baby is at high risk of being infected with hepatitis B. To prevent transmission from you to your baby, your baby should be given the usual hepatitis B vaccination and one dose of hepatitis B immunoglobulin (HBIG), preferably within 12 hours of birth and definitely within 7 days. After this, your baby will also need the usual three further hepatitis B injections at two, four and six months of age.

Are there side effects from hepatitis B immunisation?

Serious side effects are very rare. The most common problems are soreness where the injection was given, mild fever and joint pain. See your doctor if you're concerned.