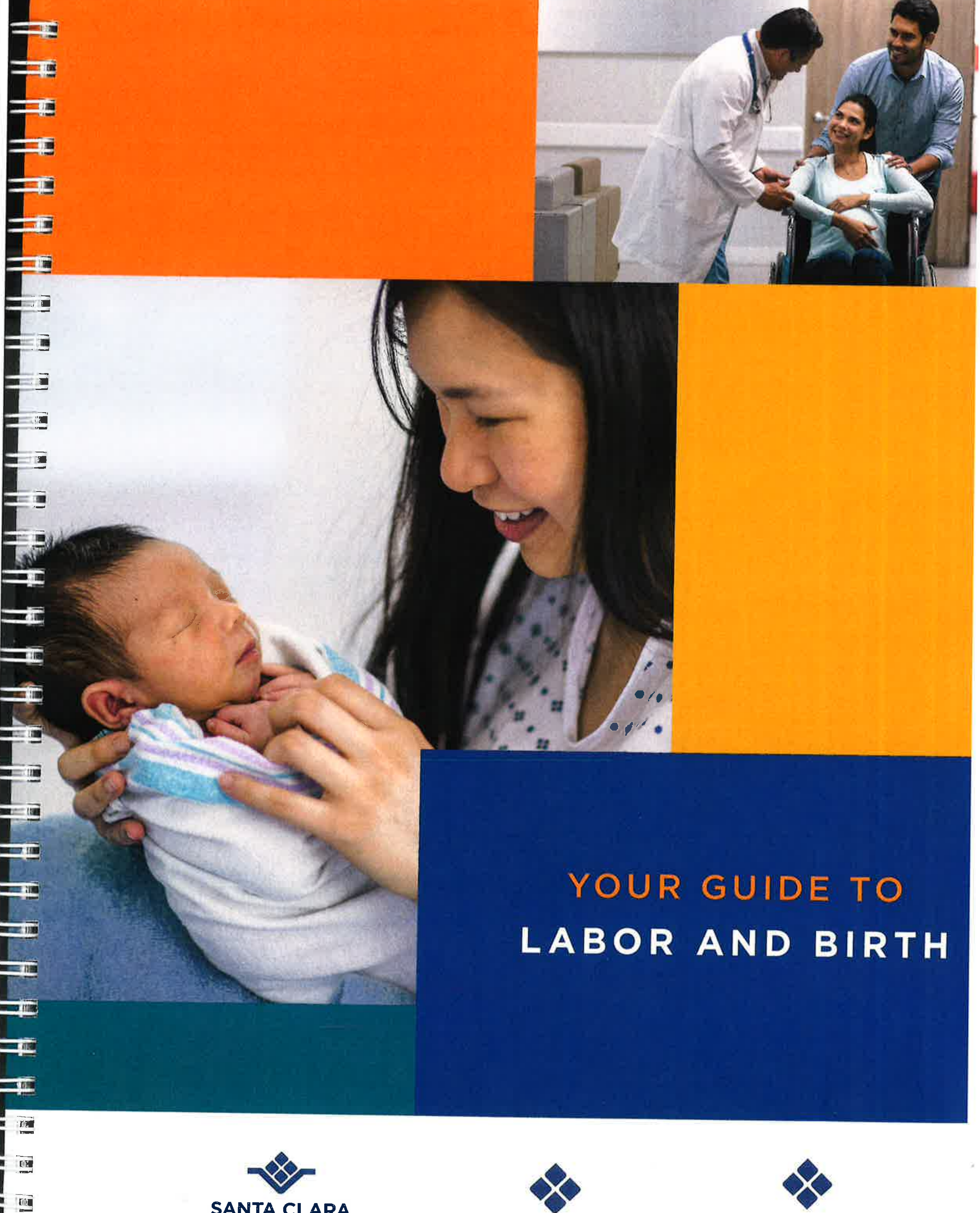


YOUR GUIDE TO LABOR AND BIRTH

SANTA CLARA VALLEY MEDICAL CENTER

O'CONNOR HOSPITAL

ST. LOUISE REGIONAL HOSPITAL

WELCOME TO O'CONNOR HOSPITAL

Having a baby is a deeply-moving experience that can be shared forever with your family and friends. We are delighted that you have chosen our team to provide you with the support and resources you'll need as you prepare for labor and birth.

The more you know about what happens at every stage of labor and birth, the easier it will be to approach the birth of your baby with confidence. This book provides accurate, up-to-date information about a number of important topics, including the different stages of labor, pain and comfort measures, vaginal and cesarean delivery, taking care of yourself after the birth, caring for your newborn, and much more.

We hope you will find the book to be a valuable source of information as you prepare for the birth of your baby. If there is anything else we can do to help and support you along the way, please let us know.

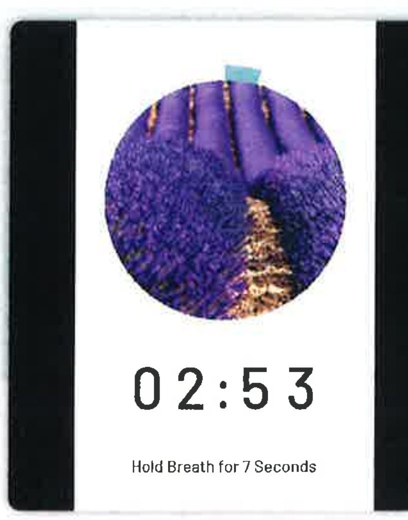
With warmest regards,

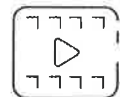
The O'Connor Hospital Team

YOUR GUIDE TO LABOR AND BIRTH

Digital Companion to Your Book

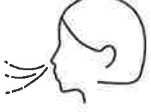
Looking for a fun way to learn new things? The Baby360 Scan + Play app is a FREE tool that makes it fast and easy to watch helpful videos on several interesting topics in this book. You can also use the app to enjoy more great interactive features:





EDUCATIONAL VIDEOS

They say a picture is worth a thousand words. That's why we added several educational videos to enhance your learning experience as you read this book. All video content is medically accurate and up to date with the latest medical standards.



BREATHING EXERCISES

Stress reduction and relaxation are very important throughout your pregnancy and childbirth journey. Use breathing exercises in our app to help reach calm and focus.

STICKERBOOK

Embellish your special moments with Stickerbook. Whether announcing the gender of your baby or just capturing a sweet moment, our beautiful hand-drawn stickers are a great addition to your photos.

To Use App:

1. DOWNLOAD
Visit baby360.com/ScanAndPlay and download the Baby360 Scan + Play app or scan this icon.

2. FIND
Look for the blue Scan + Play icons throughout this book.

3. SCAN
Use the Baby360 Scan + Play app to scan the blue icons.

4. PLAY
Sit back, get comfortable, and enjoy your video!

Your Guide to Labor and Birth is for general reference purposes only and cannot be relied upon as a substitute for medical care. You and your baby should have regular checkups with your health care provider. You should also consult with your health care provider about any special questions or concerns.

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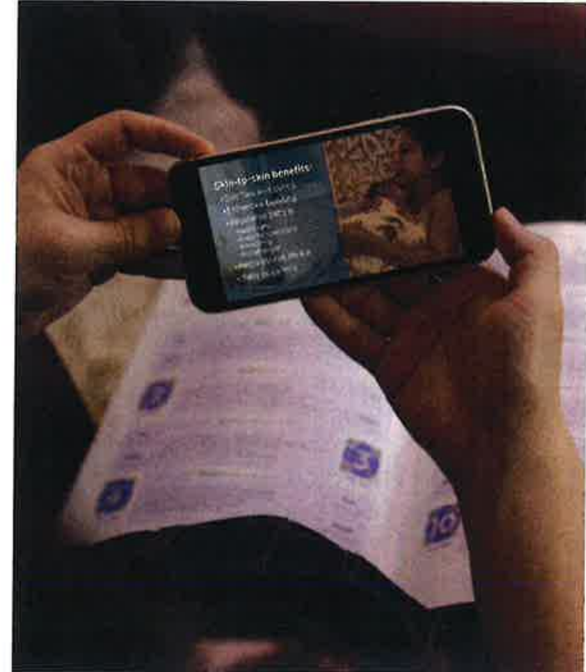

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WELCOME!

Preparing to go through labor and birth can be a challenge. There's so much to do — and so many decisions to make. You may feel like you're on an emotional roller coaster. These are all normal responses when you're pregnant.

Here's another perspective: The more you learn about your body and what happens at every stage of labor and birth, the easier it will be to manage your responses and make good decisions. Simply put, the more you know, the more confident you will feel about your ability to go through labor and birth calmly and confidently.

This book can help.

To make it easier for you to find information about what happens before, during, and after the birth of your baby, we've divided the book into three convenient sections:

- **Before You Give Birth** – Includes making arrangements, taking care of yourself, learning how to manage pain, and more.
- **What Happens During Childbirth** – Includes understanding labor, medical interventions, types of births, and more.
- **After You Give Birth** – Includes caring for your newborn, postpartum changes and self-care, breastfeeding, and more.

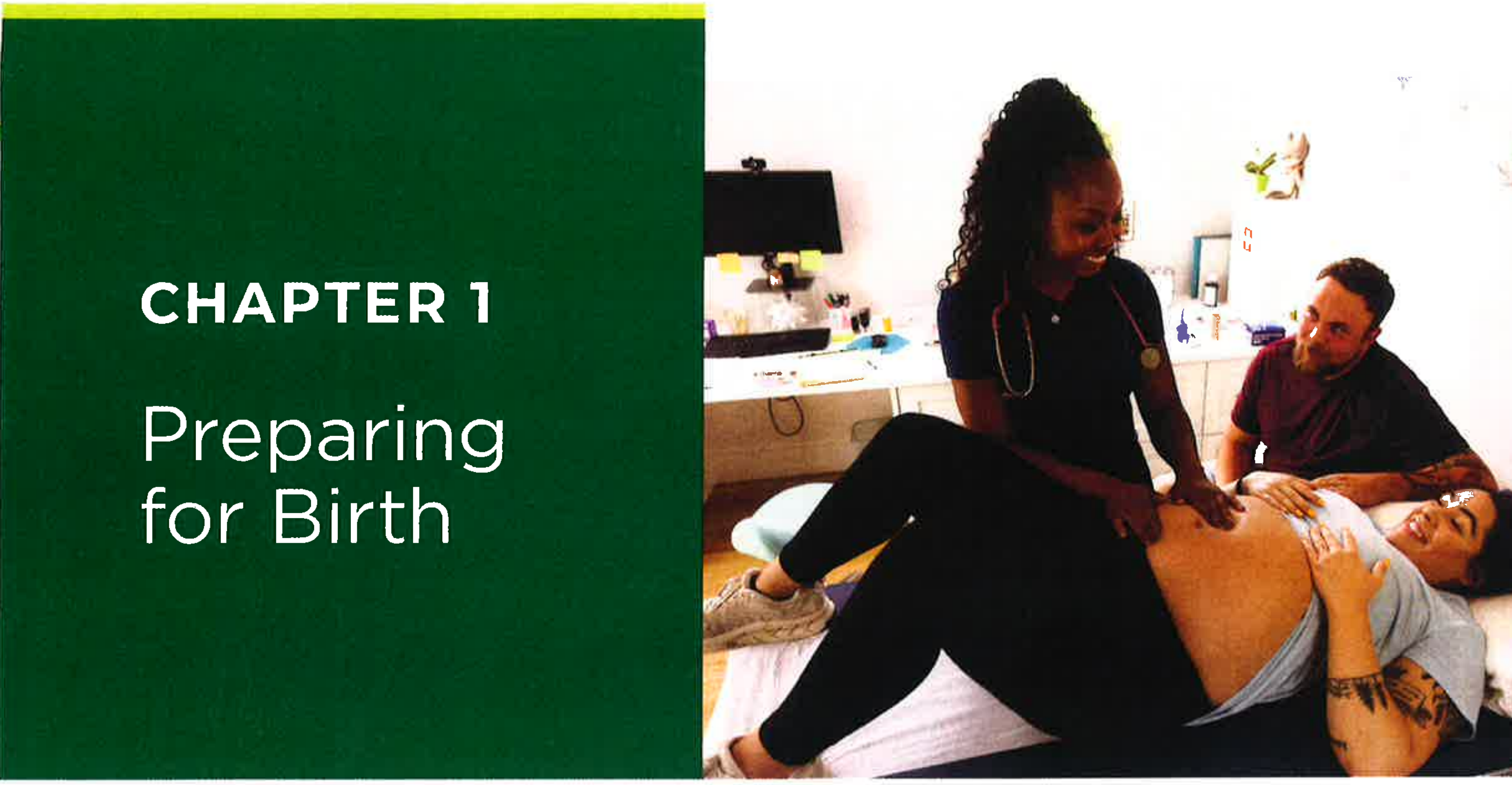
Here's a suggestion: Think about sharing this book with another very important person, your designated labor partner. There's a lot of information in this book that will help your partner learn how to help you, especially near the end of labor when your baby is almost here.

We hope this book will answer many of your questions, make it easier to talk with your health provider, and help you move forward with knowledge and confidence. We wish you a very happy, healthy labor and birth experience.

See a word in ***purple text***? You'll find it defined in the Glossary at the back of the book.

BEFORE YOU GIVE BIRTH

MAKING ARRANGEMENTS, TAKING CARE OF YOURSELF, LEARNING HOW TO MANAGE PAIN, AND MORE



CHAPTER 1

Preparing for Birth

Choosing a Facility

Early in your pregnancy, you'll want to choose a hospital or birth center where your baby will be born. Your health care provider can help you decide which place might be the best choice. You can also ask friends and family members about their experiences and tour several facilities. If you know you will need special care, you'll need to choose a facility that offers that level of care.

Basic considerations before choosing

- **Insurance** – Is the hospital or birth center in your insurance network?
- **Your health care provider** – Does your provider use this facility?
- **Location** – Is the hospital or birth center close to your home?

HOSPITAL OR BIRTH CENTER?

Everyone wants to give birth in a safe, comforting environment. Although hospitals are the traditional choice, birth centers are also very popular. Birth centers encourage natural childbirth, based on the philosophy that childbirth is a normal process, not a technical or medical procedure.

Birth centers can provide a more homelike, relaxed environment with some of the same medical services as a hospital. Many are run by certified nurse-midwives and staff. A physician may oversee the facility.

Things to consider when choosing a birth center

- Does it screen patients and only allow low-risk births?
- Does it have backup arrangements with a hospital or physician if there is an emergency?
- If I or my baby need extra support, will we be transferred to a hospital?
- How long will I stay in the center after I give birth
- Does my insurance cover the cost of this birth center?

Things to consider when choosing a hospital

- Does it offer birthing rooms?
- Are there LDRs (labor, delivery, and recovery rooms) or LDRPs (labor, delivery, recovery, and ***postpartum*** rooms)?
- Will my baby stay in the room with me (room-in)
- How many people are allowed in the room during the birth?
- What are the visiting hours?
- Can my other children visit at any time?
- Do children have to be a certain age to visit?
- Does it have breastfeeding educators or lactation consultants available?
- What kind of security does it have to keep my baby safe?
- If I need a ***cesarean birth***, where will it be done and who can be with me?

TAKING A TOUR

Most hospitals and birth centers offer tours on certain days and times. Taking a tour is a good way to see what you can expect if you have your baby there. You'll learn where to go, what the rooms look like, and what services they offer. This is also a great time to ask specific questions to help you decide if this is the best facility for you.

Your Birth Team

From the beginning of your pregnancy through labor, birth, and beyond, you will interact with different medical professionals on your birth team. You'll want to choose experienced people who treat you with a warm, caring attitude. Having trust and confidence in the people around you can significantly enhance your labor and birth experience.

Your birth team may include:

- **Obstetrician** – A physician with specific medical and surgical training who cares for patients during pregnancy, labor, and childbirth. Obstetricians also treat other health problems and complications that may occur during pregnancy, birth, and the postpartum period.
- **Family medicine physician** – A physician who provides medical care to patients of all ages at every stage of life, including pregnancy and birth. Some family medicine physicians perform cesarean births, while others may need to transfer your care to an obstetrician if you need a cesarean.
- **Midwife** – A health care professional who can offer personal attention and support during prenatal care, attend your labor, help with the birth, and provide postpartum care. Some midwives are qualified medical providers who go through comprehensive training for certification. The practice and credentials related to midwifery are different from state to state, so you'll want to ask about their specific certification and experience.
- **Nurse practitioner (NP)** – An NP is an advance practice registered nurse with extra training who can do checkups, order lab tests, and prescribe medicine. They can be licensed to provide prenatal care and well-woman care, but they don't deliver babies. They usually work in clinics with a physician or a certified nurse midwife (CNM) who would attend the birth.
- **Registered nurse (RN)** – A registered nurse works closely with your doctor or midwife to provide comprehensive medical care. They will monitor you and your baby closely. In the hospital, registered nurses are the health care professionals you will have the most contact with.
- **Doula** – A doula is a trained professional who provides continuous physical, emotional, and informational support to you (and your family) before, during, and after the birth. Some doulas also offer emotional and practical support during the postpartum period. Studies have shown that when doulas attend a birth, labor is shorter with fewer complications, babies are healthier, and they breastfeed more easily.

