

# **Pain Relief in Labour**

Labour pain can often be managed with simple comfort measures, but sometimes you need more pain relief. There are a number of different options to help you manage your pain

## In early labour (before 4 cm dilation)

## Personal support person

Having a support person can provide practical and emotional support. This person can be a partner, family member or friend. They can give you a back massage, prepare a bath, walk with you, or just provide company.

A doula is good option if you do not have a support person or you would like the support of a trained caregiver. Doulas are not covered by the BC Medical Services Plan. Some extended healthcare plans may cover the cost or you may have to pay privately. For more information on doulas visit: <u>Doula Services Association of BC.</u>

## **Movement + Positioning**

Moving and <u>changing your position</u> frequently during labour may increase your comfort level. Try walking, rocking in a chair, swaying, kneeling over a birthing ball, squatting and other positions. Use the position you find most comfortable. Upright positions may be useful if your labour progress has slowed or if you have back pain.

<u>Exercise balls</u> are excellent tools to use during labour. BC Women's has exercise balls you can borrow to use in labour. Ask your provider for more information.

### **Benefits of movement**

- May help you manage pain caused by contractions
- Labouring in an upright position allows gravity to help your baby move down through your pelvis, speeding up your labour

### Limitations

Trying to stay in an upright position may cause tiredness



## Hot + Cold Therapy

Placing a warm gel pack, blanket, heated rice pack, or hot moist towel on your lower abdomen, groin, low back or shoulders may provide temporary pain relief. Placing a cold pack (ice bag, frozen gel pack, cold cloth) to painful areas may also provide comfort.

### Benefits of heat therapy

- Temporary pain relief if you are cold, sore or tense
- May also help reduce swelling

\*hot packs are not currently used at BC Women's due to risk of burns. They can be used at home at your own discretion.

### Benefits of cold therapy

- May reduce pain in your lower back
- May provide relief to your sweating brow, face, chest or back of your neck

### Risks

- May cause skin damage (redness, blisters or very pale skin) if the temperature is too hot or cold.
- Hot and cold packs cannot be used with an epidural because they may cause severe burns.

## Touch

Touch can be soothing. Someone holding your hand, stroking your arm, massaging your back, feet or shoulders may help you relax and ease some of the pain in early and active labour.

### **Benefits of touch**

- Decreased feelings of depression and anxiety
- Reduced leg and back pain
- Shortened labour and reduced need for pain medication



**Note:** Some people do not like massage or touch during labour. Ask first before touching anyone in labour.

## **Shower + Bath**

Taking a warm shower or bath may relieve pain. The stimulation of a shower or bath may also relieve tension and anxiety by reducing your awareness of your labour pain.

### **Take precautions**

- Make sure you have a support person to help you in and out of the shower or bath to avoid slipping on wet floors.
- Keep track of the water temperature to avoid burns
- Drink plenty of water to avoid dehydration

## **TENS Machine**

A **T**ranscutaneous Electrical **N**erve **S**timulation (TENS) machine is a small box with wires and pads attached to the skin sending small electric impulses to areas where you need pain relief. Electrical stimulation blocks some of the pain messages from reaching the brain. The brain registers the tingling sensations from the TENS instead of the pain.

### Benefits of a TENS machine

- Can be used in early to active labour and in combination with other pain relief methods
- Has no harmful effect on you or your baby
- Does not restrict your ability to move about in labour

### Limitations

- Not covered by the BC Medical Services Plan; some extended health care plans may cover the cost or you may have to pay privately
- Machine must be rented or purchased beforehand, pads must be purchased
- Cannot be used in the bath or shower

## Morphine + Dimenhydrinate (Gravol)

Morphine and Gravol are used together to provide pain relief and help you rest during early labour. Morphine is a strong opioid medication given by injection to reduce pain by blocking the pain messages to your brain. Gravol reduces nausea (upset stomach) caused by the morphine or by labour and can help you to sleep. Morphine and Gravol are good pain relief options if you are having difficulty managing early labour. After receiving Morphine and Gravol in hospital, you can return home to rest and continue your labour.

