



ow that you are pregnant, you have undoubtedly many questions. For example, about pain during childbirth. How bad will it be? And what if you cannot take it? Can you get something for the pain? Giving birth hurts. There is no way to ignore this. But every birth is different. How much pain you will have and where exactly, no one can predict. Fortunately, there are plenty of ways to ease the pain. With and without medication. At home, in the birthing centre or at the hospital. You can read about the possibilities in this brochure. That can help you to feel more comfortable and have less pain when the time comes.

# A few facts about contractions and pain

## • Labour pain (the pain of contractions) is a unique pain

You only have labour pains when giving birth. It is a signal that it is time to seek help and to go to a place where you feel safe and calm. The pain is there for a reason: your baby is being born. That thought may help to endure the pain better.

# Your body produces painkillers

Did you know that your body immediately reacts to pain by producing its own painkillers (endorphins)? For that reason, you feel less pain. However, if you are very tense or afraid, that may hinder the production of endorphins. Therefore, you will also get tips in this brochure on how to stay as relaxed as possible during delivery

## The pain comes in waves

The pain of labour is caused by contractions. A contraction is the contracting of the uterine muscle. You can compare such a contraction with a wave washing ashore. In the beginning, you feel the wave of pain rolling in. Just before the wave breaks, the pain is most severe. Then the wave retreats and you feel the pain becoming less. Between contractions, your body rests.

## • The pain is not always equally severe

At the beginning of the delivery, there is more time between contractions. Then they are not yet so painful. After a while, the time between contractions becomes shorter. The contractions are more powerful and they hurt more. Finally, you have pushing contractions which can be very painful just before the birth. Once your baby is born, the contractions stop. You will still feel a few cramps to loosen the placenta. These are after-pains.



## Abdomen, back and leg pains

Some women can easily tolerate the pain. Other women cannot. We do not yet know why it is that there are such differences. It may, in part, be due to the location of the pain. Most women, during labour, have pain predominantly in their abdomen. But there are also women who feel the pain mainly in their back and/or legs. Sometimes the site of the pain changes.

## Good support makes all the difference

It may sound strange, but how you look back on your birth afterwards has little to do with how much pain you had, or if you had drugs to suppress the pain. According to research, the degree of satisfaction with which you look back later on your delivery depends primarily on the guidance and support you received. Therefore, it is important that you get good support, also from your healthcare provider. It is also important that you are involved in decisions.

# You can do this yourself, even before the birth

#### Make sure you are well prepared

Make sure you know what is going to happen and what you can do yourself. That way, you have more control and are thus more confident that you can handle the delivery. Moreover, you can relax more when the time comes.

#### Look for information

Read leaflets, magazines and books about giving birth. Look for reliable information on the Internet. Ask your midwife questions. You can also take a pregnancy course to start practising breathing techniques. And you can go to an information and briefing meeting about pregnancy and birth.

#### Arrange to have someone with you to support you

Good support can help you cope better with the pain. Therefore, it is very important to think carefully about who you want to have at your delivery. Discuss this in advance with your midwife. Only your partner, or (also) your sister, a friend, your mother: everything is possible. Whatever you are most comfortable with

Choose someone for whom you do not have to keep up appearances. Someone with whom you feel at ease. And tell this person who will support you what you want in advance. Then, when the time comes, you can focus all your attention on handling the contractions. Your midwife will of course also support you during labour.



## Make sure you are well rested

Try to go into labour well-rested. Get a lot of rest in the last weeks of your pregnancy and take ample time for yourself. If you're rested, you can handle pain better.

#### Indicate your wishes in advance

Do you already know what you want to do to deal with the pain when the time comes? Then write down your personal preferences, for example, in a 'birthing plan' (www.deverloskundige.nl). Are you dreading the birth or do you have questions? Then you should talk about this with your midwife.

# General tips: dealing with pain

There are several ways to deal with the pain and to feel as comfortable as possible. With and without medication. Do what you think suits you best.

## Try to relax

Maybe you are, like many women, dreading the birth a bit? That's understandable, however, try not to give in to those feelings too much, because it makes you tense. Due to the tension, you will have more problems with pain and contractions will not be able to progress properly. It can help to talk with your midwife.