MIDWIFE CATEGORIES	
CERTIFIED NURSE-MIDWIFE (CNM)	Trained and licensed in both nursing and midwifery; has a master's or doctoral degree from an accredited institution; certified by the American College of Nurse Midwives
CERTIFIED PROFESSIONAL MIDWIFE (CPM)	Trained in midwifery and meets practice standards of the North American Registry of Midwives
DIRECT-ENTRY MIDWIFE (DEM)	Trained in midwifery through a variety of sources that may include self-study, apprenticeship, midwifery school, or a college program
CERTIFIED MIDWIFE (CM)	Trained and certified in midwifery and has at least a bachelor's degree from an accredited institution
LAY MIDWIFE	Not certified or licensed but has trained informally through self-study or an apprenticeship

Your Labor Partner

The person you choose as your labor partner will play a vital role in helping you get through labor and birth more comfortably. For many people, this will be their partner or spouse. For others, it might be a family member or a close friend. Whoever you pick should understand that they will be with you through all the different stages of labor, actively providing help and support.

When you're in labor, it's easy to forget some of the techniques you learned in childbirth class. That's why it's important to have your labor partner come to classes with you. Your labor partner can help you stay calm and remind you when and how to use some of the comfort measures you both learned in class.

8 ESSENTIAL DUTIES of a LABOR PARTNER

1. **EMOTIONAL SUPPORT**
   Keep you informed about how you are progressing
2. **REASSURANCE**
   Tell you how well you're doing and how much you mean to them
3. **SKILLS LEARNED IN CLASS**
   Breathe with you, remind you of focal points and visualization
4. **TIME YOUR CONTRACTIONS**
   Track how close together they are and how long they last
5. **PRESSURE POINTS AND MASSAGE**
   Use touch and massage techniques to help you relax
6. **COMFORT MEASURES**
   Fluff pillows, help you change positions, remind you to use the bathroom
7. **KEEP YOU RELAXED**
   Suggest changes in relaxation methods or breathing if you are in pain
8. **UPDATE FAMILY AND FRIENDS**
   Manage who is in the room and offer updates during labor

FOR BIRTH

Healthy Communication

Having honest and open communication with your partner or spouse is essential as you get closer to the birth of your baby. You may be surprised to learn that you share some of the same feelings or concerns. Talking about them openly before your baby is born can strengthen your relationship and help you both prepare to be parents.

Your partner may be wondering:

- Will the labor process be safe?
- Do I have what it takes to be a good parent?
- How can I be helpful when I'm afraid to see my partner in pain?
- How am I going to react when our baby is born? Will I pass out or be sick?
- Are we making enough money to support another family member?
- Will we have time together once our baby is born?

You may be wondering:

- Will our baby be healthy?
- Am I going to be able to tolerate labor?
- How will I handle the pain?
- Will I be a good parent?
- Will my partner still find me attractive after I give birth?
- Am I going to love this child at first sight?
- Will I go back to work after the baby arrives?

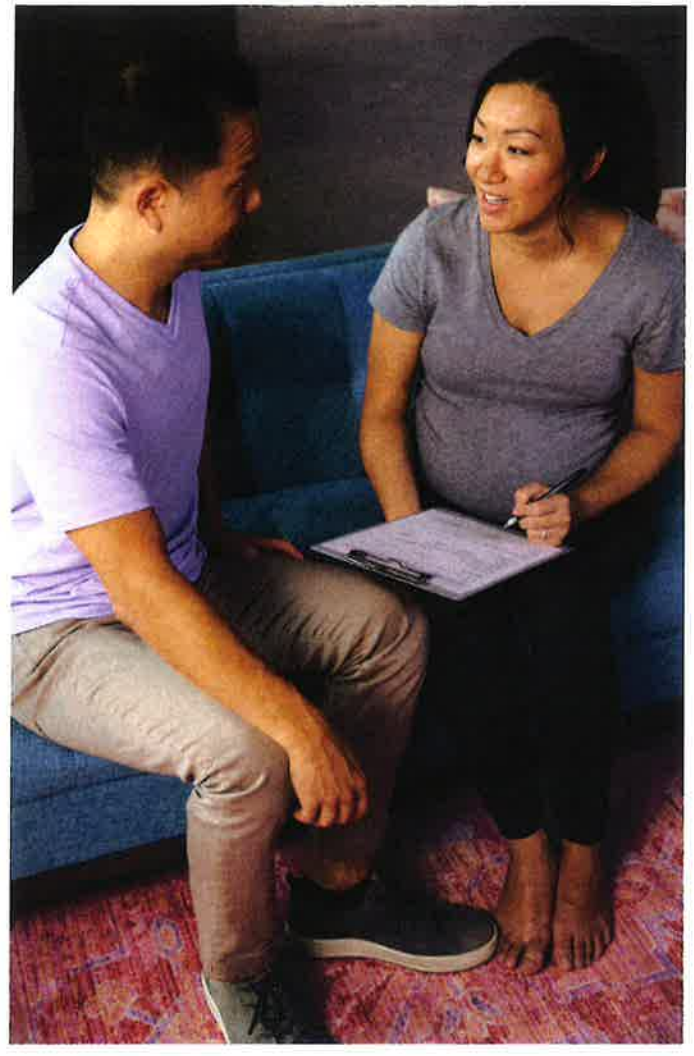
Classes and Educators

Learning how your body responds at every stage of the labor and birth process can help you and your partner feel less anxious and more confident. Using the relaxation and comfort techniques you learn in class can help you shorten labor time, use less medication, and have an easier birth. Understanding the entire process can also help you make informed decisions when you need to.

PRENATAL CLASSES

Most hospitals and birth centers offer in-person prenatal and breastfeeding classes. Many also offer online or virtual classes. Signing up early gives you the best chance to get into the class(es) you really want. Another benefit of taking a prenatal class is getting to meet other expectant parents and form new friendships.

Childbirth educators, lactation consultants, midwives, and doulas can teach you what to expect, how to respond, and how to do some of the basic tasks you'll face as new parents. In addition to teaching classes, many are available to work with you as personal consultants.



Creating a Birth Plan

A birth plan isn't exact. Giving birth simply has too many variables that no one could predict in advance. A birth plan is more like a list of preferences for how you would like your birth experience to unfold. Writing a birth plan early in your pregnancy helps you think about your choices and what you hope will take place. A written plan also allows you to share your wishes and expectations with your partner, health care provider, doula, birth partner, birth facility team, and anyone else who needs to know.

Educating yourself before labor begins makes it easier to understand your options, including medical interventions and the use of pain medications. Preparing ahead of time also makes it easier to learn about "routine" intervention policies and procedures at your birth facility. If you don't agree with a policy or procedure, be sure to discuss it with your provider in advance. As you learn more about what to expect during labor and birth, you can add your preferences to your birth plan.

WRITING YOUR BIRTH PLAN

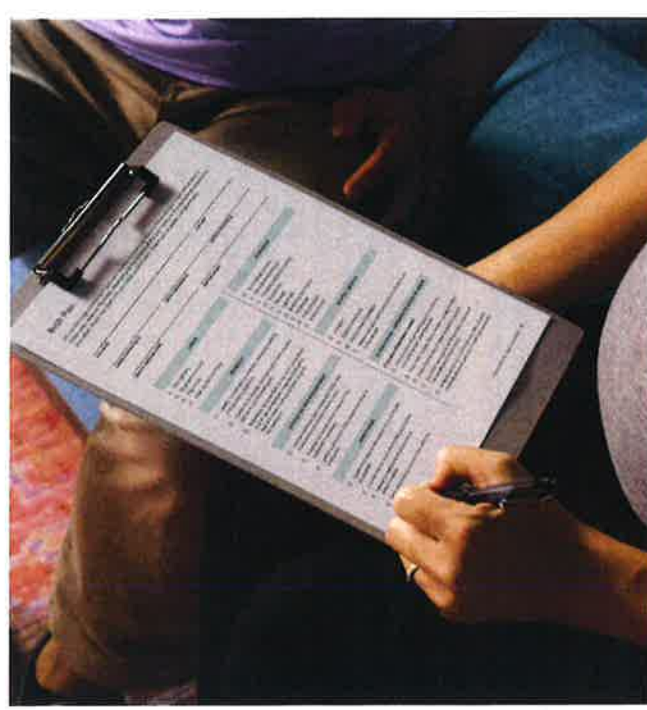
As you get ready to write your birth plan, start with a list of ideas to help you prioritize. If you want minimal interventions, you can list alternatives. Look for birth plan templates online or ask if your birth facility has one to guide you. You don't need a specific form, though. Listing your thoughts and preferences on a piece of paper also works.

Your written birth plan might include:

- Which pain relief measures you would like
- How you feel about certain interventions
- Who you want in the room with you
- What birthing positions you plan to use
- Who you want to help with the birth
- Whether you want your partner to cut the ***umbilical cord***
- What you want to do with the ***placenta***

You can also add things that would enhance your experience and make you more comfortable. For example, do you want a specific type of lighting or background music in your room? Would you like to have snacks or beverages available? Not every facility can accommodate every wish, but having a written plan at least lets them know your desires.

Try to keep your plan simple and upbeat. List your desires in the order of their importance. Then make time to review your birth plan with your health care provider and birth team.



Birth Plan

Fill out this page according to your own wishes for your birth. Keep in mind that you might not be able to follow every wish on this page, depending on the policies of the birth facility or if complications arise during your labor. Share your plan with your labor support team, health care provider, and labor nurse.

FULL NAME ______________________

DUE DATE ______________________

LABOR COMPANION (1) ______________________

LABOR COMPANION (2) ______________________

LABOR COMPANION (3) ______________________

HEALTH CARE PROVIDER ______________________

DOCTOR'S NAME ______________________

LABOR

- ○ Dim lighting
- ○ Quiet environment
- ○ Play music
- ○ Wear my own clothing

MOBILITY

- ○ I prefer to maintain all mobility, including walking and changing positions.
- ○ I prefer to be able to move around in bed only and get up to use the bathroom.
- ○ Mobility is not important to me, and I understand that if I get an epidural, I may be confined to bed and need a urinary catheter to go to the bathroom.

HYDRATION AND NOURISHMENT

- ○ I would like to eat light snacks and drink clear fluids whenever possible during labor.
- ○ It would not bother me to have an IV for hydration if necessary.
- ○ I prefer a saline lock if the placement of an IV is required.

MONITORING

- ○ I prefer my baby to be monitored as minimally as possible.
- ○ I would like as much monitoring as possible.
- ○ I prefer a method that allows me to remain mobile.
- ○ Fetal monitoring in bed is fine with me.

PAIN RELIEF

- ○ Nonmedical options
- ○ Relaxation techniques
- ○ Changing positions/walking
- ○ Visualization
- ○ Massage
- ○ Labor ball
- ○ Breathing techniques
- ○ Tub/shower
- ○ Hot/cold packs
- ○ Aromatherapy

MEDICAL OPTIONS

- ○ Analgesic
- ○ Epidural anesthesia
- ○ Nitrous oxide (if available)
- ○ I prefer that pain medication only be offered to me at my request.

AUGMENTATION — METHODS TO SPEED UP LABOR

If my labor slows down, I would:

- ○ First try nonmedical methods such as walking and using upright labor positions
- ○ Prefer that my practitioner breaks my bag of waters
- ○ Prefer that my bag of waters breaks on its own
- ○ Not mind having an IV of Pitocin and understand the benefits and risks involved
- ○ Prefer to receive an IV of Pitocin only after all other methods are tried, and only if medically necessary

Birth Plan *(continued)*

PUSHING

- ○ I prefer to wait to push until I feel the urge or my baby descends.
- ○ I would like to use a variety of positions during pushing.
- ○ I would like a mirror placed at the foot of the bed, so I can watch my baby's birth.
- ○ I would like to push whenever I feel like it.
- ○ I would like to be directed as to when to push.
- ○ I prefer any natural tearing over an episiotomy.
- ○ I would not mind having an episiotomy.
- ○ I would like to avoid forceps and/or vacuum extraction unless absolutely necessary.
- ○ I would like to touch my baby's head as it crowns.
- ○ I would like my health care provider to hand me the baby immediately if there aren't any complications.

BIRTH AND BABY CARE

- ○ I would like to hold my baby skin-to-skin immediately after birth and breastfeed as soon as possible.
- ○ I would like to cut the umbilical cord.
- ○ I prefer to have the cord cut immediately.
- ○ I would like to wait to have the cord cut until the baby receives all the blood from the placenta.
- ○ I would like to donate the umbilical cord blood.
- ○ I would prefer that routine hospital procedures be done while I hold my baby, if possible.
- ○ I would like all routine tests, shots, and procedures for my newborn.
- ○ I prefer to choose the tests that are done and discuss it with my baby's pediatrician ahead of time.
- ○ I am breastfeeding exclusively and don't want my baby to be given pacifiers, bottles, or formula.
- ○ I plan to formula-feed only.
- ○ I prefer a combination of breastfeeding and formula-feeding.
- ○ I want to room in with my baby.
- ○ If I have a boy, I prefer to have him circumcised.
- ○ I do not want my baby boy to be circumcised.
- ○ I would like my baby's hearing to be tested.

IN CASE OF A CESAREAN

- ○ I would like my support person to accompany me during surgery.
- ○ If possible, I would like 2 people to accompany me.
- ○ If anesthesia is a choice for me, I would prefer an epidural.
- ○ If anesthesia is a choice for me, I would prefer a spinal.
- ○ If possible, I would like music played in the operating room.
- ○ I would like the drape/screen lowered during surgery so I can see the birth.
- ○ I would like the surgeon to describe the surgery as he or she goes along.
- ○ I would like to have video or photos taken.
- ○ I would like my support person to cut the cord.
- ○ I would like to have at least one arm released so I can hold my baby right away.
- ○ I would like to breastfeed as soon as possible in the recovery room.

NOTES

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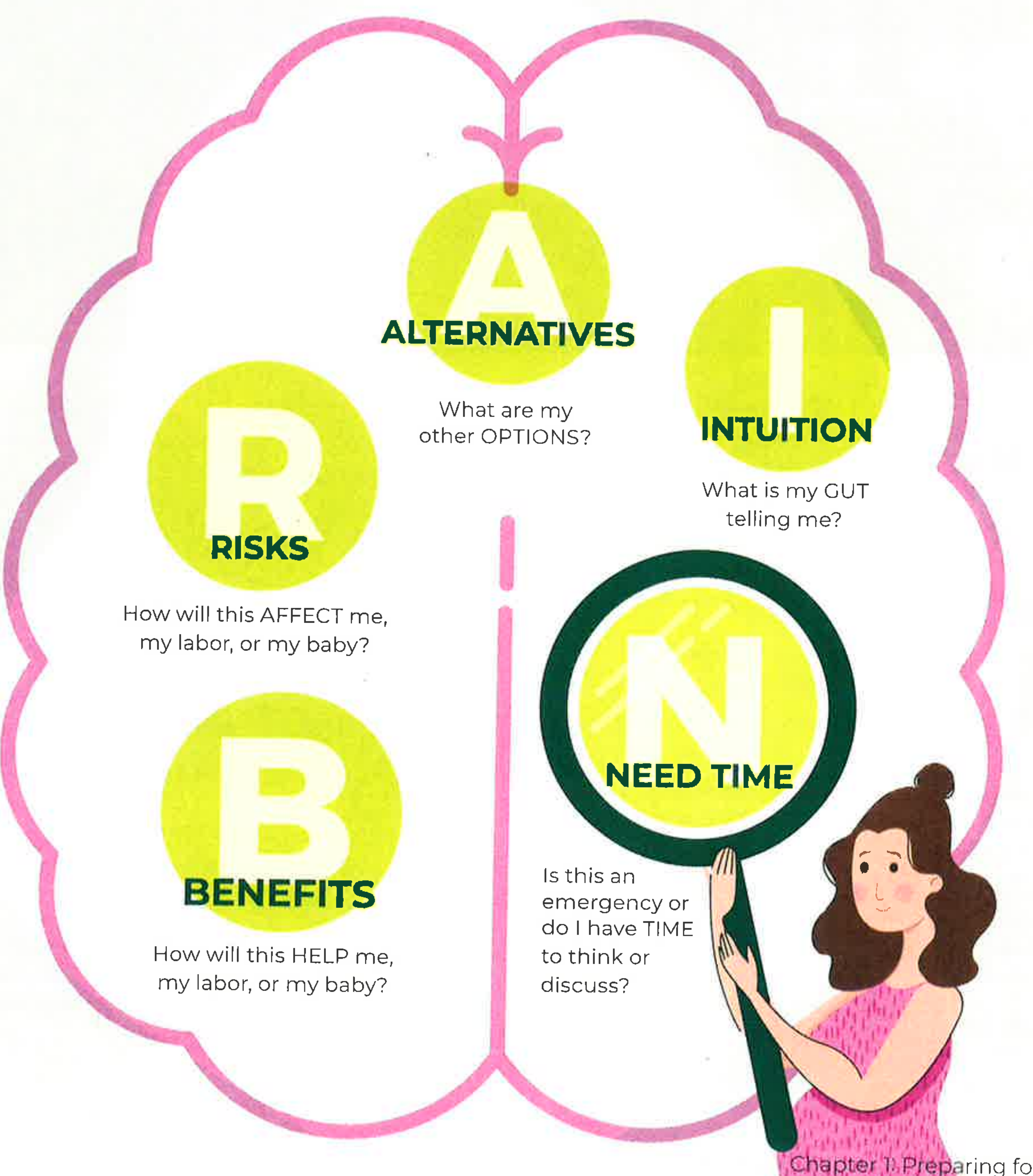
MAKING informed DECISIONS: BRAIN

PREPARING FOR BIRTH

You may find it helpful to use this guide when talking to your health care provider or as a handy tool to help with making decisions in other areas of your life.

