

Pain Relief for Labour and Giving Birth



This booklet will give you some ideas about your options for pain relief during labour and giving birth. We hope that knowing what to expect will help to make giving birth a satisfying experience. At the end of the booklet, you will find a list of the references we used.

What will labour feel like?

Different women experience labour pains in different ways. While you are pregnant, you may feel your uterus (womb) tightening from time to time. These are called Braxton Hicks or practice contractions. When you go into labour, these tightenings become regular and much stronger.

The tightening may cause pain that feels like period pain, and usually becomes more painful the further you get into labour. If medication is used to start off (induce) labour or speed up your labour, your contractions may be more painful. Most women use many ways to cope with labour pain¹. It helps to be flexible and have an open mind about pain relief.

Preparing for labour

Prenatal classes can help you understand what happens in labour and the options that are available. If you can't go to classes, ask your doctor or midwife about who will care for you while you are in labour and what is available for pain.

If you feel at ease in the place you give birth, you may be more relaxed and have less pain². For some women, this means giving birth at home, but other women feel better at the hospital. Here at BC Women's Hospital, we have a variety of labour rooms to meet the needs of our patients.

It can be helpful to have a support person (e.g. trusted spouse, friend, family member or doula) with you during labour³. Talk to your support person about your concerns and what you want so this person can give you the support you need.

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What pain relief is available?

It is difficult to know before labour what sort of pain relief will be best. Your doctor, midwife and nurse can talk to you about your options.

Self-help methods

Try breathing slowly and calmly to increase the oxygen going to your muscles. This may make the pain less intense. You are also less aware of pain when you focus on your breathing. It is difficult to relax when you are in pain, and so it helps to practice calm breathing before you go into labour.

Massage therapy

A massage while you are in labour may help you feel relaxed and comforted. Be sure to let your support person know what you like and don't like.

This may include:

- Light massage on your abdomen
- Firm pressure on the lower spine
- Soothing massage of shoulders, back, legs, hips and feet



Warm water during labour (shower or birthing tub)

Studies show that if you have labour in a shower or tub, you will find it less painful and you are less likely to need other types of pain relief⁴. There is no greater risk to having labour in water. The nurse or midwife will monitor your progress and your baby's wellbeing.

Complimentary therapies (therapies that do not use medications). If you are thinking about complimentary therapies, it is important to get advice from someone trained in that therapy.

- **Aromatherapy** - using concentrated essential oils can help you reduce fear, improve your wellbeing and encourage you to keep going. You can use these oils in your home before you come to the hospital. However, once in the hospital, we ask that you do not use scented oils, as the hospital is a scent-free zone.
- **Music therapy** - playing music you like to help you relax.

The following complementary therapy options must be self-arranged. They are not provided by BC Women's Hospital.

- **Reflexology** - a reflexologist massages points on your hands and feet that relate to the parts of your body that are painful in labour.
- **Hypnosis** - using suggestions or positive thoughts to calm your mind and distract you from the pain. You can be trained to do self-hypnosis or have a hypnotherapist with you while you are in labour.
- **Acupuncture** - a trained therapist puts needles into points on your body to help reduce the pain.

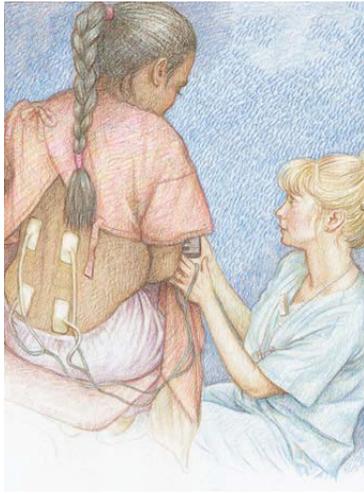
Some studies suggest that women who use these therapies feel in control of their labour and use less medication to reduce pain⁵. Talk to your care provider ahead of your birth to inform him/her if you are planning to use these complementary therapies.

Sterile Water Injection

Small amounts of sterile water are injected under the skin of the low back. It feels like a bee sting and helps to relieve back pain or "back labour" for about 2 hours.

Transcutaneous electrical nerve stimulation (TENS)

A gentle electrical current is passed through four flat pads stuck to your back and has a tingling feeling. You control the strength of the current. TENS works best if it is started in early labour, perhaps at home, and if you have used TENS before for other injuries. It causes no known harmful effects to the baby.



You can rent a TENS machine from any shop that caters to birth supplies.

Entonox

You breathe Entonox through a mask or mouthpiece. It is made up of nitrous oxide and oxygen. It is sometimes called “gas and air” or “laughing gas.”