#### Look for distractions

At the beginning of the delivery, do not pay too much attention to the pain. The contractions are usually still very tolerable at that stage. Continue as long as possible with what you are doing. Look for distractions, for example by watching TV, doing something in the house or listening to music.

#### Rest between contractions

Between contractions, you always have a break. Use that time to relax and prepare for the next contraction. Make sure that you do not tense up or hold your breath when the pain comes again. Try to let go of all the tension and keep breathing calmly. Then you feel the pain less.

#### Count them down: each contraction is one less to go

Think positive. Believe that you can handle this. Remember: this contraction is over and will never return. Do not get angry at yourself if this doesn't always work. There will be times when the pain washes over you and when you think you cannot handle it anymore. Let yourself be encouraged by the midwife or someone else who is with you. Then just get going again. With every contractions, think that you are that much closer to the end of the

With every contractions, think that you are that much closer to the end of the delivery. Count down instead of up. Think of the moment after the delivery, when you are holding your baby.

## Concentrate on your breathing

If you follow the rhythm of your breathing, you are less focused on the pain. That helps you to relax and to better cope with the contractions. So keep breathing calmly. Inhale and exhale slowly, counting to four.

#### Make sure you are nice and warm

Warmth helps you to relax. So make sure that the temperature in the room is pleasant. Put on warm clothes you feel comfortable in.

When you are laying down, put hot water bottles against your abdomen and back. Many women enloy sitting in the shower, with warm water from the shower head flowing on their stomach or back.

# Ways to deal with pain, with the advantages and disadvantages

The overview below can help you figure out what does and does not suit you. The advantages and disadvantages have emerged from studies.

## Ongoing support

You can get support in a variety of ways: someone can stay with you or near you all the time, encourage you and keep you going, hold you (your hand) or do whatever you ask. This may be a midwife, maternity nurse or nursing staff member but of course also your husband, a family member, friend or a doula (see 'Practical matters').

### Benefits of continuing support

- The delivery takes about half an hour less.
- The chance of having a caesarean delivery or a vacuum extraction (artificial delivery) is smaller.
- You have less need for medication to reduce the pain.
- Women who receive support throughout labour, look back on the birth with more satisfaction.

## Disadvantages of ongoing support

There are none.

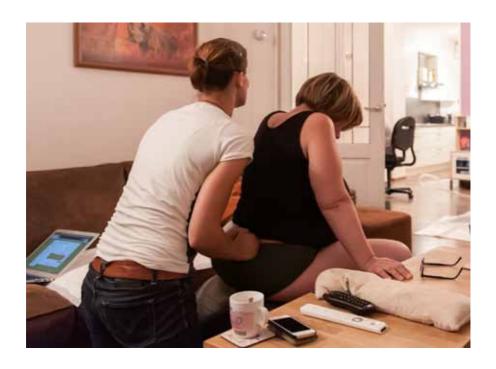
#### Praktische zaken

A doula is specially trained to provide support during childbirth. Doulas are not available everywhere and the costs are not always reimbursed by your health insurance.

#### Changing positions

Changing positions during contractions and the pushing phase has many advantages. Experiment to see in what position you can relax most and what feels best for you. For example, you can also handle a contraction standing up or sitting down while you lean forward on a table. With back contractions, it may feel good to sit on your hands and knees.

Do not go lie down in bed too quickly. Do you want to lie down? Then try to see if it feels good lying on your side. Walking around can be pleasant as well. During the pushing phase, you can sit on a birthing stool. Do you want to know more about positions during childbirth? Ask your midwife for the folder on birthing positions (also visit www.deverloskundige.nl).



# Advantages of standing or sitting upright compared to lying down

- The delivery takes about an hour less than when you lie down a lot.
- You have less need for medication to reduce the pain.
- You have more control. You feel less dependent than when you are lying in bed.
- Pushing is less painful and easier.
- When you push, you have a smaller chance of an assisted delivery and episiotomy.

# Disadvantages of standing or sitting upright compared to lying down

• You may loose more blood than when you push lying down.



## Taking a bath

Taking a bath is also a good idea. In the warm water, you feel lighter and more relaxed. Have the water not warmer than 37-38 degrees Celsius.

#### Benefits of baths

- The delivery takes about half an hour less.
- You have less need for medication to reduce the pain.
- Being in a bathtub has no side effects or consequences for you or your baby.