BRAIN DECISION-MAKING TOOL

The **"BRAIN"** acronym reminds you to ask about the benefits and risks of certain procedures, what your options are, what your intuition is telling you, and how much time you have to make a decision.



Baby's Medical Provider

You should find a health care provider for your baby before you give birth. This very important person will take care of your baby's health for many years.

Providers who care for babies include:

- **Pediatricians –** Physicians who specialize in caring for babies and children
- **Family medicine doctors** – Physicians who care for people of any age
- **Physician assistants** – Providers who can practice medicine under the direction and supervision of a physician; can perform checkups, order lab tests, and prescribe medicine
- **Nurse practitioners** – Advance practice registered nurses with extra training who can do checkups, order lab tests, and prescribe medicine

You'll probably want to meet with several providers before you make a choice. Ask your family and friends who they use and how they feel about that person.

Be sure that your choice is on the list of providers covered by your health insurance plan. If not, you will pay more for office visits. Above all, choose someone you like and feel you can trust. You will make a lot of visits to their office during your baby's first year of life, so it's important to feel confident about your choice.

Questions to ask prospective providers

- Are you in my insurance network?
- What hospital or medical facility do you use?
- Are you supportive of exclusive breastfeeding?
- Do you feel routine ***circumcision*** is necessary?
- Will you give me books or other materials about how to care for my baby?
- What are your office hours and do they include weekend hours?
- What happens if there is an emergency or I need you after office hours?

CHAPTER 2

Having a Healthy Pregnancy

Staying Active

There are many good reasons to exercise when you're pregnant. It can help with backaches, blood circulation, sleep, weight control, and other pregnancy-related issues. Exercise can also help you build strong muscles for labor and recover more quickly after your baby is born.

Talk to your health care provider about which exercises would be good choices for you. Remember to drink plenty of water while you are exercising. Wear good shoes and a comfortable support bra. Above all, pay attention to your body and stop if you need to during any workout.

Recommended activities

- Walking
- Swimming
- Stationary biking
- Water and low-impact aerobics

SCAN + PLAY

WARNING!

When exercising, call your provider or seek emergency care immediately if you have:

- Shortness of breath
- Chest pain
- Uneven heart rate
- Extreme fatigue
- Dizziness or headache
- Uterine contractions
- Decreased fetal movement
- Calf pain or swelling
- Leaking fluid or blood from your ***vagina***

Easy Exercises

These 3 stretching and toning exercises don't take any special preparation, space or equipment. Almost anyone can do them anywhere.

1 THE PELVIC ROCK

Pelvic rocking helps relieve a sore back by stretching your lower back muscles. It's the most common exercise taught in childbirth classes because it's very effective. Doing the pelvic rock during pregnancy can help support your growing baby. Doing it after pregnancy can help tone your abdominal muscles. You can do the pelvic rock lying on your back, standing up, or down on your hands and knees.

Start by doing 10 of these 3-4 times a day. Work yourself up to about 40 stretches 3-4 times a day, including once before you go to bed. This helps baby get into a good position.

Here are 3 ways to do the pelvic rock:

1. Lying down
Lie flat on your back, hands on the floor at your sides. Rock your ***pelvis*** up by drawing your belly button (naval) in and slightly raising your tailbone (pelvic area). Return to starting position. This is a small movement. Don't stress your back. If you feel dizzy, try another position.

STEP 1

STEP 2

2. Standing up

Keep your back straight, tighten your buttocks, bend your knees slightly, and rock your pelvis back and forth. This is a belly dancing move called the hinge. Try putting on some music and slowly walking around while doing this exercise. Your abdomen and bottom should work like a hinge, while the rest of your body stays upright.

PREGNANCY

3. On your hands and knees

This is like the cat's stretch yoga pose. Get down on your hands and knees with your arms shoulder-width apart and your knees hip-width apart. Pull your buttocks down and slightly arch your back, tilting your pelvis forward. Then push your buttocks out and back, tilting your pelvis back. Keep these movements small to keep your back mostly flat.

Easy Exercises *(continued)*

2 SQUATS

This exercise will help your back and is good practice for properly lifting heavy weights, like your newborn. Always lift heavy objects by keeping your back straight, squatting down, and using your leg muscles to push yourself up. There are 2 types of squat exercises. Try to do both types 3-4 times a day.

Standing squat
Stand with your lower and upper back against a wall. Keep your feet hip-width apart and parallel while pressing your heels flat against the floor. Lower your body slowly down the wall, with your hands against it, until you are in a squatting position. Hold for 3-5 seconds. Slowly raise yourself back up. Repeat 5-10 times.

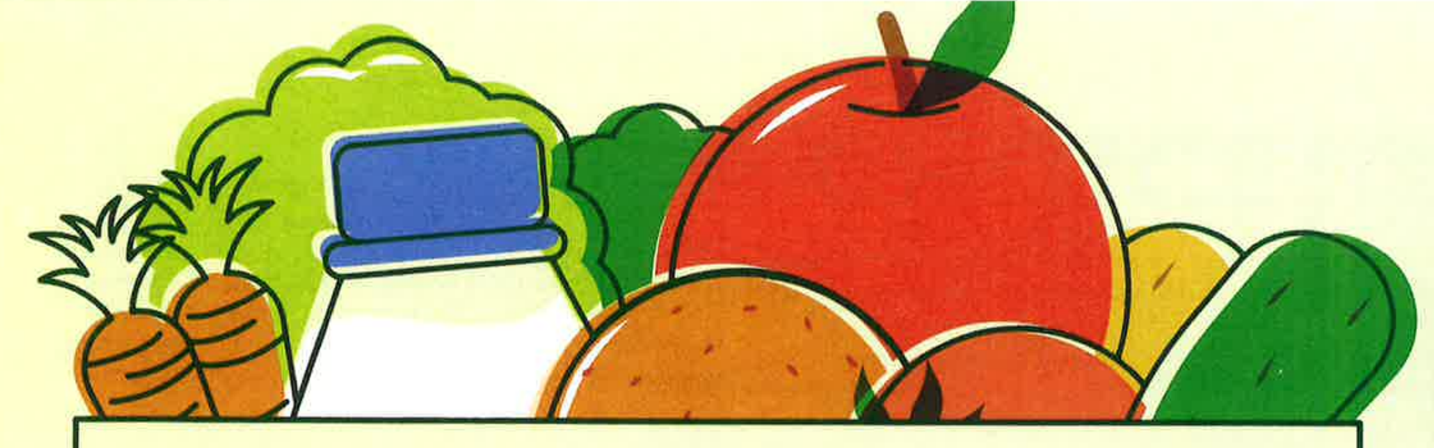
Squat variation
Hold on to a heavy piece of furniture that will not tip over. Slowly squat down, keeping your feet hip-width apart, your heels flat on the floor, and your back straight. Let your knees spread open. Hold for 3-5 seconds. Slowly raise yourself back up. Repeat 5-10 times.

3 KEGEL EXERCISES

Kegel exercises tone the muscles in your pelvic area and improve circulation to the vaginal and rectal areas. Continue to do Kegels after you've given birth to help speed healing, improve the muscle tone of your vagina, and help prevent urinary leaks. Your goal is to control and relax 3 different sets of pelvic muscles, 1 set at a time.

- **First set** – Contract your muscles like you are holding back the flow of urine, then relax.
- **Second set** – Tighten your muscles like you a holding back a bowel movement, then relax.
- **Third set** – Contract your vaginal muscles, then relax.

It may take some practice to work each of these sets of muscles individually. But keep practicing. Relax and contract each set of muscles separately contracting them more firmly and longer each tin



EATING healthy

Choosing to eat healthy, nutritious foods is very important for both you and your baby. You need to eat the right balance of proteins, carbohydrates, fats, fruits, and vegetables every day.

The American College of Obstetricians and Gynecologists (ACOG) recommends eating 300 extra calories per day during pregnancy (600 for twins and 900 for triplets). You may need more during the later stages. Ask your health care provider for a referral to a registered dietician if you are struggling with healthy eating.

HEALTHY SNACKS

- String cheese
- Yogurt
- Turkey slices
- Cottage cheese
- Hard-boiled eggs
- Hummus

VITAMINS

You'll need to take prenatal vitamins, although vitamins can't take the place of healthy foods. Prenatal vitamins typically have extra iron, folic acid, calcium, and omega-3 fatty acids. If vitamins leave a funny taste in your mouth or make you feel sick, try taking them after you eat a meal or at bedtime.

FOODS TO AVOID

Food poisoning can be very serious when you're pregnant. To be safe, stick to foods that are clean, pasteurized, and/or thoroughly cooked.

Don't eat:

- Raw or undercooked fish (sushi)
- Raw, undercooked, or processed meat
- Hot dogs and luncheon meat (unless steaming hot)
- Raw eggs
- Refrigerated paté and meat spreads
- Refrigerated smoked seafood
- Unwashed raw fruits or vegetables
- Unpasteurized milk or soft cheese
- Unpasteurized fruit juice

FOODS TO LIMIT

Even though they may not be dangerous, there are some foods that you should eat less of while you're pregnant. If you're not sure what is in a certain food, read the label before you take a bite.

Cut back on:

- Saturated and trans fats – Less healthy than unsaturated fats
- Sugary food and drinks – Less nutritious, high in calories
- Salty foods – Cause your body to retain fluids and swell
- Caffeine – Can cause headaches, *insomnia*, or nervousness

AND DON'T FORGET TO DRINK PLENTY OF WATER

6 to 8 GLASSES A DAY TO STAY HYDRATED

Head-to-Toe Health

It might feel like you have a million things to do to get ready for your new baby. But it's also important to take good care of your own health and safety while you're pregnant. How you live your life and the choices you make during this time can affect not just your health, but also the health of your unborn baby. Here are a few things to think about.

CLEANERS AND SPRAYS

Did you know that the chemicals in household cleaners get into your body through your skin? Try to use products with natural ingredients instead of chemicals. It also helps to wear rubber gloves and open the windows when you clean so you're not touching chemicals or breathing fumes.

EMOTIONS AND STRESS

When you become pregnant, your changing ***hormone*** levels can add another layer of emotional stress. It's normal for many pregnant people to experience a wide range of quickly changing emotions — including joy, excitement, fear, or even panic. Managing pregnancy stress and mood swings isn't always easy.

Here are some things that may help:

- Recognize that stress is common when you're pregnant
- Exercise, get enough sleep, and eat well-balanced meals
- Avoid people, places, or activities that stress you out
- Don't try to do too many activities in a single day
- Find quiet time to sit and breathe deeply for a few minutes
- Talk to friends, family, or your health care provider if you need help

MEDICATIONS

Don't take any type of medication unless your medical provider tells you it's safe to use during pregnancy. If you're not sure about the safety of any medication, call your provider's office and ask.

TEETH AND GUMS

When you're pregnant, your gums may bleed or swell. But it's still important to brush and floss every day to keep your teeth healthy. It's OK to see your dentist for checkups or any dental issues. Remember to tell them you're pregnant before they take any X-rays or give you any medications. ***Local anesthesia*** is generally safe to use during pregnancy. But you can check with your health care provider to be sure.

REST

It's normal to feel more tired than usual during the first part of your pregnancy. This is your body telling you to rest and relax to help your baby grow. Try to get 8 to 10 hours of sleep each night and take naps during the day if you need to.

SEX

Your desire for sex may be higher or lower during pregnancy. Many people feel less interested in sex when they have morning sickness. Others lose interest late in pregnancy when they're physically more uncomfortable. Sex may not be comfortable in the last 4 to 6 weeks, but it's still safe. Unless your health care provider tells you not to have sex, you can continue to enjoy it while you're pregnant.

TRAVEL

If you're not having any medical issues, it's usually fine to travel when you're pregnant. Once you're in your eighth month of pregnancy, you may want to stay closer to home.

Talk to your health care provider before traveling if you:

- Are expecting twins
- Have pregnancy-related high blood pressure
- Are having a high-risk pregnancy
- Have only 4 to 6 weeks left until your due date

WORKING

Depending on what type of job you have, you may be able to safely work outside your home through most of your pregnancy. As your due date gets close you may need to make some changes. If you have any concerns, talk to your health care provider about your job duties and how you might be able to adjust them

MAKING good CHOICES

Anything you eat, drink, or smoke while you're pregnant will also affect your baby. That's why it's important to understand the potential risks of certain choices you may have to make during your pregnancy.

Alcohol - To be safe, don't drink any alcohol while you are pregnant. Even drinking small amounts can trigger fetal alcohol spectrum disorders (FASDs) that may cause physical, behavioral, and learning problems in your baby.

Smoking or Vaping - Smoking or using electronic cigarettes (vaping) that contain tobacco can increase your chance of having a miscarriage or preterm birth. Smoking also puts your baby at risk for birth defects, respiratory (lung) problems, and SIDS (Sudden Infant Death Syndrome).

Marijuana (Cannibis) - Although marijuana (cannabis) is legal in many states, its impact on babies is not fully known. Many researchers believe marijuana has more long-term effects on young brains than adult brains. Studies suggest that babies' growth and brain development may be harmed when exposed to THC (the active ingredient in marijuana) on a regular basis. THC is stored in body fat and more than half of an unborn baby's brain is composed of fat. Because marijuana isn't grown or processed under any safety rules, it can also expose you and your baby to unwanted mold, fungi, bacteria, processing chemicals, or even heavy metals found in soil (lead, arsenic, mercury). Although some people use marijuana to control nausea (morning sickness), it may not be safe for your baby and is not recommended for use during pregnancy.

Street Drugs - Using drugs can cause you to miscarry or deliver your baby too early. Babies born dependent on drugs will go through painful withdrawal right after birth. Using drugs during pregnancy increases a baby's risk of SIDS.

Interpersonal Violence - Domestic violence is the use of physical, sexual, or emotional threats by one person to control another person. Intimate partner violence may begin or intensify during pregnancy, when having a baby triggers unexpected negative emotions in a partner. This type of abuse puts you and your baby at serious risk of injury. If you are threatened, get out and get some help.

National Domestic Violence Hotline
Call 1-800-799-SAFE (7233)
Text START to 88788

Aches and Pains

Your body will go through many changes over the course of your pregnancy, most caused by changing hormones. Although every pregnancy is different, you will probably experience at least some of these common aches and pains. To make it easier to find what you need, we've listed them in alphabetical order.

BACKACHE AND SCIATICA

There are many pregnancy-related causes of back pain. Pregnancy hormones can relax the ligaments that hold your pelvic and weight-bearing bones together to help you prepare for birth. As your ***uterus*** grows larger, your belly sticks out farther. This can weaken your abdominal and back muscles and cause low back pain.

Your enlarged uterus may also push on your sciatic nerve, causing back pain and/or weakness or numbness in your legs. This condition, known as sciatica, usually goes away after pregnancy.

What you can do

- Wear low-heel, flat-heel, or supportive shoes (no high heels)
- Take breaks during the day and rest as much as you can
- Exercise to strengthen your back and abdominal muscles
- Use a heating pad to reduce pain but never on bare skin
- Avoid lifting anything too heavy
- Never sit straight up after lying on your back; roll sideways first

BELLY (ROUND LIGAMENT) PAIN

During the second half of your pregnancy, you may feel sharp or dull pain on one or both sides of your lower belly. This is called "***round ligament pain***" and it happens when the ligaments supporting your uterus start to stretch or have spasms. You may notice pain when you're walking or if you quickly roll over in bed.

Try resting and putting a warm compress or heating pad on the area to help reduce pain. Round ligament stretching early in your pregnancy may feel like menstrual cramps. If the pain is especially strong and doesn't go away, talk to your health care provider.