Morphine and Gravol do not increase the chance of an assisted delivery (e.g., forceps) or a cesarean delivery. They will not cause addiction or overdose when administered by your health care provider during labour.

Morphine is not given in active labour because it stays in your body for several hours after it is given which can have a prolonged effect on the baby. Morphine is also not very effective for the pain of active labour when compared with fentanyl.

### **Benefits of Morphine**

- Reduces pain but does not take it away completely
- Works within 20-30 minutes and pain relief lasts up to 4 hours

### Side effects

- Morphine may cause nausea, vomiting, dizziness, and sleepiness
- Gravol may cause sleepiness
- If given near the time of birth, Gravol may cause drowsiness and impaired breathing in the baby. This is short-term and may be treated with another medication if needed.

## Pain relief in active labour

Except for morphine, all the pain relief options used in early labour can also be used during active labour, in addition to these further measures for pain relief.

## **Sterile Water Injections**

Sterile water injections may be used in active labour to provide pain relief; especially strong lower back pain. Your healthcare provider injects four doses of sterile water into your lower back just under your skin. The injections feel like a sharp bee sting at first, but the stinging and the back pain go away.

### Benefits of sterile water injections

- Effective at relieving back pain in labour
- Can be repeated as often as needed
- Pain relief occurs within minutes of the injection and can last between 45-120 minutes

### Risks

• There are no known side effects

## Entonox / Gas

Entonox is a mixture of nitrous oxide and oxygen, sometimes known as 'laughing gas'. You



breathe the gas in through a mouthpiece during contractions to ease the pain.

### Benefits of Entonox/gas

- Can help you cope with labour pains by providing short-acting pain relief
- Provides light relief and leaves the body quickly, with no risk to the baby
- Can be used anytime in labour, and nearly anywhere in the room
- You control how much and how often you want to use the gas

### Risks

- May make you feel light-headed and nauseated
- May cause your mouth to feel dry for a short time

## Fentanyl

Fentanyl is a strong opioid medication given through an IV. It offers a medium amount of pain relief. Fentanyl dulls your pain without the numbing effect of an epidural; it will not take all of your pain away. Fentanyl is not as effective for pain relief when your labour is long or difficult. Fentanyl does not increase the chance of an assisted delivery (e.g., forceps) or a cesarean delivery. It will not cause addiction or overdose when administered by your healthcare provider during labour. See Information about IV Fentanyl for more information.

### Benefits of Fentanyl in active labour

- Reduces labour pain but does not take it away completely
- Works within minutes, but only lasts about 45-60 minutes, however, more doses can be given

### **Risks for you**

- May cause drowsiness, nausea, dizziness, itchiness, and disorientation
- May cause your breathing to slow down; you may need to be given oxygen and monitored

### **Risks for your baby**

- Fentanyl crosses the placenta and goes to your baby. If given close to the time of birth Fentanyl may cause drowsiness and impaired breathing in the baby. This is short-term and may be treated with another medication if needed.
- If you needed a large dose of Fentanyl, your baby's breathing may have to be monitored for several hours
- Your baby may struggle with starting breastfeeding because they are sleepy; you may need more help from your nurse or lactation consultant to help get your baby to breastfeed.

## Pudendal block

A local anesthetic (freezing) is administered by needle into your vagina. The anesthetic relieves pain along the pudendal nerve, which gives feeling to your perineum, vulva and vagina. A pudendal block can be used during the second stage of labour until just before your baby is born. It also relieves pain during a vacuum or forceps-assisted birth.