## Disadvantages of baths

- You have a greater risk of infection if you go in the bath after your waters have broken.
- You probably cannot take a bath when the condition of your baby needs to be monitored.
- Not all hospitals have a bathtub available for deliveries.

#### Practical matters

Ask your midwife about the possibilities. You can, if necessary, rent a bathtub.

#### TENS

TENS (Transcutaneous Electrical Nerve Stimulation) is a device with which you give yourself small electrical impulses. This diverts attention from the pain of the contractions. You operate the device yourself, giving you a sense of control. The electric impulses enter your body via electrodes (wires that are stuck onto your back). This causes a prickly or tingling feeling, comparable to cold hands that tingle when they become warm again.

## **Advantages of TENS**

- · Some women have less pain.
- It seems to work especially during the early stages of the delivery.
- TENS has no side effects or consequences for you or your baby.

### **Disadvantages of TENS**

- You cannot use the device in the bath or shower.
- You always need to hold the device in your hand.

#### Practical matters

You have to rent the device yourself. Check with your insurer to see if it will be reimbursed.

#### Acupuncture and acupressure

With acupuncture, small needles are placed in certain points of your body. These points are connected to the painful areas. Acupuncture may restore the balance in the body and reduce the pain.

Acupressure is similar to acupuncture. No needles are used, only hands or fingers. The therapist pushes his hands and fingers onto special points which are connected with the painful area.

#### Benefits of acupuncture and acupressure

- Less pain: acupuncture works especially well the first hour after putting in the needles, acupressure works slightly longer.
- You have less need for medication to reduce the pain.
- You can relax better and are less afraid.
- With acupuncture, you have less chance of having a baby via vacuum extraction.
- Acupuncture and acupressure have no side effects or consequences for you and your baby.

## Disadvantages of acupuncture and acupressure

There are none.

#### **Practical matters**

- You must arrange acupuncture and acupressure before the delivery.
- Only specially trained therapists can give acupuncture or acupressure.
- Acupuncture and acupressure are not always reimbursed by the healthcare provider.

#### Injections with sterile water

If you have pain in your lower back, injections of sterile water may help. Your midwife will give you four injections with a small amount of sterile water in your back, just above your anal cleft. This will reduce the pain in your lower back. Water injections work for one to two hours, have no side effects and can be repeated as often as you want. Because treatment with injections of sterile water is not yet offered everywhere, we recommend that you ask your midwife about the possibilities.

# This may help you to relax more

Whether or not physical and mental relaxation reduces the pain, has not been studied properly. In any case, you feel calmer and more at ease. A few relaxation tips.

## Yoga, autogenic training, relaxation and guided imagery

With these techniques, you do exercises to calm your breathing and relax your muscles. These techniques also focus your attention on things that make you calm and relaxed. By being relaxed, you feel more comfortable and less anxious. This helps you to deal with the pain better.

#### Massage

Massage may help relax your muscles. Therefore, you usually feel calmer as well. It distracts you from the pain and prevents cramping. With the help of a few pointers, anyone can quickly learn massage techniques. Some women like for someone to constantly press against their lower back with two fists. Other women prefer someone massaging their upper legs. Experiment to see what you do and do not like. Maybe do not want anyone to touch you at all and you prefer to be left alone. Please make that known!

## Hypnosis

With hypnosis, you learn to relax your body really well and you may also feel less pain. Despite the deep relaxation, you stay alert and keep your control. You don't do things you do not want to do. Hypnosis has no side effects. Do you want to give birth under hypnosis? Then you need to be guided already during your pregnancy by a hypnotherapist.

## Aromatherapy and music

Some women find it pleasant to have scented candles or use aromatic oils. Others enjoy listening to music or other soothing sounds. Again, do it if it makes you feel comfortable.

## Ask your midwife.

Are you interested in one of these methods? Ask your midwife about the possibilities in your area.



# Pain medication

For pain control with medication you need to go to the hospital. The reason is that your heart rate, blood pressure and respiration need to be monitored when administering medication. The condition of your baby needs to be monitored as well (registration of the heart rate via a cardiotocogram or CTG).

The equipment for this is only available in the hospital.