BRAXTON HICKS CONTRACTIONS

Braxton Hicks contractions cause a balling-up or crampy feeling in your uterus. You may have them during your whole pregnancy but probably won' feel them until your second or third ***trimester***. Braxton Hicks contractions help your uterine muscles stay in shape and practice for the upcoming labor. That's why they are also called "practice contractions." Sometimes it can be hard to tell the difference between Braxton Hicks and true labor ***contractions***.

BREAST CHANGES

You'll start seeing changes in your breasts very early in your pregnancy, including:

- Breasts becoming larger, firmer, and more tender than usual
- ***Areola*** (dark area around the nipple) getting larger and darker
- Your nipples starting to stick out more

Halfway through your pregnancy, your breasts may start to leak small amounts of a fluid called ***colostrun*** You can buy special pads to protect your clothes if th happens. The veins under the skin of your breasts ma also become more visible as your body gets ready to produce milk. Wearing a bra that fits properly can gi you comfort and support.

CONGESTION AND NOSEBLEEDS

A stuffy nose, or nasal congestion, is another common problem during pregnancy. Because you have more blood in your body, your nasal passages may swell, feel very dry and raw, or start to bleed.

To reduce nasal congestion:

- Try saline nose drops or a humidifier to ease dryness
- Avoid medicated nose drops or sprays
- Drink more fluids to help reduce dryness

To stop a nosebleed, press your finger firmly against the side that is bleeding for a few minutes. If the bleeding is heavy and/or you can't stop it by applying pressure, call your health care provider.

CONSTIPATION AND BLOATING

Constipation and bloating are common problems during pregnancy. They may be caused by high levels of iron in prenatal vitamins and pressure from your growing uterus on your lower bowel. If you have symptoms, natural remedies such as these may help:

- Drink lots of water; prune juice can also be helpful
- Eat high-fiber foods (vegetables, fruits, whole grains)
- Find time to take a walk or do some exercise every day
- Eat frequent small meals, which are easier to digest
- Avoid processed foods, fatty meats, and high-fat dairy
- Avoid gassy foods (beans, cabbage, carbonated soda)

NOTE: Certain laxatives may cause contractions and dehydration. Bulk-forming agents or stool softeners are the safest choices during pregnancy.

FATIGUE

Feeling very tired (fatigue) is a common early sign of pregnancy. Some people feel more energy after their first trimester, then become tired again near the end of their pregnancy. You may be feeling extra tired because of hormone changes or the physical strain of pregnancy on your body. Try to rest more often, eat healthy foods, and ask for help if you need it. Even though you might not feel like walking or moving, light exercise can help boost your energy.

FEELINGS AND MOOD SWINGS

During pregnancy, your feelings and moods can change quickly. You may feel happy one minute, then suddenly burst into tears the next. Emotional changes may also make you feel more tired. Mood swings are often related to changes in your hormone levels. You may also feel worried at times about your baby's health, going through labor, or becoming a parent.

A good way to feel more confident and relaxed is to learn as much as you can about pregnancy, labor, and birth. Going to prenatal classes, reading books, watching videos, and downloading pregnancy apps can be very helpful.

FREQUENT URINATION

When your uterus expands, it puts pressure on your bladder so you feel like you need to urinate more often. Don't try to control this by drinking less fluid. It's more important to stay hydrated and drink whenever you are thirsty. Late in pregnancy, you might experience urine leaks when you laugh, cough, sneeze, or bend over. Bladder leak pads or panty liners can help you stay dry. This usually corrects itself after pregnancy. Kegel exercises may help with this issue. See page 20.

HEARTBURN

Heartburn (indigestion) is another common problem. Heartburn causes a burning pain in your chest and throat and sometimes a dry, hacking cough. Heartburn happens when acid is forced from your stomach into your throat. It may get worse in the second half of your pregnancy.

What you can do

- Eat 4 to 5 small meals during the day
- Don't eat or drink close to bedtime
- Avoid fried, acidic (tomatoes, fruit), or spicy foods; caffeine; and chocolate
- Don't lie flat on your back; put pillows under your head and shoulders
- Try over-the-counter antacids such as Mylanta, Rolaids, or Tums if your provider approves

HEMORRHOIDS

Hemorrhoids are swollen veins at the opening of the rectum that can become painful, itchy, and even bleed. They can occur if constipation causes you to strain during bowel movements. Your growing uterus can also cause fecal movement to slow down.

If you have hemorrhoids:

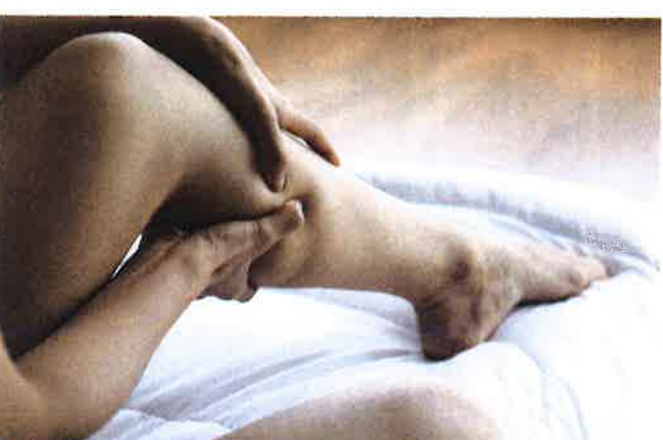
- Eat plenty of grains and other high-fiber foods
- Drink lots of water to avoid constipation
- Rest lying on your side instead of your back
- Use ice packs or witch hazel pads on the hemorrhoids
- Soak in a warm tub several times a day
- Use ointments or creams if approved by your provider

JOINT PAIN

During pregnancy, your joints may feel achy and loose when you walk. Gaining body weight also puts extra pressure on your knees. Swelling can increase stiffness in your hands, feet, hips, knees, and ankles. This stiffness makes you feel as if you have arthritis. Swelling in your hands can also cause carpal tunnel syndrome or make existing symptoms worse. This condition produces pain and tingling in your fingers, especially at night.

What you can do

- Wear hand splints to relieve carpal tunnel syndrome
- Lie down and rest during the day with your feet up
- Reduce the high-sodium foods (salt) in your diet
- Eat foods rich in omega-3s (salmon, other oily fish)
- Try heat and cold therapy (heating pads/ice packs)



LEG CRAMPS

Muscle cramps in your lower legs and feet are normal. They can happen at night and wake you up. If you have frequent, painful leg cramps or notice redness and swelling in your legs or feet, call your provider right away.

If you have leg cramps:

- Exercise or walk every day
- Wear supportive shoes
- Eat foods high in magnesium
- Drink lots of water
- Take a warm shower or bath
- Ice packs may help

NAUSEA AND VOMITING

"Morning sickness" is the common term for feeling nauseous (sick to your stomach) and/or vomiting during pregnancy. It can happen any time of the day and last anywhere from a few minutes to the whole day. Morning sickness usually starts after the first month and goes away around 16 weeks of pregnancy. But some people will experience morning sickness throughout their entire pregnancy.

What can help

- Eat small, frequent meals
- Drink liquids during the day but not with meals
- Eat crackers or dry toast
- Get out of bed slowly
- Eat cold, bland foods (nothing greasy or spicy)
- Don't lie down immediately after eating
- Try ginger, lemonade, and mint tea
- Switch to chewable prenatal vitamins

SCAN + PLAY

PREECLAMPSIA

Preeclampsia is a type of high blood pressure that can develop in the second half of pregnancy. If your symptoms are severe and you develop this condition early in your pregnancy, it may increase the risk of health complications for you and your baby.

Potential health complications can include placental abruption (separation of the placenta from the womb), liver damage, kidney damage, bleeding problems, and seizures. Any of these problems can be life-threatening for you and your baby. Preeclampsia can also occur after your baby is born even if you did not have symptoms during pregnancy.

WARNING

If you have **ANY OF THESE SIGNS** or something just doesn't feel right, call your provider right away:

- Sudden weight gain and swelling of your hands and face
- Dull or severe throbbing headaches
- Vision changes (flashing lights, auras, light sensitivity, etc.)
- Sudden onset of nausea or vomiting
- Upper abdominal or shoulder pain
- Shortness of breath, confusion, or anxiety
- Lower urine output than usual

SHORTNESS OF BREATH

You may feel like it's hard to breathe during the last month or two of pregnancy. This happens when your uterus gets large enough to press on your ***diaphragm*** (breathing muscle).

If you experience shortness of breath:

- Try sleeping on your side instead of your back
- Use pillows between your legs and behind your back
- Prop yourself up at night instead of lying flat
- Sleep in a recliner with pillows around you
- Slow down when climbing stairs

SKIN CHANGES

Rising hormone levels during pregnancy can cause changes to your skin color. These changes usually go completely away or mostly fade after the baby is born and your hormone levels stabilize. Your skin may look flushed, like you're blushing. Other common skin changes include blotchy brown markings on your face, a dark line down the middle of your belly, or acne. Staying out of the sun may help.

SWELLING

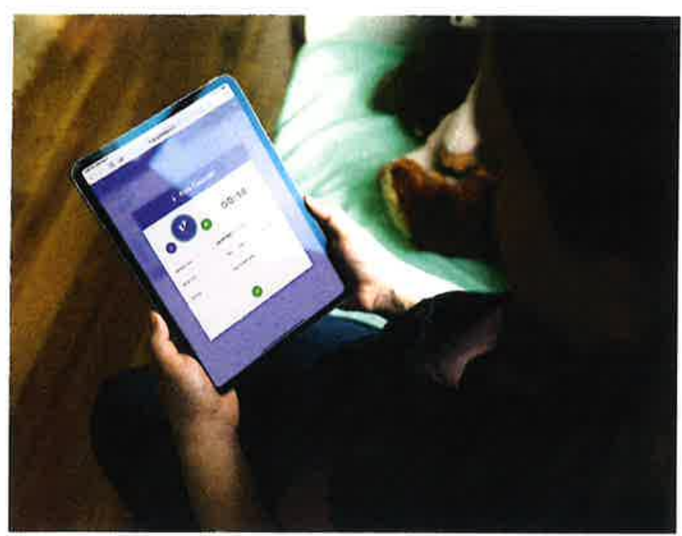
It's normal for your feet and legs to swell toward the end of pregnancy, especially in hot weather. This happens when your added pregnancy weight slows the circulation rate of fluids to your heart, especially from your feet. At the same time, changing hormone levels can cause your body to hold onto water. But if you notice excessive leg swelling or swelling in your face and hands, call your health care provider right away. It could be a sign of a blood pressure problem.

Tips to reduce swelling

- Rest with your feet and legs elevated
- Wear supportive tights or maternity pantyhose
- Avoid standing for long periods
- Lie on your side when sleeping or resting
- Try regular exercise, such as walking or swimming
- Drink lots of water and avoid salty foods

WARNING

Excessive swelling could be a sign of preeclampsia during pregnancy or in the postpartum period. Preeclampsia requires immediate medical attention.



Tracking Baby's Movement

As you get closer to your due date, your health care provider may ask you to start tracking your baby's movement. This process is sometimes called "counting kicks," although you'll also count other movements (jabs, pokes, rolls, punches, and swooshes). Tracking these movements helps you know what's normal for your baby. It can also alert you to call your provider if something changes.

How to track your baby's movement

- Choose a time of day when the baby tends to be active
- Make sure you've recently had a snack and a cold drink of water
- Sit quietly or lie on your side and don't let yourself become distracted
- Time how long it takes to feel 10 distinct movements by your baby

The American College of Obstetricians and Gynecologists (ACOG) considers 10 movements in 2 hours to be a reassuring number. If you feel fewer than 10, talk to your health care provider. Your baby's activity level will vary throughout the day, but you should feel them moving inside you every day.

Preterm Labor

Labor usually begins sometime after 37 weeks of pregnancy (40 weeks is full term). A baby born before 37 weeks is considered premature. These infants may need special care in the NICU or special care nursery to breathe and keep themselves warm. Premature birth can be a serious risk to your newborn. The earlier that preterm labor occurs, the greater the risk to your baby. Premature babies can have organs that are not fully developed, leading to breathing, hearing, and vision problems. They may also have long-term learning or behavioral disabilities.

Many risk factors have been linked to preterm birth. But not everyone who experiences preterm labor has risk factors. You are at the highest risk if you have already had at least 1 preterm birth. Other high-risk factors include twins, a fetal birth defect, problems with the cervix, uterus and placenta, and others.

Feeling contractions does not always mean you are in labor. See "Braxton Hicks Contractions" on page 46. Your contractions must be strong enough to dilate the cervix. Your health care provider may do a pelvic exam to see if your cervix is thinning and opening, then decide how to manage your preterm labor based on how far along you are and what is best for the health of both you and your baby.

WARNING

Warning signs of preterm labor may include:

- Uterine contractions (4 in 20 minutes or more than 8 per hour)
- Abdominal cramps with or without diarrhea
- Low backache that comes and goes or is constant
- Pelvic pressure that feels like the baby is pushing down
- A sudden increase in vaginal discharge — watery, mucuslike, or slightly bloody
- Water breaks (either a small trickle or a gush)

Call your health care provider immediately if you have 1 or more of these warning signs. You may be in premature labor!

Warning Signs During Pregnancy

Call your health care provider at once (or seek emergency care) if you experience:

- Bleeding from nipples, rectum, bladder, or coughing up blood
- Any vaginal bleeding (except a small amount after a pelvic exam)
- Swelling of hands or face
- Dimness or blurring of vision
- Severe headaches or ones that won't go away
- Abdominal pain not relieved by heat, rest or bowel movement
- Chills or fever over 100°F
- Vomiting that won't stop
- Painful or burning urination
- Decrease in movement by your baby

CHAPTER 3

Pain and Comfort

Understanding Pain

It's no secret that childbirth can be painful. Pain is a real thing, but it's also subjective. How you perceive and respond to pain can be influenced by the people around you and your past experiences. Of course, this will be different for everyone. When you understand how your mind and body react to pain, you can learn techniques to manage it during labor and birth.

HOW FEAR INCREASES PAIN

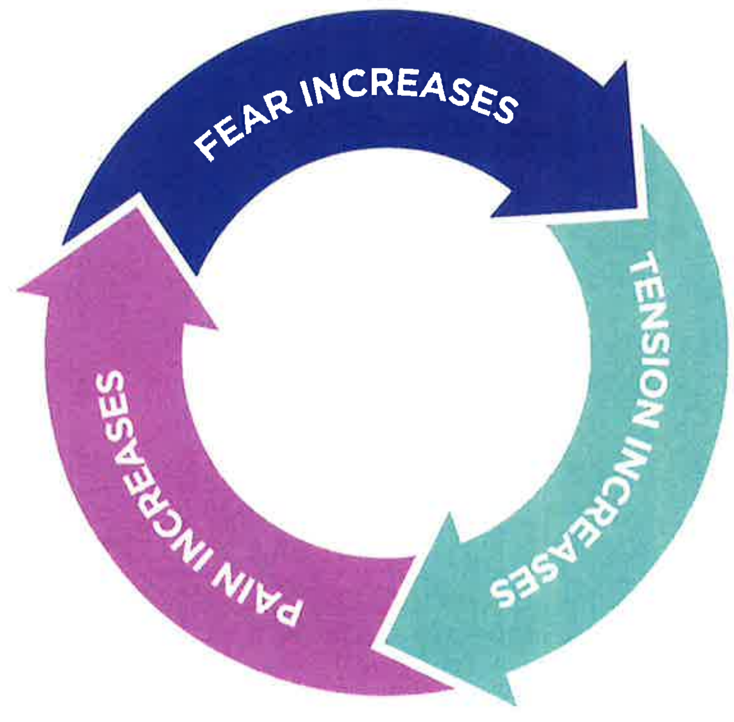
Simply put, when you think something (like a labor contraction) will be painful, it's normal to feel **fear**. Your fear causes you to feel extra stress and **tension**. Tension makes the **pain** worse. When the pain is worse, you become even more afraid of the next contraction. And you're stuck in what is called the fear-tension-pain cycle.

The key to avoiding this cycle is to minimize your fears, which isn't as easy as it sounds. But you can ease your fear of labor pain by:

- Understanding how your body works
- Maintaining a positive, confident attitude
- Learning how to truly relax your mind and body

In addition to increasing pain levels, tension and fear also trigger other negative "fight or flight" responses. For example, redirecting your blood supply away from "nonessential" organs. Because your uterus is a nonessential organ, it can end up with little or no blood supply to fuel labor contractions. This can slow labor with possible health consequences. Learning to release fear and tension and let your uterus do its job can make a huge difference in your overall birth experience.

FEAR-TENSION-PAIN CYCLE



HOW YOUR BODY PROCESSES PAIN

It's important to understand how your body communicates with your brain when it experiences different types of positive (soothing) and negative (painful) sensations. Basically, there are two nerve pathways that deliver sensations to your brain to be processed. The **Gate Control Theory of Pain** reflects how positive sensations reach your brain first because they travel on a larger nerve pathway than negative sensations.

