### Women's Health

# Labor and **delivery basics**

Labor and delivery can be an exciting yet intimidating time. We recommend taking the time to understand your options for delivery and creating a birth plan with flexibility for treatment options if needed. It is important to take the time to discuss pain management options in advance with your provider to understand how your labor will be managed.

## **Stages of labor**

#### The first stage of labor

The first stage of labor is divided into three phases: early, active and transitional labor. With each phase, the cervix dilates more; when it is completely dilated, the second stage of labor begins.

#### **Early labor**

This is the longest part of labor. For first-time mothers, it can last days, though it may last only three to five hours in subsequent births.

At first, contractions are irregular, about 15 to 20 minutes apart. Gradually, they become more regular and rhythmic until they are about five minutes apart. Each contraction usually lasts 15 to 40 seconds. Contractions feel like gas pains, backache, abdominal pressure or menstrual cramps.

#### **Physical changes**

- Indigestion.
- Diarrhea.
- Bloody show.



• Dilation - cervix is 4 centimeters dilated or less.



#### How you may feel

Every pregnancy is different, and most women feel both excited and apprehensive. You may be restless, talkative and enthusiastic. Because the contractions of early labor are usually mild, you will probably experience only minor discomfort and can continue your routine activities. If you're tired, you may fall asleep between contractions.

#### Active labor

The early phase gives way to the active phase when you are 4 to 6 centimeters dilated and the baby's head starts to face the mother's backbone. The lower part of the uterus, the cervix, thins and opens so your baby can pass through.

Active labor lasts about four to 12 hours for first births, and about three hours for subsequent births. Contractions in active labor arrive closer together about three to four minutes apart - and last longer - about 45 to 90 seconds. They become more intense and may feel like strong, sharp cramps or intense pressure or tightening in the abdomen.

#### **Physical changes**

- Nausea or vomiting as the digestive system slows down.
- Heavier bloody show.
- Perspiration.
- Dry mouth.
- Diarrhea.
- Flushing.
- Cramping in the thighs.
- Back pain.
- Rupture of the amniotic membranes (water breaks).



# **Pain relief options**

Managing the pain of labor is possible using natural and pharmacological methods. As you prepare your birth plan, consider a staged approach to managing your pain, one that will accommodate your unique birthing experience. The chart below lists some of the common approaches. Discuss your options with your caregivers. Base your decisions on your welfare and that of your baby. **See chart below.** 

Method	Delivery mechanism	Pros	Cons
<b>Comfort techniques</b> (Appropriate for all stages)	Breathing, visualization, position, massage	<ul> <li>No outside intervention required</li> <li>Always available</li> </ul>	• Effectiveness varies
<b>Analgesics</b> (For active labor and postpartum)	Injection into muscle or vein	<ul> <li>Relieves pain without loss of sensation</li> <li>Allows mother to rest between contractions</li> <li>Mom is conscious and alert</li> </ul>	<ul> <li>May cause drowsiness and nausea</li> <li>Can slow baby's breathing and reflexes if given too close to delivery</li> </ul>
Anesthesia, epidural	Injection into lower back; effective for many C-sections	<ul> <li>Not sedating</li> <li>Eases pain</li> <li>Small doses can be administered periodically</li> </ul>	<ul> <li>Mother's blood pressure may drop and slow baby's heart rate (temporarily)</li> <li>May lose some muscle control</li> <li>Results in more frequent use of forceps and vacuum extractor</li> </ul>
<b>Anesthesia, spinal block</b> (Primarily used in C-sections)	Injected into spinal fluid (needle goes deeper than epidural); most effective for C-sections	<ul> <li>Fast relief</li> <li>Numbs lower half</li> </ul>	<ul> <li>Can be given only once and usually reserved for delivery</li> <li>Mother's blood pressure may drop and slow baby's heart rate</li> <li>Can cause severe postpartum headaches</li> </ul>
Anesthesia, local or pudendal	Injected into or around vagina	<ul> <li>Affects a small area (good for lacerations)</li> <li>Rarely affects baby</li> <li>No lingering effects</li> </ul>	• Doesn't help with contractions
Anesthesia, general	Face mask or injection through IV line	<ul> <li>Fast acting</li> <li>Complete pain relief</li> </ul>	<ul> <li>Generally reserved for difficult situations</li> <li>Loss of consciousness</li> <li>Potential risk to women with a family history of reactions to anesthesia</li> </ul>
Tranquilizers and sedatives	Injection into muscle or vein	<ul> <li>No loss of sensation</li> <li>Promotes relaxation and rest</li> </ul>	• May cause drowsiness
Nitrous oxide	Gas breathed in through a mask	<ul> <li>Self-administered</li> <li>Quick acting</li> </ul>	<ul> <li>Doesn't completely remove sensation of pain; may cause sedation, dizziness, nausea and vomiting</li> </ul>
Peanut/birthing ball	Squat or sit, support legs while in bed	<ul> <li>Relieves back pressure and hip pain, aids in allowing pelvis to open</li> </ul>	• None
Bathtub or shower	Water jet ceramic tub/shower combo in the room	• Readily available; promotes relaxation; relieves pain	Not available if you or your baby require continuous monitoring

#### **Transitional labor**

The transitional phase is the hardest but shortest phase of labor. The cervix is now dilated between 8 and 10 centimeters – the width of five fingers. As the baby moves deeper into the pelvis, its head turns to face the mother's backbone.