Entonox:

- Is simple and quick to act.
- Wears off in minutes.
- May make you feel light-headed or a little sick for a short time.
- Does not harm your baby and gives you extra oxygen, which may be good for you and your baby.
- Does not take the pain away completely, but it may help.
- Can be used any time during labour and almost anywhere in the room.
- Works best if used as soon as you feel a contraction coming on.
- Can make you feel dizzy and tingly if used between contractions or for long periods.

Opioids

These are strong medications that include painkillers (e.g. morphine and fentanyl). A nurse injects them into a large muscle in the arm or leg, or into a vein. Morphine is often given in early labour. Pain relief starts after about ½ an hour and may last a few hours. Fentanyl can be given during active labour. It starts helping in a few minutes and last for about 1 hour.

The effect may be limited and different for each woman. Some feel more relaxed and less aware of the pain and others have enough of a break from labour pain to have more energy to carry on⁶. Some women may want other methods of pain relief addition to the opioid medicine.

Side effects of Opioids:

- Feeling sleepy.
- Feeling sick; you will usually have an anti-sickness medication to stop this.
- Delay in stomach emptying causing you to throw up. This can be a problem if you need a general anesthetic.
- Slow down breathing; you may need oxygen from a face-mask.
- Baby may be slow to take first breath and need an injection to help breathing.
- Baby may be sleepy and not feed as well. If you have morphine at least 4 hours, or fentanyl at least 1 hour before you give birth to the baby, the effect on your baby is very small.

Epidurals and spinals

These are the most complicated method of pain relief but they give the most pain relief in labour. They are given by a doctor specially trained to provide pain relief in labour called an anesthesiologist. Your midwife or doctor may suggest an epidural if you have a complicated or long labour.

Epidurals

- The anesthesiologist puts a needle in the lower part of your back and uses it to place a very thin tube (an epidural catheter) near the nerves in your spine.

- The tube is left in place so you can be given painkillers during labour. Painkillers are usually local anesthetic that numbs your nerves.
- An epidural may take 30-40 minutes to give you pain relief. This includes putting in the tube and getting the epidural painkillers working. Your anesthesiologist will usually check to see if they are working by putting an ice cube on your tummy and legs and asking you how cold it feels. Your nurse will take your blood pressure regularly.
- The anesthesiologist may need to adjust or even take the epidural catheter out and put it in again. This happens to less than 1 in 10 women.
- Extra medication may be added or “topped up” to provide pain relief or if you need a vacuum, forceps or a Cesarean delivery. A nurse takes your blood pressure regularly after “top up.”
- With a PCEA (Patient-Controlled Epidural Analgesia), you can push a button to increase the medication. A small amount of pain killers are usually flowing through the PCEA pump continuously, so if you have a nap the epidural continues to work.



The aim of an epidural is to take away the pain of contractions during labour and birth. It should not make you feel drowsy or sick. It may not take away the feeling of pressure in your bottom that most women have when the baby is ready to be pushed out. The smallest dose of medication possible is used to keep you comfortable and to be safe for your baby.

Spinal and combined spinal-epidural (CSE)

Epidurals may be slow to act (15 to 20 minutes), especially if you have one late in labour. But, if the painkillers are put directly into the bag of fluid surrounding the nerves in your back, they work much faster. This is called a spinal.

A spinal is a once-only injection without a catheter. If an epidural catheter is put in at the same time, it is called a combined spinal-epidural (CSE). At BC Women’s Hospital, the use of a CSE depends upon the anesthesiologist. It’s usually for women who need pain relief very quickly.

Who can and cannot have an epidural?

Most people can have an epidural, but certain medical problems may mean it is not right for you (e.g. spina bifida, previous back operation, problems with blood clotting). Before you are in labour, talk to your doctor or midwife about epidurals. If you are overweight, an epidural may be more difficult and take longer to put in place.

Will an epidural affect my ability to push the baby out?

Some women want to have some feeling during the birth so they have a better idea of how to push the baby out. The epidural cannot be adjusted exactly, so if you want to have some feeling, there is more chance that you may have discomfort as well.

It is usually possible to reduce the pain of labour without making the lower part of your body completely numb or giving you weak legs. At BC Women’s we use a modern method called a ‘mobile epidural.’ This allows most women to move around and stand or walk. A few women are not able to get out of bed with a mobile epidural.

You will be able to breastfeed your baby after the epidural.

What if I need a Cesarean delivery?

An epidural is often used for a Cesarean delivery instead of a general anesthetic that puts you to sleep. A strong local anesthetic is put into your epidural catheter to make the lower half of your body very numb. This is usually safer for you and the baby than a general anesthetic.

If you do not already have an epidural, a spinal is used but with a bigger dose of local anesthetic than for labour.