An exception is nitrous oxide. When this is used, the condition of the mother and baby are not subject to extra monitoring. Therefore, you can also get nitrous oxide in a birthing centre.

## • Where can you get which pain medication?

- epidural (epidural analgesia)
- injections of pethidine
- pump with remifentanil
- nitrous oxide

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At the hospital are more possibilities in the field of pain relief than at home or in a birthing centre. However, the risk of surgery is greater in the hospital. This is also the case if you are going through a normal, healthy pregnancy and childbirth and have your baby in the hospital. Research has shown that medication is given more frequently in the hospital in order to induce labour, and that infants are more often born by vacuum extraction or a caesarean section.

Ask your midwife in advance about the possibilities in your area and how you can arrange this type of pain relief. You can read below about the most important drugs and their advantages and disadvantages. That may help you choose should the need arise. For all medications the long-term side effects for the baby have not yet been properly studied.

## Epidural

An epidural is an injection in the lower back with a combination of pain-killers. Under local anaesthesia, the anaesthesiologist inserts a needle into your lower back. For this to be done, you need to round your back and sit or lie down, moving as little as possible. Through the needle a thin, flexible tube is inserted into your back. The needle is removed and the tube remains in place. Through this tube, you are given painkillers during the entire delivery. After 15 minutes you will feel the anaesthetic start working.

## The benefits of an epidural

- Most women feel little pain anymore during labour.
- The epidural works better than a pethidine injection or a remifentanil pump.
- You do not become sleepy or drowsy from an epidural and, therefore, you can experience the birth to the full extent.

## The disadvantages of an epidural

- Occasionally, an epidural does not work or is insufficient. How often this happens is not exactly known (probably between 5 and 10%). The epidural is then sometimes repeated.
- Some women experience itching during an epidural. This has to do with the composition of the medication.
- You cannot get out of bed because you have less feeling in your legs.
   That returns slowly when the administration of medication is stopped.
   At a low dosage, you have more feeling in your legs and sometimes you can stand and walk.
- Occasionally, it happens that women suffer from headaches after an epidural. That can be remedied with medication.

See also: The epidural compared with a pethidine injection or remifentanil pump on page 16

#### Practical matters

- You cannot yet get an epidural immediately and at any time in every hospital. Ask your midwife how this is arranged in the hospitals in your area.
- Sometimes you can get an epidural during the pushing phase. This varies per hospital.

#### Pethidine injection

Pethidine is administered by injection into your buttock or upper leg. Pethidine resembles morphine. You can feel the effect within half an hour and it works for 2 to 4 hours.

## Advantages of pethidine

- Pethidine can be given in every hospital at any time.
- About one in three women is satisfied with the painkilling effect.
- You may get drowsy from the pethidine or even fall asleep. That can be pleasant if you are tired from the contractions; you can then rest for a while.

## Disadvantages of pethidine

- Pethidine works less quickly than remifentanil, nitrous oxide or an epidural.
- Two out of three women still have (a lot of) pain.
- You may become nauseous, drowsy and sleepy. It is then possible that you are less aware of the birth.
- You cannot walk around anymore. The drowsiness may cause you to fall.
- Your baby may also become drowsy from the pethidine. Therefore, it may have more trouble breathing after the birth. Sometimes, babies need an injection to start breathing properly again.
- Due to the drowsiness, your baby sometimes has more trouble finding the breast and sucking. This may complicate breastfeeding.

#### Practical matters

Pethidine is not used in every hospital. Ask your midwife how this is arranged in the hospitals in your area.

## Remifentanil pump

Remifentanil is a morphine-like substance administered through an IV line in the arm which is attached to a pump. With a push button, you can control the amount of remifentanil you get through the drip. The pump is adjusted so that you can never administer too much to yourself.

## Advantages of remifentanil

- · Remifentanil works quickly, often within a few minutes.
- Remifentanil numbs the pain about as well as pethidine.
- After delivery, remifentanil disappears fairly quickly from the bloodstream.

## Disadvantages of remifentanil

- Remifentanil may influence your breathing and the amount of oxygen in your blood. Therefore, when using this drug, you and your baby must be constantly and carefully monitored.
- Remifentanil numbs the pain less well than an epidural.
- You cannot walk around anymore. Because of the drowsiness you could fall.
- The effect of remifentanil on breastfeeding has not yet been properly studied.