Transitional labor lasts about one hour for first-time mothers, and 30 minutes for subsequent births. It often consists of roughly 12 to 20 very intense contractions. Contractions last from 60 to 90 seconds and occur every two to three minutes.

#### **Physical changes**

- Hiccups or burping.
- Nausea or vomiting.
- Exhaustion.
- Perspiration.
- Heavier bloody show.
- Rupture of the amniotic membranes (water breaks).
- Cramping in the buttocks.
- Shaking in the thighs.
- Hot flashes (during contractions) or cold flashes (between contractions.)
- Natural amnesia.
- Extreme pressure in the lower back or pressure in the rectum.
- Urge to push.

#### How you may feel

You may be very restless, disoriented and withdrawn – concentrating totally on yourself. Feeling overwhelmed and wanting to give up and go home are common reactions during the last few centimeters of dilation.

Most women demand their partner's constant companionship. Don't be alarmed by this reaction – it's perfectly normal. Continuing to focus on your baby – and the support of your coach and medical team – will carry you through this demanding stage of labor.

#### The second stage of labor

The second stage of labor begins when the mother's bearing down pushes the baby out through the vaginal opening. As the head emerges, the baby turns to face the mother's side for the easiest fit.

Once the shoulders emerge, the baby slides out easily into the world.

Contractions still last 60 to 90 seconds, but may slow to two to five minutes apart, creating brief rest periods for the mother. Contractions continue to be very intense, but pushing along with them helps to ease the pain. The second stage lasts 30 minutes to two hours in first birth and five to 30 minutes in subsequent births. First-time moms with epidurals can push up to three or four hours.

#### **Physical changes**

- Bloody show.
- Flushing.
- Back pain.
- Intense pressure (as vaginal tissue bulges, rectum dilates and pelvic floor muscles stretch).
- A stinging and burning sensation (as the baby's head passes through the vaginal opening).

#### How you may feel

Many women feel an overpowering urge to push as the baby moves through the birth canal. You may get a "second wind" as the urge to push begins, and you may feel alert and exhilarated.

You may be startled or frightened by the power of this urge, but surrendering to it and remembering the goal of labor helps to conquer the fear. If the urge to push continues for more than an hour, you may become tired, anxious and frustrated.

For most women, though, pushing is the most satisfying aspect of labor, both physically and emotionally, because it results in the birth of the baby. Once labor is over and their baby is born, many women experience a great relief and an overwhelming joy.

#### The third stage of labor

The third and final stage of labor is when the placenta detaches from the uterine wall. The placenta is pushed out by the mother with the assistance of a provider. The uterus becomes smaller and rises upward into the abdomen.

Contractions resume shortly after the baby is born, and they are usually less painful than those of the second stage. This final stage of labor lasts about five to 30 minutes in first and subsequent births.

#### **Physical changes**

All women have a vaginal discharge, called lochia, that begins at this stage. Lochia resembles a heavy menstrual flow, consisting mainly of blood, mucus and tissue fragments from the uterus where the placenta was attached.

#### How you may feel

You may be extremely thirsty, hungry or experience chills. You will probably be too excited and absorbed in admiring your new baby to pay much attention to this final stage.

#### Welcome to the world!

Your baby will be monitored closely as he or she transitions to life outside of your womb. Here's what you can expect in the first few hours of your baby's life.

#### In the delivery room

The first cry is proof the baby has made the transition to a new environment and can safely breathe on his or her own. Your newborn may be put directly on your body, cord intact, and covered with a blanket to stay warm. We encourage this skin-to-skin contact right after birth and recommend initiating breastfeeding during this time. Evidence shows that this can help regulate your baby's temperature, help control his or her blood sugar levels and ease the transition from the womb.

This handout does not take the place of a discussion with your health care team. Discuss any questions or concerns you may have with your health care team. Approved for distribution by System Patient Education Council. The cord is usually cut between one and three minutes after your baby's birth. At one minute and at five minutes, your newborn will receive an Apgar score – an evaluation of vital signs and physical responsiveness. Your newborn will be checked for any obvious abnormalities or signs of illness and will be weighed and measured within the first hour after delivery.

If appropriate for you and your baby, our goal is to get baby to breastfeed within an hour after birth to support the bonding experience and to ensure adequate milk supply.

Your nurse and health care providers will care for and assess you and your baby throughout your stay in the hospital and will monitor any changes. As part of the care for your baby, an antibiotic ointment will be applied to your baby's eyes to reduce the risk of infection. It is recommended that newborns receive the hepatitis B immunization, as well as a vitamin K injection, after delivery, while still in the hospital. Before your baby is discharged, the newborn screening will be done on your baby, which tests for several diseases. Most babies go home after 24 to 48 hours. We have a team of nurses, lactation consultants, pediatricians, OB-GYNs, and midwives who are available to support you and answer any questions you may have.

# Hospital visiting policy

We know this is an important time for you and your family. At Corewell Health, your care team will work with you to determine the right number of guests to support you during your labor and delivery.

To effectively treat you and keep children safe, visiting children must be accompanied by an adult.



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