### Benefits of pudendal block

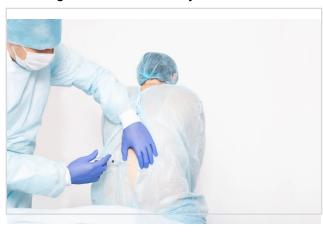
- Provides some pain relief to the perineum, vulva and vagina
- Works rapidly

### Risks

• Small risk of bleeding, infection, or injection into the blood vessels

## **Epidural**

An anesthesiologist (pain relief doctor) administers the epidural. An epidural is the most complicated method of pain relief, but also provides the most effective pain relief in labour. It delivers a mixture of pain relief medication into your lower back using a small flexible tube. The tube is placed into your back using a needle, and requires you to sit still for a short time. The medication numbs the nerves and feeling in your womb (uterus) and birth canal (vagina). An epidural provides strong pain relief and is very safe. An epidural does not increase your chance of having a cesarean delivery.



For most people, epidurals start working within a few minutes but do not provide maximum pain relief for 20-40 minutes. An epidural does not completely block all sensation, particularly if you are late in labour. Epidurals continue working throughout your labour and do not run out. Once admitted to a labour room you can get an epidural. It is never too late to ask for an epidural, but once you are fully dilated or your labour progresses quickly, you may have your baby before the epidural starts to work.

Epidurals are not appropriate for people with certain medical problems (i.e. spina bifida, previous back operations, and problems with blood clotting). If you are overweight, an epidural may be more difficult and take longer to put in place.

Talk to your healthcare provider early in your pregnancy to discuss the best pain relief options for you.

## **Benefits of Epidural**

- The most effective form of pain control in labour
- Allows you to sleep during labour
- Typically allows you to be mobile; you may be able to walk with support. Your legs may feel numb, but you should be able to move them

- With Patient-Controlled Epidural Analgesia (PCEA), you have a button that you can push to deliver more medication which helps you tailor the epidural to your needs
- If you require a cesarean delivery, the epidural can be 'topped up' with stronger freezing medication instead of using a general anesthetic, so that you can be awake for the delivery

### Risks and side effects

- May impair your ability to feel contractions; you may need help knowing when to push
- May cause your contractions to lower in strength and rate; you may require medication oxytocin – to make your contractions stronger after an epidural
- An increased chance your baby's heart rate will decrease short-term this is treatable

Common Side Effects	<ul> <li>Low blood pressure</li> <li>Shivering</li> <li>Itching</li> <li>Fever</li> <li>Small bruise at site of epidural</li> <li>5-10% of epidurals leave areas of your belly 'unfrozen', which may be corrected by additional or different medications</li> <li>It may be hard to urinate (pee), and a catheter may be inserted to help empty the bladder</li> <li>You may require medication – oxytocin – to make your contractions stronger after an epidural</li> </ul>
Common Risks ~1/20 to 1/100	<ul> <li>A severe headache, lasting for several days, that may need specific treatment</li> <li>3-5% of patients may need an epidural replaced during their labour</li> <li>An epidural may not work for a cesarean delivery and you may need a general anesthetic</li> </ul>
Uncommon risks ~1//1000 to 1/10,000	<ul> <li>Medication or allergic reaction</li> <li>High levels of freezing causing difficulty breathing or thinking</li> <li>Temporary nerve injury: numb patch or muscle weakness</li> </ul>
Rare risks ~1/10,000 to 1/100,000	<ul> <li>Infection around the brain or spinal cord (meningitis or abscess): more common with CSE</li> <li>Permanent minor nerve injury</li> </ul>
Extremely rare risks ~1/100,000 to 1/200,000	<ul> <li>Bleeding/hematoma around spinal cord</li> <li>Permanent severe nerve injury including paralysis</li> <li>Cardiac arrest: this can be from a high block, irregular heart rate, or severe medication reaction</li> </ul>

## For more information

Talk to your healthcare provider for more information about your pain management options. The following links can also provide you with more information.

- BC Women's Hospital: Information about Epidurals and Combined Spinal Epidurals (CSE)
- BC Women's Hospital: Information about Intravenous Fentanyl
- Penny Simkin, <u>Comfort in Labour</u>. This booklet includes comfort measures, effective positions (with illustrations) and tips for partners.