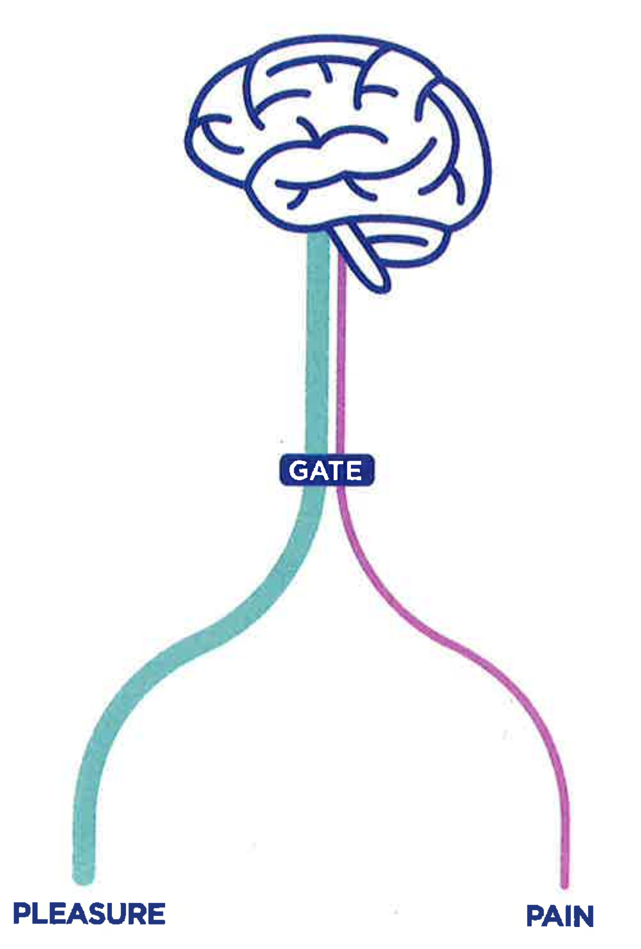
Here's how this works:

- **Larger nerve pathway** – Very quickly delivers **soothing sensations** from the body's skin to the brain, including touch, heat, cold, scents, sounds, and pressure
- **Smaller nerve pathway** – More slowly delivers **painful stimuli** to the brain, including burning, aching, and sharp pains
- **Your brain** – Can only interpret signals from one pathway at a time so the faster, larger pathway (soothing) generally receives priority over the slower, smaller pathway (painful)

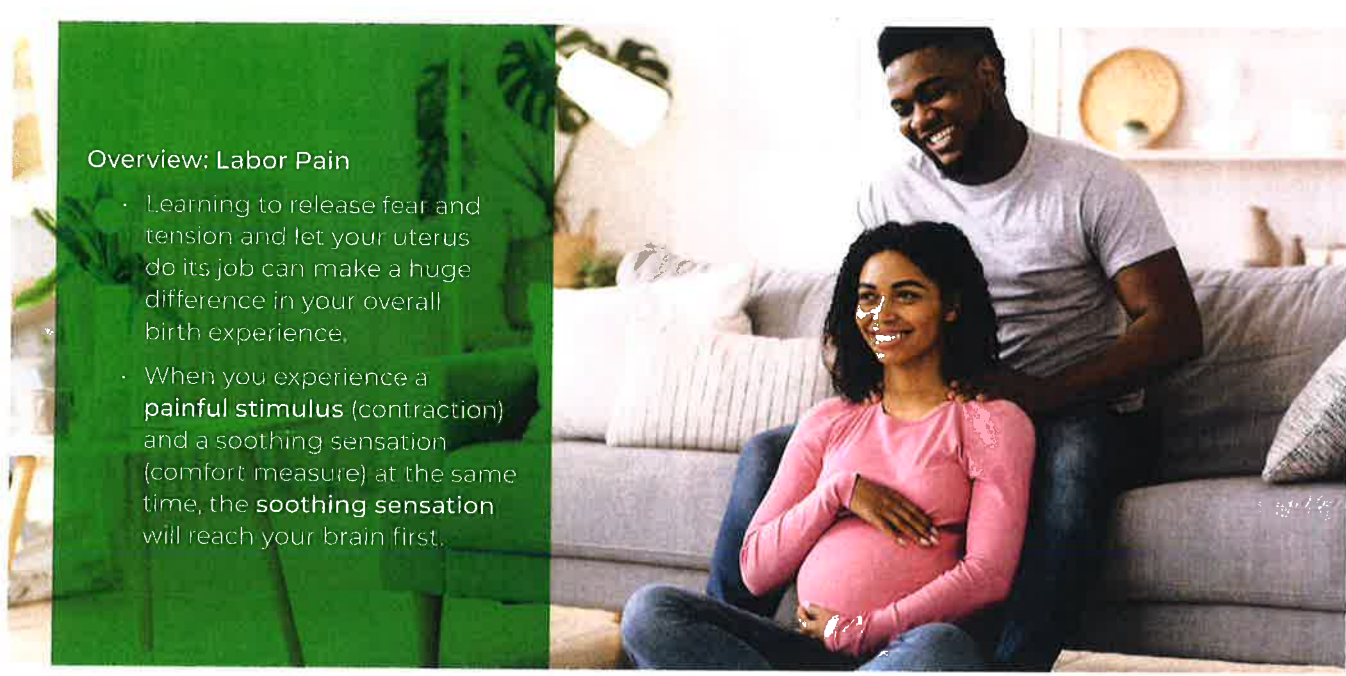
How to manage labor pain using this information

- When a contraction starts, you and your labor partner should immediately start doing a **comfort measure** (relaxation, breathing, heat, touch, etc.) that you've practiced
- The soothing sensation triggered by your use of this comforting technique will reach your brain first, overriding the pain message sent by the actual contraction

GATE CONTROL THEORY OF PAIN



COMFORT



Overview: Labor Pain

- Learning to release fear and tension and let your uterus do its job can make a huge difference in your overall birth experience.
- When you experience a **painful stimulus** (contraction) and a soothing sensation (comfort measure) at the same time, the **soothing sensation** will reach your brain first.

Comfort Measures

"Comfort measures" is a term used to describe natural methods to manage pain and discomfort during different stages of labor and birth. Some comfort measures help your body produce pain-relieving hormones called endorphins. Others naturally create soothing impulses that can reach your brain more quickly and block the painful stimuli of labor contractions. See Gate Control Theory of Pain on page 31.

Most prenatal classes teach these effective techniques. You'll want to practice them at home with your labor partner to help you work better as a team during different stages of labor.

20-MINUTE RULE

Here's why you'll want to learn and practice several different comfort techniques. Good sensations such as touch, a hot water bottle, or an ice pack can help minimize your pain. Unfortunately, after about 20 minutes, your brain gets used to that good sensation and you may start to feel pain again. When this happens, change to a different comfort measure to feel better for another 20 minutes.

RELAXATION

A good way to ease labor pains is to consciously relax your body. When you're scared, your muscles tense up. This creates more pain during labor, which in turn makes you feel more tense. If you can relax, your body will release endorphins. These feel-good hormones can then help lower the intensity of your labor pains.

Tension and stress can also cause your body to produce stress hormones that are stronger than endorphins. These stress hormones cause your heart to beat faster, you to breathe faster, and your muscles to tense up.

Using relaxation successfully during labor starts with knowing how your body handles stress and where you carry tension in your body. Pay attention to your body while you practice relaxation methods with your partner. Knowing the difference between feeling tense and feeling relaxed will help you during labor.

Relaxation techniques to practice

- **Progressive relaxation** – Your labor partner will tell you to tense one muscle group. Pay attention to what this feels like. Try to keep the rest of your body relaxed. Feel the difference when your partner tells you to relax the tensed muscle group.
- **Touch relaxation** – Your partner will tell you to tighten a muscle group. When you feel your partner's touch, consciously relax that area. Practice this so that when you are in labor, your partner can let you know to relax a part of your body that seems tense.

BREATHING TECHNIQUES

Breathing is an important part of relaxing and lowering your pain level during labor. Focusing on your breathing distracts your brain from thinking about the discomfort and ensures you aren't holding your breath. You can breathe through your nose, your mouth, or both. You can even make sounds if you feel like it. What's most important is that you stay focused on your breathing instead of anything else that's happening to you at the time.

Breathing patterns to practice

- **Slow breathing** – This is a relaxed and comfortable pattern that may work well in early labor. Simply breathe in slowly and deeply, then relax your face, shoulders, arms, hands, back, legs, and toes as you slowly breathe out.
- **Light, quick breathing** – This can be helpful when your contractions get stronger and longer. Take a cleansing breath when a contraction starts, then breathe in and out slowly. When the contraction is more intense, take quick shallow breaths in and out, followed by another deep cleansing breath when the contraction is over.
- **Pant-pant-blow** – Try this pattern when you feel like pushing but your ***cervix*** is not fully dilated. Take in a deep breath, then breathe out with short pants, followed by a longer blow during the contraction. Take a cleansing breath at the end of the contraction.

CLEANSING BREATH

Taking a deep breath can relax you through an entire contraction. Here's how to do it:

- **When a contraction starts** – Take a deep breath in through your nose, then let it out through your mouth. This gives you and your baby more oxygen, reminds you to relax and focus, and lets your partner know that a contraction is starting.
- **When the contraction ends** – Take another deep breath to get rid of any leftover tension and remind yourself to relax until the next contraction begins.

FOCUS AND DISTRACTION

When you focus all of your attention on one thing, your brain can ignore distracting thoughts, including physical discomforts such as labor pain. You can pick anything to be your focal point — a special photograph or a familiar object that makes you feel calm. It can also be a repeated word, sound, or phrase. The key is to keep all your attention on your focal point to distract your brain from discomfort, fear, stress, or other unpleasant feelings.

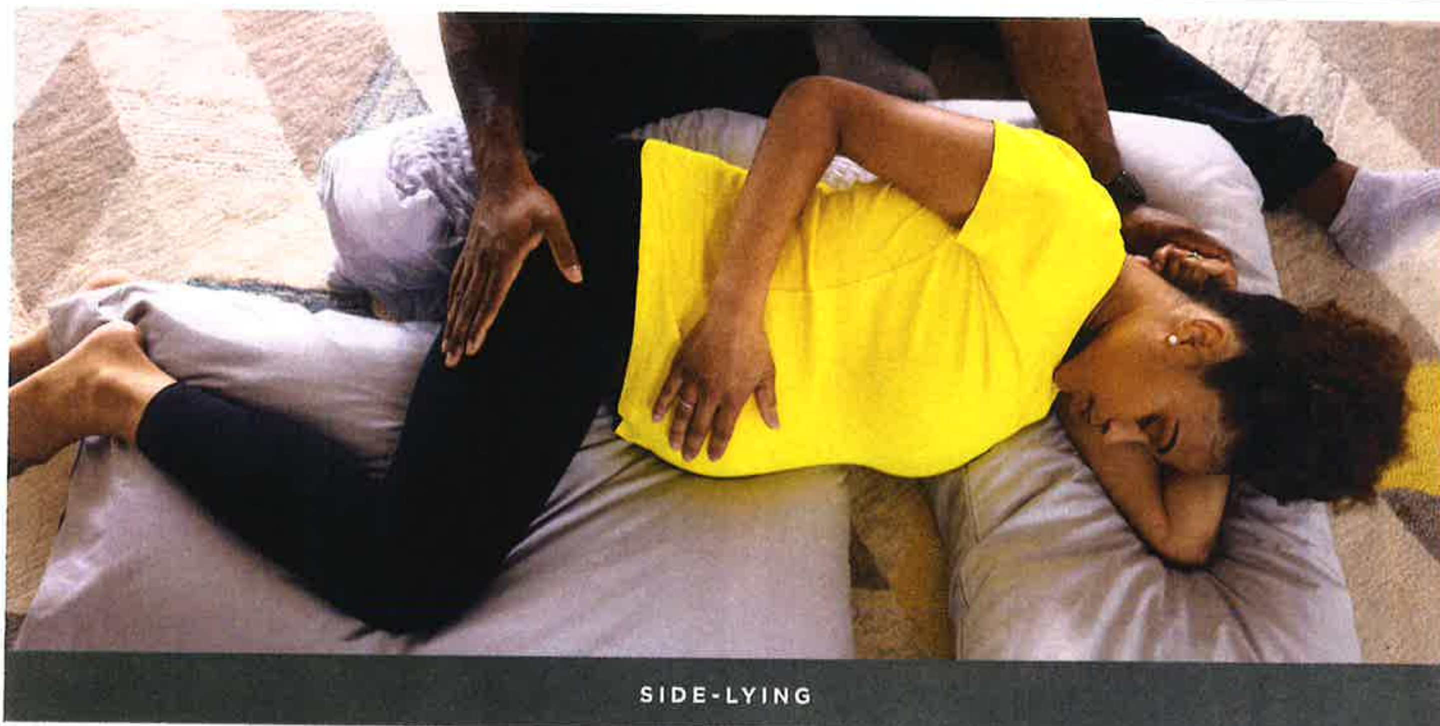
Visualization is another way to avoid thinking about labor pain. Imagine you are in a place that soothes and comforts you. Listen to the sounds, see the colors, and smell the pleasant scents. You can also picture the safe, easy birth of your child and what it will be like to gaze into your baby's eyes for the first time.

CHANGING POSITIONS

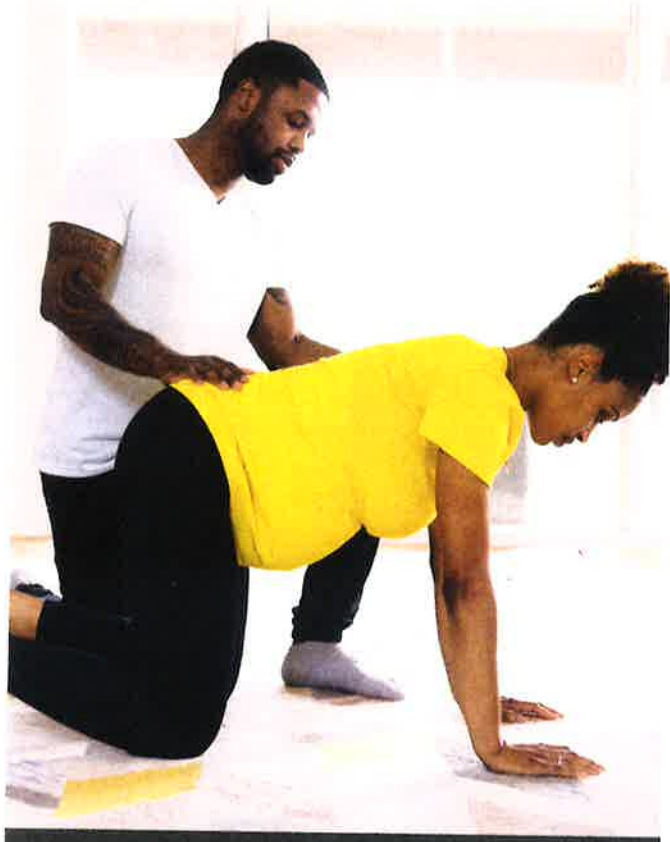
Staying in one position can increase your tension. You may be more comfortable if you change the way you're sitting or lying down often. It can also help to sit up or walk around. If it's OK with your health care provider, try moving, resting, and changing positions when you can.

WALKING/STANDING

SQUATTING



SIDE-LYING



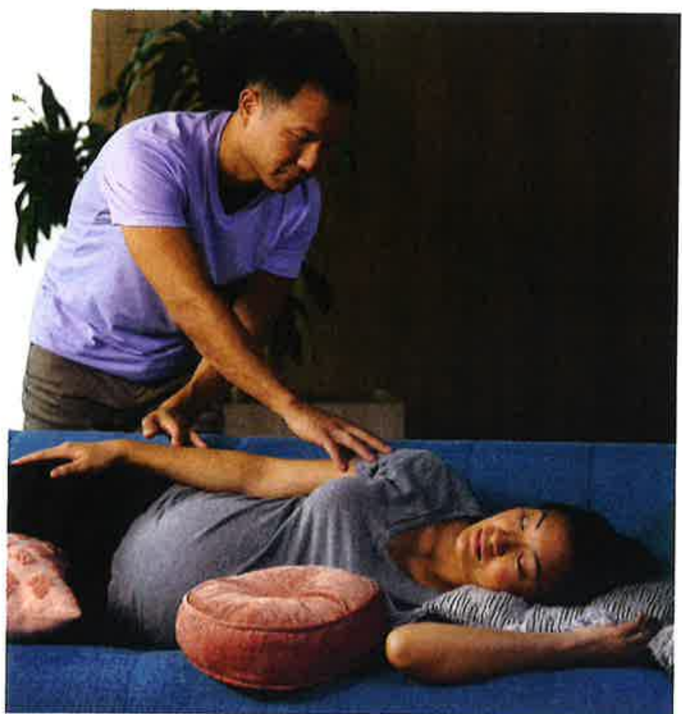
KNEELING ON HANDS AND KNEES

LUNGING

SITTING

SLOW DANCING

COMFORT



TOUCH

Did you know that someone's touch can lower your pain level? Simply holding hands with another person and having them gently stroke your arms, legs, or belly can help your body release "feel-good" endorphins. When you're tense, have your partner cuddle up close and gently touch you. It may help both of you relax.