For more information, read our 'Anesthesia for Cesarean Delivery' booklet. See last page of this booklet for information on how to access this booklet.

Benefits and risks of epidurals

How do we get our facts?

We get our facts from randomized studies and from observational studies.

Randomized studies usually compare women who have an epidural with women who use other painkillers (such as opioids or Entonox). The kind of treatment that each woman receives is decided randomly (like tossing a coin). In a few studies, all the women had an epidural, but the amount of opioid was decided randomly. See reference 9 for a review of all the published randomized studies on epidurals in labour.

Observational studies look at large numbers of women who have had an epidural to see what happens. This is the only way to find out the risk of very rare events.

The following information is based on results of randomized studies.

Benefits of epidurals

Epidurals lessen the pain of labour more than any other treatment. There is also less of a need to use medication to make a baby start breathing after birth when a woman has an epidural as compared to opioids given in other ways (into the muscle or vein).

With an epidural you do not have a higher chance of needing a Cesarean delivery. And you do not have a greater chance of long-term backache. Backache is common during pregnancy and often continues afterwards. You may have a tender spot in your back after an epidural which, rarely, may last for months¹¹.

Common Risks of epidurals: From 1/10 to 1/100 women

- The chance you will need a vacuum (small suction cup on your baby's head) or forceps to deliver your baby is 14% with an epidural. Without an epidural it is 7%.
- Second stage labour (e.g. when your cervix is fully dilated and pushing) may be longer.
- Your contractions may slow down and you are more likely to need medication (oxytocin) to make them stronger.
- Your legs may feel weak although you are still able to walk safely.
- You may find it difficult to pass urine. Many women need a tube passed into the bladder to drain the urine.
- You may feel itchy.
- You may develop a fever and that may increase distress in your baby or make it harder to tell if you have an infection.
- If you have higher doses of opioid, your newborn baby may be more likely to need help with breathing¹².

Uncommon Risks of epidurals: From 1/100 to 1/1000 women:

Sometimes the epidural causes a headache because the epidural needle punctures the bag of fluid that surrounds the spinal cord. This is called a "dural puncture." This may cause a severe headache that lasts for days or weeks if it is not treated¹⁴. If you develop a severe headache, your anesthesiologist will give you advice about the best form of treatment. If you have a dural puncture, we will continue to check you for 1-2 days to see if a headache starts.

At BC Women's, a dural puncture only happens in about one in every 100 epidurals.

Very Rare Risks of epidurals: From 1/1,000 to 1/100,000 women:

About one in every 15,000 women has long-lasting nerve damage after an epidural. This can cause problems such as a weak muscle or a tingling or numbness down one leg. After giving birth, nerve damage can happen whether you have an epidural or not¹⁵. It is actually about 5 times more common

without an epidural. This type of nerve damage can last months to a year. Permanent nerve damage is extremely rare.

There is no evidence to show that having an epidural while you are in labour causes the nerves in your spine to become permanently damaged²¹.

If you are worried about the risk of serious problems, talk to your anesthesiologist.

Possible complications of an epidural or spinal for labour pain¹⁵⁻²²

Type of complication	How often does this happen?	How common is it?
Significant drop in blood pressure	One in every 100 women	Uncommon
Not working well enough to reduce labour pain so you need to use other ways of lessening the pain	One in every 10 women	Common
Not working well enough for a Cesarean delivery so you need to have a general anesthetic	One in every 20 women	Sometimes
Severe headache	One in every 100 women (epidural) One in every 500 women (spinal)	Uncommon Rare
Nerve damage (numb spot on a leg or foot, or a weak leg)	Temporary – one in every 1,000 women	Rare
Effects lasting for more than 6 months	Permanent – one in every 15,000 women	Rare
Accidental unconsciousness	One in every 100,000 women	Very rare
Epidural abscess (infection in the back)	One in every 200,000 women	Extremely rare
Epidural hematoma (blood clot)	One in every 250,000 women	Extremely rare
Severe injury, including paralysis	One in every 300,000 women	Extremely rare
Meningitis (infection in the fluid around the spine)	One in every 300,000 women	Extremely rare
The information available from the published documents does not give accurate figures for all of these risks. The figures shown above are estimates and may be different in different hospitals.		

There are many ways to cope with discomfort and pain in labour. Your care providers will help by giving you information and support to help you choose what is best for you at each stage in your labour. It is important to have the information and be open to changes. The whole care team at BC Women’s Hospital will do their best to help you.

Please visit our website for more information on pregnancy and childbirth, including pamphlets on anesthesia for cesarean delivery at: <http://www.bcwomens.ca/HealthTopics/AtoZHealthtopics/A-ZHealthPamphlets/default.htm>.

For more resources, go to: www.powertopush.ca.

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