#### **Practical matters**

Remifentanil is not available in all hospitals. Ask your midwife how this is arranged in the hospitals in your area.



The epidural in comparison with a pethidine injection or remifentanil pump

The epidural has relatively more side effects for both mother and child, according to research. That is because:

- You always get an IV of fluids and sometimes medications to prevent low blood pressure.
- The pushing phase takes longer. Because of this, you are more likely to give birth via vacuum extraction.
- The contractions are often less powerful. You need extra medication to make them stronger again.
- You often get a bladder catheter because, due to the anaesthesia, you
  cannot feel when you need to urinate. This is a plastic tube which is
  inserted through the urethra to empty the bladder. The catheter may
  be kept in place throughout the delivery, or you may only get a
  catheter at times when it is needed.
- You are more inclined to get a fever. It is then difficult to determine
  whether this is caused by the epidural or if it is fever due to an
  infection. Just to be sure, you will get an antibiotic. Sometimes the
  paediatrician feels that the baby needs to be admitted to the
  paediatric ward and given antibiotic.
- Sometimes the blood pressure of the mother drops due to the medication in the epidural and the baby's heart rate becomes too slow. In that case, a caesarean may be decided on.

#### Nitrous oxide

Nitrous oxide (Relivopan®) is a mixture of (di)nitrogen(oxide) (N2O) and oxygen (O2). During a contraction, you give yourself nitrous oxide via a mouth-nose mask. You put a cap over your nose and mouth, put on a chin mask and breathe in the gas. After the contraction, you take the cap off again and administration will stop automatically. The midwife makes sure that you are using the nitrous oxide correctly.

## Advantages of nitrous oxide

- Nitrous oxide works after only 1 minute.
- Nitrous oxide helps you relax properly and ensures that you can better tolerate the pain.
- With nitrous oxide, your condition and that of your baby do not need to be closely monitored.
- You consciously experience the childbirth.
- After you stop inhaling nitrous oxide, it is quickly gone from your body.

## Disadvantages of nitrous oxide

- Nitrous oxide can make you feel nauseous, dizzy or drowsy. These side effects go away quickly when you remove the cap.
- You cannot walk around because of the equipment.
- During the pushing phase, you cannot use nitrous oxide.

#### **Practical matters**

Nitrous oxide is not yet available in many places. Ask your midwife how this is arranged in the birthing centres and hospitals in your area.

# What can your midwife do for you?

As you have read, there are many ways to better cope with pain during childbirth or methods that ensure you have less pain. Think about what is best for you. Discuss it with your partner and your midwife as well.

## Preparing for childbirth

Your midwife will do everything she can to properly prepare you for childbirth and to make sure that it progresses as pleasantly as possible. Be sure to tell her what you want and, most especially, what you are worried about. She will give you tips to prepare you for the delivery. This is to ensure that you go into the delivery with confidence.



## Safe delivery

Your midwife is medically trained and always keeps a close eye on how you and your baby are doing. Remember, you're in good hands. During labour she guides and supports you at home or in hospital, together with a maternity nurse or hospital nurse. She takes into account what you want and asks you regularly how you are doing. She also encourages you and gives you and your partner instructions on how to cushion the labour pains well. She tells you how far along you are and what will happen next. You can ask her all your questions and talk about your concerns and wishes.

## Arranging for pain relief

Often, you do not know in advance whether you will need pain relief. If you already do know, discuss it with your midwife. If you give birth at home, it is possible that you only discover during the delivery that you do want medication for the pain or that your midwife thinks it would be better for you. She will of course discuss this with you. Together with you, she will decide what the best time is to go to the hospital. Your midwife usually goes with you. Sometimes she transfers the care to the gynaecologist or midwife in the hospital. Sometimes she stays with you until you have given birth.

# Questions?

Ask your midwife. She can tell you everything about easing the pain, pain treatments with or without medication, the advantages and disadvantages and the possibilities or lack thereof in your area.

She helps you have confidence in yourself! She is there for you.



Do you want to read more about how you can prepare for the birth of your baby? Please take a look at our leaflets

The birth of your baby: how do you prepare?

The birth of your baby: what position is best for you?

Or go to www.deverloskundige.nl and stay informed via www.facebook.nl/deverloskundige

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