LIGHT MASSAGE

Light massage in a circular motion can help you relax, ease feelings of pain, and even help you sleep. Ask your partner to relax their hands and lightly draw large circles with their palms on your back, arms, or legs. Also have them use just their fingertips to lightly glide over your belly during contractions.

PRESSURE

Applying pressure to certain parts of your body can lower stress, tension, and pain levels. You may have experienced this in the past if you've ever pressed on your forehead to relieve headache pain. You can do the same thing with labor pains. If you're having back labor (intense pain in your lower back caused by your baby's position in the womb), ask your partner to push down on your lower back with a fist or the heel of their hand to help relieve some of your pain.

BACK LABOR

If you're feeling every contraction almost totally in your lower back, you may be having "***back labor***." This happens when the hard part of the baby's head is pushing against your lower back. Although not everyone has back labor, if you do, the pain may be intense and interfere with your ability to relax.

Changing your position (especially leaning forward) may help your baby change positions in the womb and relieve back labor. Ask your labor partner to press firmly against the small of your lower back with a closed fist or the heel of their hand during contractions. A heating pad or ice pack may also help.

DOUBLE HIP SQUEEZE

The double hip squeeze is a comfort measure that can help relieve lower back pain. During labor, the pressure of the baby's head stretches your pelvis. The double hip squeeze maneuver pushes your pelvis back into a relaxed position, relieving pressure and pain.

How to do it

- You can either stand up or bend forward over a bed or a birthing ball
- Standing behind you, your birth partner gently places their palms on your hips, with one hand on each hip bone and their thumbs pointed toward the spine forming a "W"
- Your partner then presses down and pushes your hip bones in and up toward your body
- Swaying gently during the contraction while your partner is applying this pressure may help ease the pain

Your partner can alternate between the hip squeeze and using "counter pressure." To use counter pressure, your partner applies steady, strong force with the heel of their hand to one spot on your lower back during contractions. Because both the hip squeeze and counter pressure techniques can be hard work for your labor partner over time, it's a good idea to have a backup labor partner available to step in.

Sensory Enhancement

HEAT AND COLD

Warmth is a very good way to lower your pain and relax your body. A heating pad, hot water bottle, or warm pack on your lower back can help with back pain. You can also use an ice pack to help reduce pain. Some people find it helpful to alternate between heat and cold packs.

HYDROTHERAPY

Hydrotherapy is basically relaxing in warm water during labor to help with pain relief. It has both physical and psychological benefits, much like a bubble bath. Immersion hydrotherapy puts you in a tub with water deep enough to cover your belly. If you don't have a tub nearby, you can also sit or stand in the shower with the warm water running. Keep the water temperature about 98-100°F and use caution if you become dizzy or light-headed.

Benefits of hydrotherapy

- Safe
- Effective
- Offers comfort
- Helps you relax
- Easy to move around

AROMATHERAPY

Aromatherapy is an ancient healing treatment that uses natural plant extracts and essential oils to promote health and well-being. It's also safe, natural, gentle, and effective. That's why many birth professionals and midwives use aromatherapy to help promote relaxation, ease pain, and calm anxiety during labor.

Even if you choose more conventional methods of pain relief, aromatherapy can help calm your mind, improve your mood, and alleviate discomfort. Ask your medical provider, midwife, or doula which essential oils are best for use during labor.

Aromatherapy benefits

- Some oils can energize and strengthen, increasing your confidence to manage labor
- A massage with essential oils can relieve pain and lower anxiety during contractions
- Adding an essential oil to a warm bath makes it even more soothing and comforting
- Some oils help with nausea, ease fatigue, and lift your mood during transitional labor

MUSIC AND LIGHTING

Music can surround and relax you by drowning out other noise and distractions. Choose music that is familiar, comforting, and enjoyable. At home, listen to these tunes when you're practicing your relaxation techniques. When it's time to go to the hospital or birth center, be sure to bring your music with you.

Lighting and room temperature can also affect your mood and ability to relax. Do you like a brightly lit room or do you prefer the lights dimmed? Do you like your room to be cooler or do you find it easier to relax in a warm room? If you have a strong preference, be sure to include it in your birth plan and share it with your birth partner.

Useful Items

BIRTHING BALL

Birthing balls are like the exercise balls you see in a gym, only larger and with an anti-slip surface to keep you from falling off. Sitting on a curved birthing ball instead of a flat surface can help relieve pressure in your pelvis, lower back, and spine. It may also encourage your pelvic muscles to relax and open, making room for the baby to descend into your pelvis in preparation for birth.

Some evidence shows that using a birthing ball during labor can reduce stress and anxiety. It may even shorten labor and help reduce the pain of contractions. Some midwives recommend using a birthing ball at home when labor begins. You may find yourself instinctively swaying and rocking in rhythm with your contractions.

Ways to use a birthing ball during labor

- Straddle the ball and rock your pelvis from side to side or back and forth
- Lean over your birthing ball while you're kneeling on the floor
- Get into a hands-and-knees position by hugging your ball and lifting your bottom up from a kneeling position, then rock your pelvis from side to side
- Lean over your ball from a standing position, with the ball on a bed or other raised surface

PEANUT BALL

A peanut ball is just what it sounds like. It's a ball shaped like a peanut shell that is narrower in the middle so you can snugly wrap your legs around it. First used in physical therapy offices, peanut balls are gaining popularity with patients going through labor or who will be giving birth in bed.

Positioning a peanut ball between your legs during labor may help reduce pain, shorten labor, and lower your chance of interventions or cesarean birth. If you will be giving birth in bed, using a peanut ball will help open your pelvis to make it easier for your baby to travel down the birth canal.

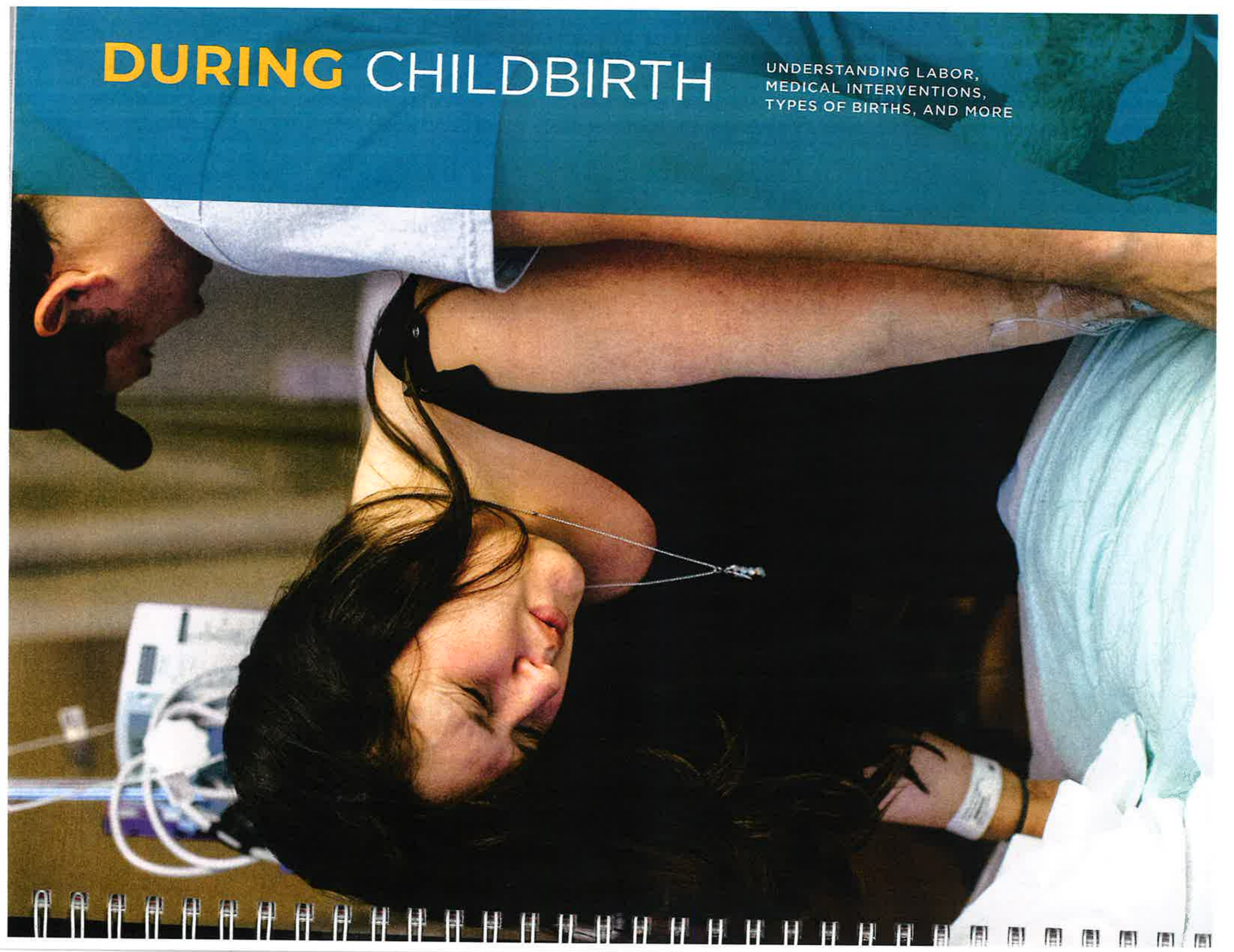
REBOZO

A rebozo is a long, flat shawl usually made from handwoven fabric. Dating back to 16th century Mexico, rebozos are still worn as garments and to help carry heavy objects long distances. A technique called "sifting" uses a rebozo to help jiggle and move your baby into a more comfortable position during labor.

How to sift with a rebozo

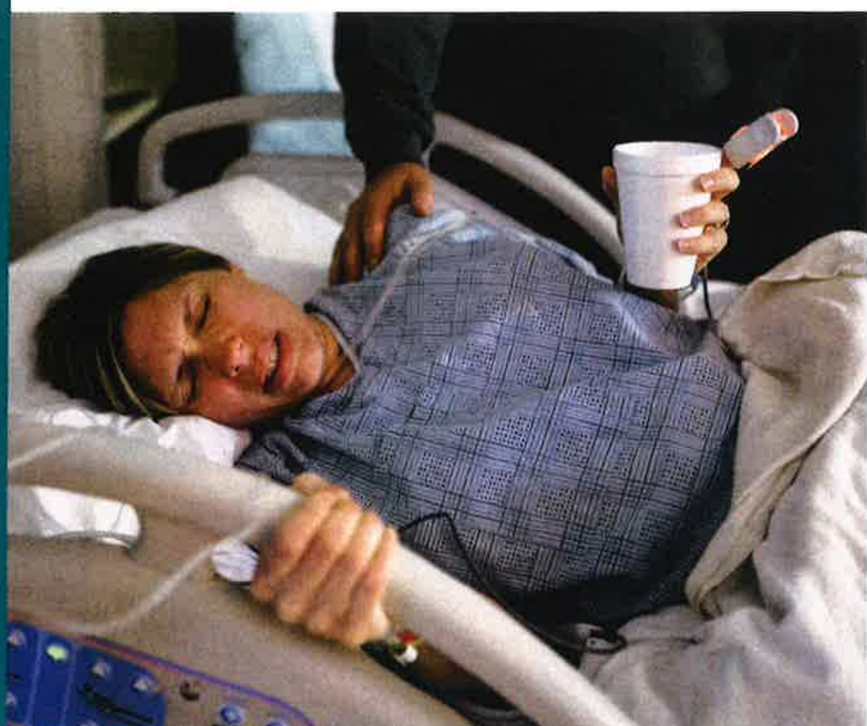
- Place the rebozo on a soft surface, such as a bed or soft rug
- Lie face down across the center of the shawl perpendicularly
- Ask your partner to gently pull on the long ends and jiggle your belly
- May also be done on your hands and knees with the rebozo cradling your belly

During labor, you can suspend a rebozo from the ceiling or door frame to help you do a supported squat. Just put the rebozo underneath your arms like a sling to support some of your weight. Or use both hands to pull on the ends of the rebozo as you squat down. When it's time to push, you can enhance your efforts by using a "tug-of-war" technique on the rebozo, either with your labor partner or by looping the rebozo over a squat bar.


DURING CHILDBIRTH
UNDERSTANDING LABOR,
MEDICAL INTERVENTIONS,
TYPES OF BIRTHS, AND MORE

CHAPTER 4

Labor and Birth



Understanding Labor

Because every pregnancy is different, there's no way to know how long you'll be in labor or what your experience will be like. What we do know is that learning what to expect at each stage of labor is the best way to prepare yourself.

For some people, pregnancy and labor are easier than they expected. Others may have more discomfort during pregnancy and a longer, more difficult labor. This section will explain the entire process, including what happens within your body, what changes you can expect, and how to deal with them.

ANATOMY AND PHYSIOLOGY

Labor starts when contractions in your uterus create changes to your cervix. It's possible to have many contractions before labor actually begins. On average, labor lasts about 12 to 18 hours for the first baby. But everyone's experience is different. Your labor could be as short as 4 hours or as long as 24 hours or more. The key is to stay as flexible and relaxed as possible during the whole process.

The muscle cells in your uterus work like other muscle cells in your body to tighten or contract the muscle. During labor, your uterine muscles will start to contract from the top, called the ***fundus***. This causes tightening and pressure in your uterus, moving from top to bottom in a wavelike fashion. These contractions force your baby to move down through your pelvis and out of the cervical opening into the vagina, or birth canal.

Your body automatically manages labor through a well-coordinated biochemical and physiological process. This includes shortening the time between contractions and increasing their intensity until your baby is born.

Overview: Labor and Birth

- When your body is ready, it makes chemicals that signal your uterus to start contractions
- A contraction happens when uterine muscles squeeze and then release, starting at the top
- Tightening creates pressure that moves from the top to the bottom of your uterus, like a wave
- Pressure moves the baby down through your pelvis, out the cervix, and into the birth canal

Labor Language

Unless you're a trained medical person, many of the words and phrases you hear from your health care provider and other people on your birth team may be new to you. This section gives you a brief definition of some of these terms and what's important to know about them.

AMNIOTIC SAC (BAG OF WATERS)

In your uterus, your baby floats in a membrane filled with ***amniotic fluid***. This membrane is called the ***amniotic sac***, or ***bag of waters***. The amniotic sac:

- Acts as an insulating cushion for your baby
- Keeps your baby's environment and temperature stable
- Keeps harmful bacteria away from the baby

Sometime before your baby is born, the amniotic sac may rupture. This is known as your "water breaking." It can happen before you start having labor contractions or any time after labor starts. Your water may break in a large gush of fluid or more of a gentle trickle. This is all normal.

If you think your water has broken, you'll need to give your health care provider some basic information. The acronym **COAT** can help you remember what to tell your provider when you call.

- **C**olor of fluid
- **O**dor of fluid
- **A**mount of fluid
- **T**ime water broke

MUCUS PLUG

The ***mucus plug*** is a collection of hormonal secretions that collect in your cervix early in your pregnancy. It acts as a seal to protect your uterus (and baby) from bacteria that could be present in your vagina. As you get closer to the start of labor, the plug may dislodge and pass into your vagina. You may or may not be aware that the plug has passed. If you do see it, the mucus may appear brown, pink, or red. Because the cervix has a rich blood supply, when the mucus passes through the cervix, it may become blood-tinged. This substance is called "***bloody show***."

PLACENTA

The placenta is an amazing organ that is only present in your body during pregnancy. It produces hormones to support your pregnancy, supply oxygen and nutrients to your growing baby, and remove waste products from the baby's blood. The placenta grows on the wall of your uterus, and the umbilical cord connecting you to your baby extends from it.

Your body will expel the placenta around 5-30 minutes after your baby is born. Depending on your health during pregnancy, your placenta may be sent to a pathology lab for further inspection or simply discarded. If you want to save your placenta, be sure to add this request to your birth plan and share the information with your health care provider.

LABOR HORMONES

Your body begins to get ready for labor up to 1 month before the birth. Toward the end of the third trimester, your body will begin producing chemicals called ***prostaglandins*** that cause softening and thinning of the cervix.

When your body is ready to give birth, it will release large quantities of prostaglandins. Before that, you may notice other signs that you'll be giving birth soon.

LIGHTENING AND FUNDUS

Earlier in your pregnancy, your fundus is right below your breasts. As your body gets ready to give birth, it will drop 2 to 3 inches away from your ribs. This is called ***lightening***. It can happen weeks before labor begins or not until right before labor starts.

During lightening, your baby "drops" or settles into your bony pelvis. You may feel more pressure in your pelvic area. You may also find it easier to breathe. But increased pressure on your bladder may cause you to make more trips to the bathroom.

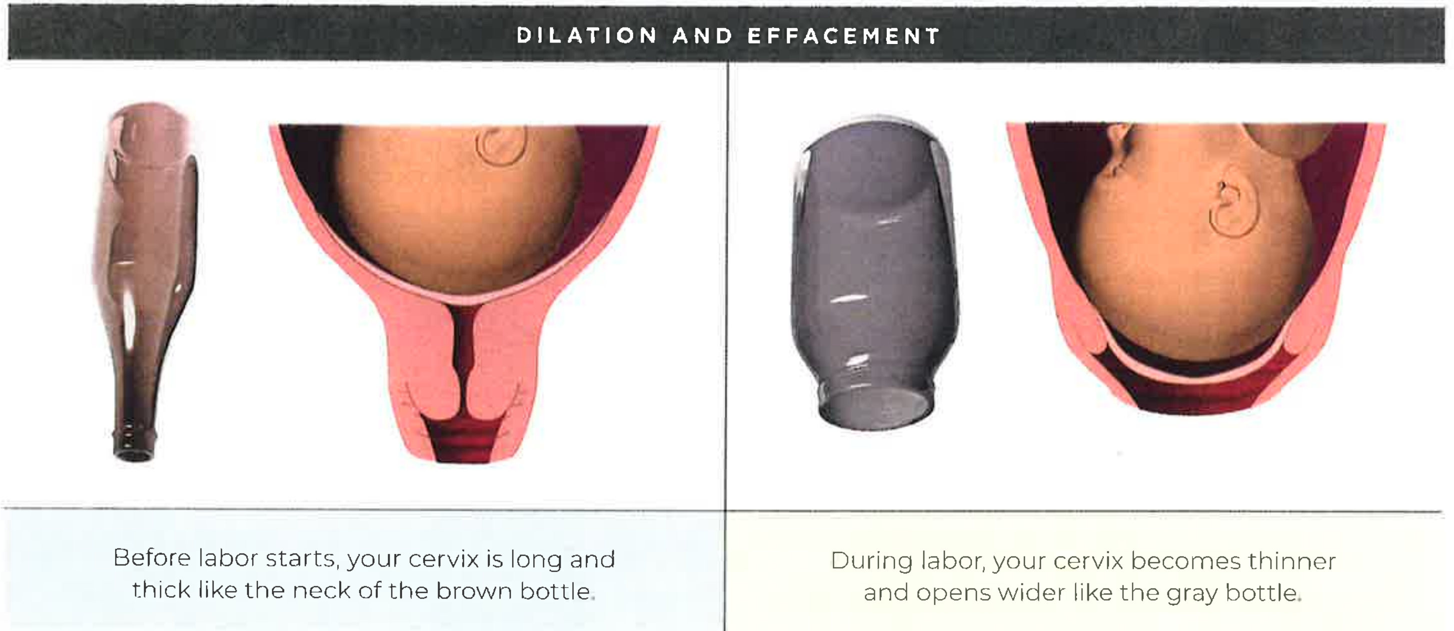
EFFACEMENT

After prostaglandins soften your cervix, they prepare your body for birth by thinning it out. This is called ***effacement***. The cervix is normally 1½ to 2 inches long but will become paper-thin as it expands and pulls over your baby's head.

WHAT YOUR CARE TEAM MAY SAY ABOUT CHANGES TO YOUR CERVIX			
WHAT THEY SAY	0% effaced	50% effaced	100% effaced
WHAT IT MEANS	Your cervix is still thick and normal length.	Your cervix is half as thick as normal.	Your cervix has completely thinned out.

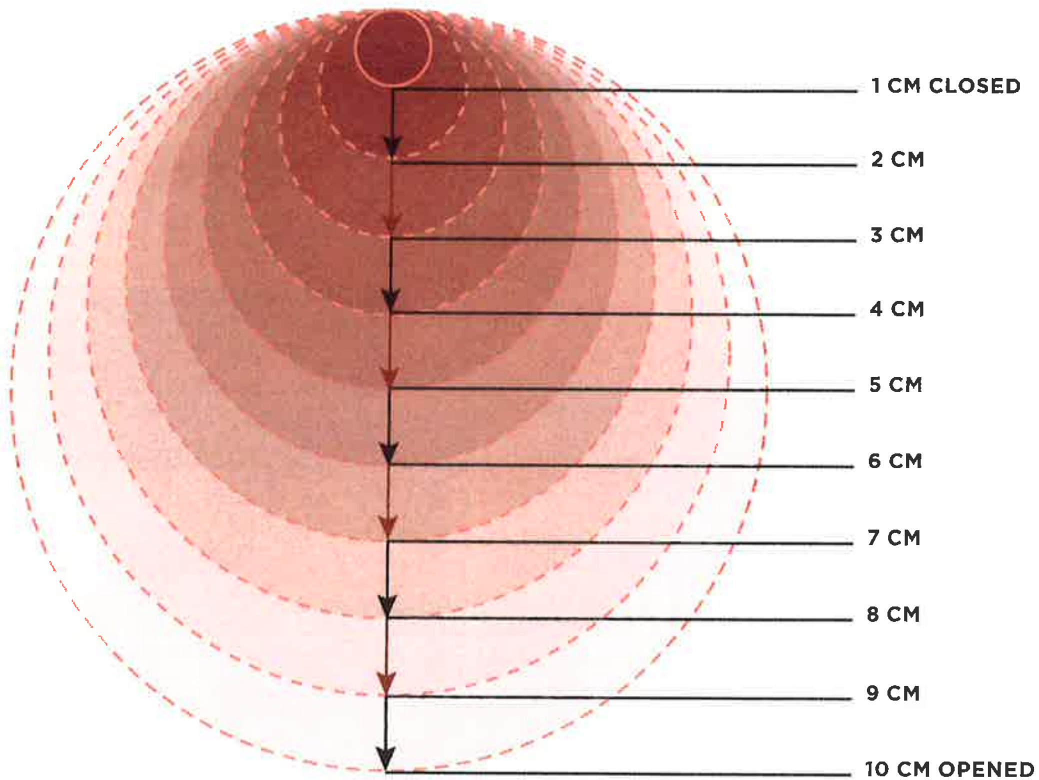
DILATION

Dilation is when the cervix opens gradually to allow your baby to pass through into the birth canal and be born. At first, your cervix is closed (0 centimeters). When it is completely open, it will measure about 10 centimeters across.



DILATION AND EFFACEMENT	
Before labor starts, your cervix is long and thick like the neck of the brown bottle.	During labor, your cervix becomes thinner and opens wider like the gray bottle.

DILATION CHART



STATION

During a vaginal exam, your provider can feel 2 bony bumps (ischial spines) in the narrowest part of your pelvis. How close your baby is to these bumps is called the baby's fetal ***station***.

- When your baby's head is above the bumps, the fetal station is a negative (–) number
- When your baby's head is below the bumps, the station is a positive (+) number and you're getting closer to giving birth
- When the baby's head is at the same level as the bumps, you are at 0 station and your baby is "engaged"

STATION

PELVIS
-4 FLOATING
-3
-2
-1
0 STATION
+1
+2
+3
+4 *CROWNING*
PUBIC BONES

Terminology Checkup

Test your knowledge by writing in the blank the correct word that matches its definition.

- Amniotic Sac
- Amniotic Fluid
- Braxton Hicks Contractions
- Cervix
- Dilation
- Effacement
- Placenta
- Presentation
- Fundus
- Lightening
- Mucus Plug
- Station
- Umbilical Cord

The necklike lower part of the uterus that dilates and thins during labor to allow passage of the baby

Intermittent uterine contractions with unpredictable frequency throughout pregnancy

The upper, rounded portion of the uterus

Indicates the location of the baby's head in the pelvis in relation to the bony ischial spines of the pelvis

The gradual opening of the mouth of the womb (cervix) to permit passage of the baby into the vagina

Structure that contains blood vessels that connect the baby to the placenta

The circular, flat organ in the pregnant uterus that serves as the exchange station for nutrients and oxygen

A thin membrane that encloses the developing fetus and contains the amniotic fluid

Refers to the part of the baby that is lying closest to the cervix

A thick plug that develops in the cervix early in pregnancy due to hormone shifts

The sensation of the baby "dropping" as the baby descends into the pelvic cavity

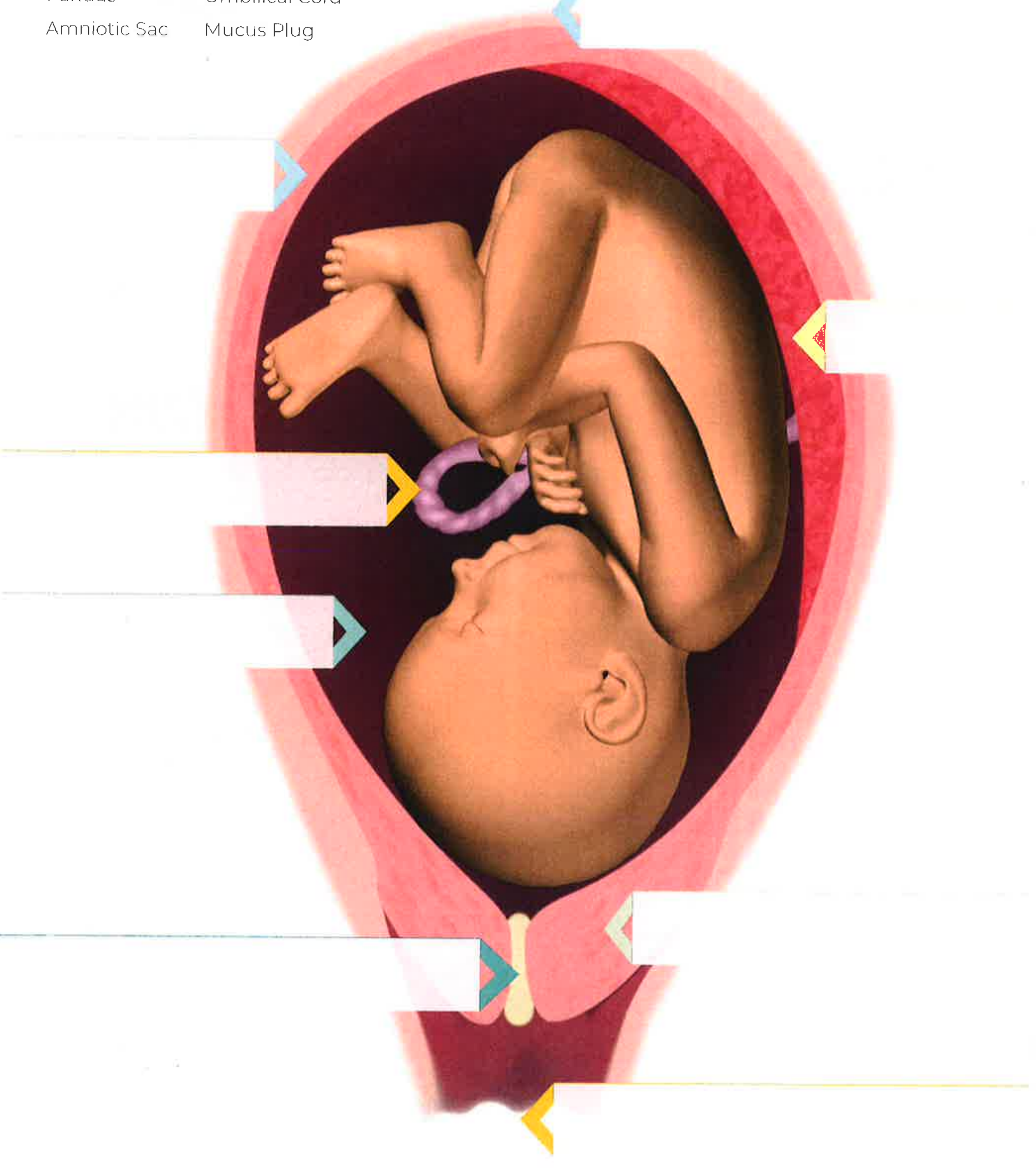
Waterlike fluid that surrounds the baby in the uterus

The gradual thinning, shortening, and drawing up of the cervix

Anatomy and Physiology Checkup

Test your knowledge by writing in the blank the correct word that matches its visual part.

Vagina	Placenta
Cervix	Uterus
Fundus	Umbilical Cord
Amniotic Sac	Mucus Plug



AND BIRTH

Frequently Asked Questions about Labor and Birth

Am I really in labor?

As you get closer to your due date, it's important to know the difference between actual labor contractions and Braxton Hicks (practice) contractions. When you start having actual labor contractions, time them. Based on the frequency and duration of your contractions, your health care provider will tell you when to call their office or go to the hospital.

Labor contractions	Braxton Hicks contractions
· Contractions occur at regular intervals	· Contractions don't happen at regular intervals
· Contractions increase in intensity	· Intensity of contractions stays about the same
· Interval between contractions shorten	· Interval between contractions doesn't get shorter
· You feel pain in your back and/or lower abdomen	· Discomfort is primarily in your lower abdomen
· Discomfort doesn't stop when you walk around	· Discomfort is often relieved by walking
· Cervix begins to dilate	· Cervix doesn't dilate

When should I go to the hospital or birth center?

Your health care provider will guide you based on their knowledge of your individual health. When you call, they'll want to know the frequency and duration of your contractions.

The general guideline is to go to the hospital or birthing center when you have contractions that are 5 minutes apart and last for about 1 minute for 1 hour **(the 5-1-1 rule)**. If your water has broken, your provider may tell you to go to the hospital sooner, even if contractions haven't started.

It's also important to listen **to your body** and pay attention to your feelings and intuition. If you feel strongly that you need to go to the birth facility, follow your instincts.

Go to the birth facility if:

- Your water breaks with a gush or continues to leak
- Your contractions are regular and 5 minutes apart for at least 1 hour
- Your health care provider tells you to go
- You feel strongly that you need to

What to tell your provider about contractions. Are they:

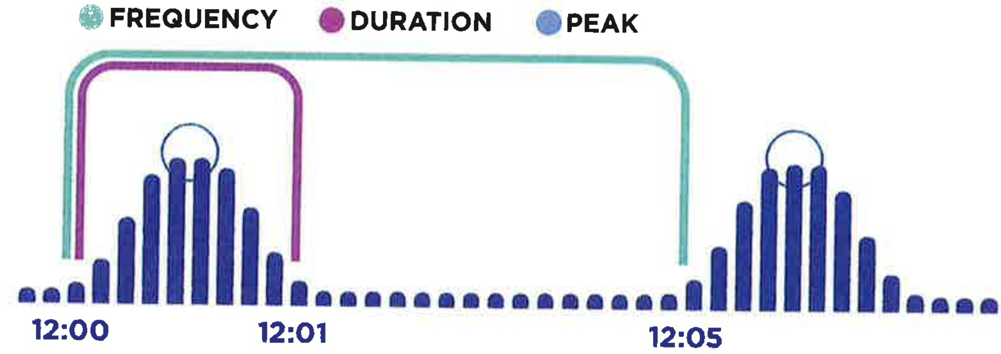
- Growing more intense?
- Following a regular pattern?
- Lasting longer?
- Coming closer together?

How do I time my contractions?

You'll need a watch or clock with a second hand and a notepad to write down the frequency and duration of your contractions.

How to time contractions

- **Frequency = How far apart your contractions are.** Time from the beginning of one contraction to the beginning of the next one.
- **Duration = How long each contraction lasts.** Time from the start of one contraction to the end of the same contraction.



DATE	BEGIN	END	DURATION	FREQUENCY	INTENSITY
8/1	12:00	12:01	1 MIN.	5 MIN.	MODERATE

What things can affect my labor?

There are many factors that can affect how long your labor lasts, including:

- Position of the baby's head
- Your baby's size
- Baby's position at birth (***presentation***)
- Size and shape of your pelvis
- Your physical and emotional state
- How well contractions have dilated the cervix
- Your labor partner and their level of support
- Medications or ***anesthesia*** you've received

Stages of Labor

There are four standard stages of labor, including the baby's birth and several hours of recovery time. In this chapter, we will give you all the details of each stage of labor, including what your labor partner will do. But before you reach the official first stage of labor, you'll go through pre-labor.

WHAT IS PRE-LABOR?

Pre-labor includes physical and emotional symptoms you may have shortly before labor begins. You may have a "nesting" instinct and feel like you have more energy. Or you may be completely exhausted and just want it all to be over. Pre-labor is different for everyone. Think of it as your body's way of telling you to rest and save your energy for labor and birth.

Overview:

- **First Stage –** Includes early, active, and transition phases
- **Second Stage –** From complete cervical dilation through birth
- **Third Stage –** Detachment and delivery of the placenta
- **Fourth Stage –** Recovery and first few hours after birth

Pre-Labor

What to Expect

YOUR EMOTIONS/REACTIONS	PHYSICAL CHANGES
• Combination of excitement and anxiety	• More Braxton Hicks contractions
• Burst of energy to clean and organize	• Increased vaginal discharge
• Desire to connect with friends and family	• Possible loss of mucus plug
	• Increased pressure on pelvic floor
	• Some nausea and diarrhea
	• Premenstrual symptoms

NOTES

COMFORT MEASURES

- Continue with normal daily activities
- Try to rest and take more naps
- Practice relaxation and breathing techniques with your labor partner
- Finish last-minute details, make final arrangements
- Pack your hospital bag so you're ready to go

ROLE OF LABOR PARTNER

- Help with any last-minute arrangements
- Make sure you both get enough rest
- Listen to your feelings, fears, and concerns
- Share their own feelings, fears, and concerns

First Stage of Labor

The first stage begins when you go into labor and ends when your cervix is completely dilated to 10 centimeters. If this is your first baby, you may be in this stage for 6 to 12 hours (average) up to as long as 20 hours. If this is your second or third baby, this stage may be shorter. The first stage of labor includes 3 distinct phases:

- Early
- Active
- Transition

Early Phase

LENGTH OF TIME

Can last 6 to 12 hours (average)

FREQUENCY OF CONTRACTIONS

Contractions are 5 to 20 minutes apart and last 40 to 60 seconds

What to Expect

YOUR EMOTIONS/REACTIONS

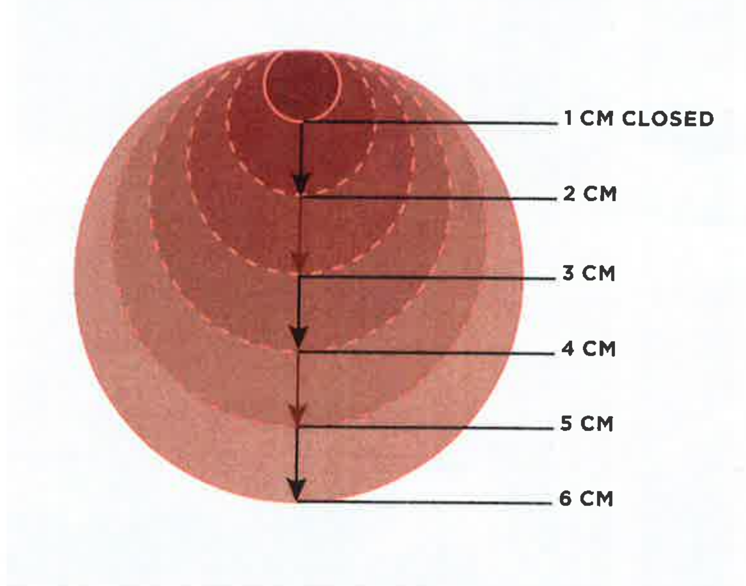
- Excited, eager, anticipating the start of labor
- Some fear and anxiety: No turning back now
- Wondering if you will remember what you learned in class
- Talkative, very social, ready to talk and interact with partner
- Fully aware of surroundings, engaged, eager to report symptoms

PHYSICAL CHANGES

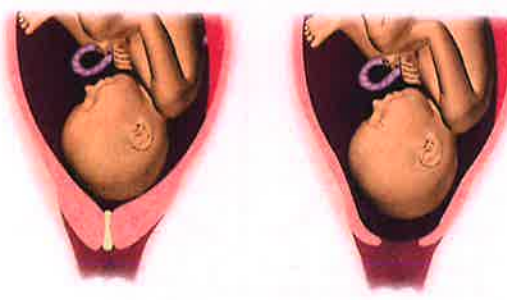
- Contractions are mild and somewhat irregular but getting stronger and closer together
- Contractions may begin 15 to 20 minutes apart and get to 5 minutes apart
- Contractions last 40 to 60 seconds toward the end of early labor
- Contractions may feel like aching or low backache, menstrual cramps, pressure, or tightening in the pubic area
- Amniotic sac may rupture; you may see a pink vaginal discharge (bloody show)

NOTES

DILATION IN EARLY PHASE OF LABOR



POSITIONING OF BABY



Cervix dilates from closed to 6 centimeters

MOOD

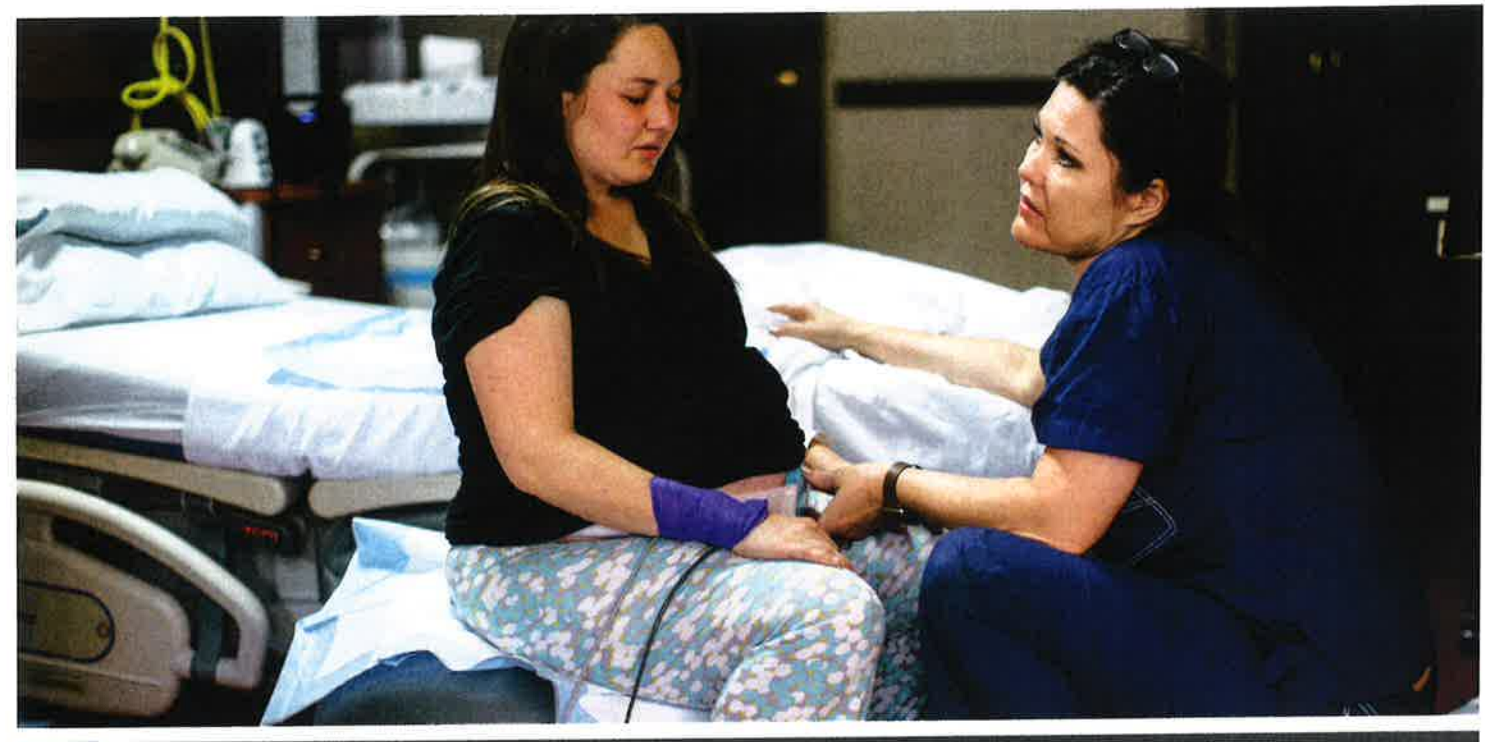
Excited, eager, some fear and anxiety

COMFORT MEASURES

- Find a balance between rest and light activity
- Getting up and walking around can be helpful
- Eat food and drink liquids if you want them
- Use slow, relaxed breathing if it works for you
- Begin comfort measures as contractions get stronger

ROLE OF LABOR PARTNER

- Give words of encouragement during labor
- Help balance light activity with rest
- Time contractions and record them for health care provider
- Offer diversions such as music, playing cards, or a movie
- Be aware of reaction to contractions; check relaxation and breathing
- Listen attentively and offer plenty of praise
- Alert the health care provider and birthing facility
- Check the weather; have the car (or a ride) available

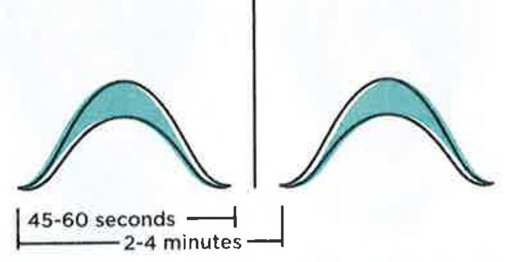


Active Phase

LENGTH OF TIME

Can last 4 to 6 hours (average)

FREQUENCY OF CONTRACTIONS



Contractions range from 2 to 4 minutes apart and last 45 to 60 seconds.

What to Expect

YOUR EMOTIONS/REACTIONS

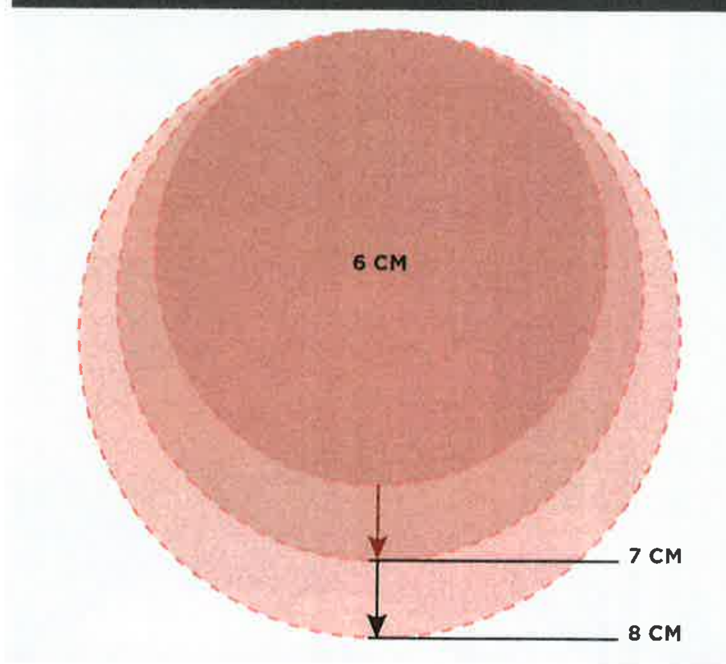
- Not feeling social; concentrating on the work of labor
- More serious, less talkative, focused on relaxation techniques
- Not completely attentive or fully aware of everything going on
- May have a hard time understanding words during contractions
- Want and need companionship from labor partner

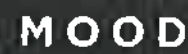
PHYSICAL CHANGES

- Contractions getting stronger and closer together
- Longer peaks in contractions and increasingly uncomfortable
- Feeling pressure or tightening in pubic area
- May experience dry mouth and perspiration
- May become more focused, harder to rest or relax
- May have some nausea and vomiting
- May appear pale or flushed

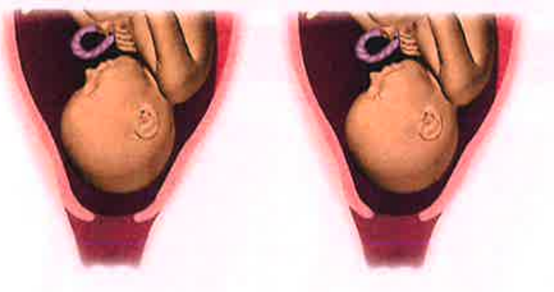
NOTES

DILATION IN ACTIVE PHASE OF LABOR





POSITIONING OF BABY



Cervix dilates from 6 to 8 centimeters

MOOD

Not feeling social, more serious, less talkative, focused

COMFORT MEASURES

- Don't fight the contractions, let them to do their job
- Keep breathing and doing relaxation techniques that work
- Add abdominal massage with breathing techniques
- Concentrate on a focal point during contractions to help distract from pain
- A warm shower or bath may be very comforting
- Change positions regularly to help the baby move through your pelvis
- Try to stay out of bed unless it's to rest or for an exam by your birth team

ROLE OF LABOR PARTNER

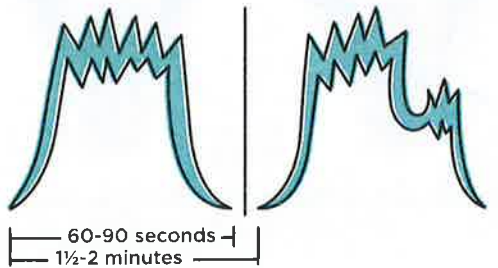
- Give 100% of your attention, breathe together
- Offer verbal support and encouragement
- Offer to wipe skin with a cool, damp washcloth
- Encourage hourly trips to the bathroom to keep bladder empty
- Keep their lips moist with water-soluble substance
- Offer ice chips and light snacks
- Surround them with pillows to help with comfort and relaxation
- Apply pressure to the lower back, if needed
- Use touch, massage, and relaxation techniques
- Encourage frequent changes of position

Transition Phase

LENGTH OF TIME

Transition may last a few minutes to 3 hours

FREQUENCY OF CONTRACTIONS



Intense contractions range from 1½ to 2 minutes apart, last 60 to 90 seconds, and can double peak

YOUR EMOTIONS/REACTIONS

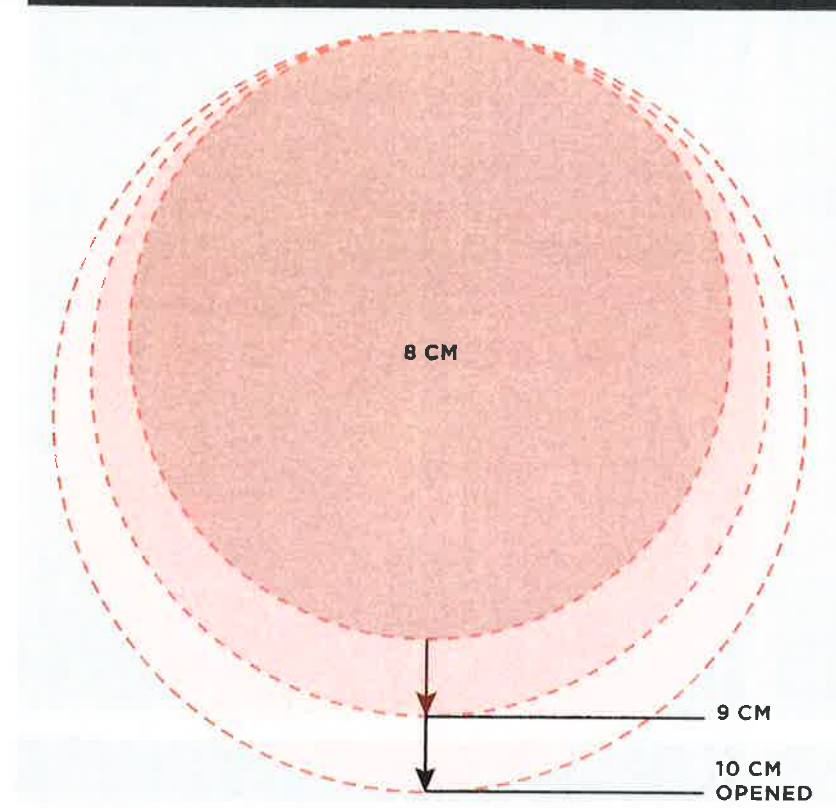
- Relying on partner for support
- May express intense emotions
- May feel out of control and cry
- May need partner's help with breathing routine
- May fall asleep between contractions
- May be less aware of surroundings
- Focus is directed inward

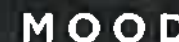
PHYSICAL CHANGES

- Long, strong contractions peak quickly or double peak and are intense
- May feel rectal pressure or urge to bear down
- Increased bloody show
- Severe low backache
- Nausea, vomiting, hiccuping, belching, passing gas
- May experience "the shakes"
- May be hot or cold

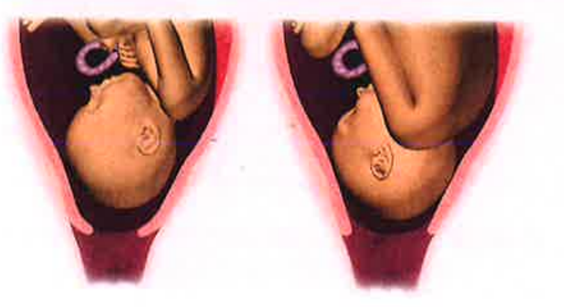
NOTES

DILATION IN TRANSITION PHASE OF LABOR





POSITIONING OF BABY



Cervix dilates from 8 to 10 centimeters

MOOD

Relying on partner for support, intense emotions

COMFORT MEASURES

- Try to rest between contractions
- Keep using comfort measures that have been working for you
- Shortest but most intense labor stage; you will be pushing soon
- Rely on your labor partner as much as you need to
- Breathing techniques help control the urge to push before you're 100% dilated

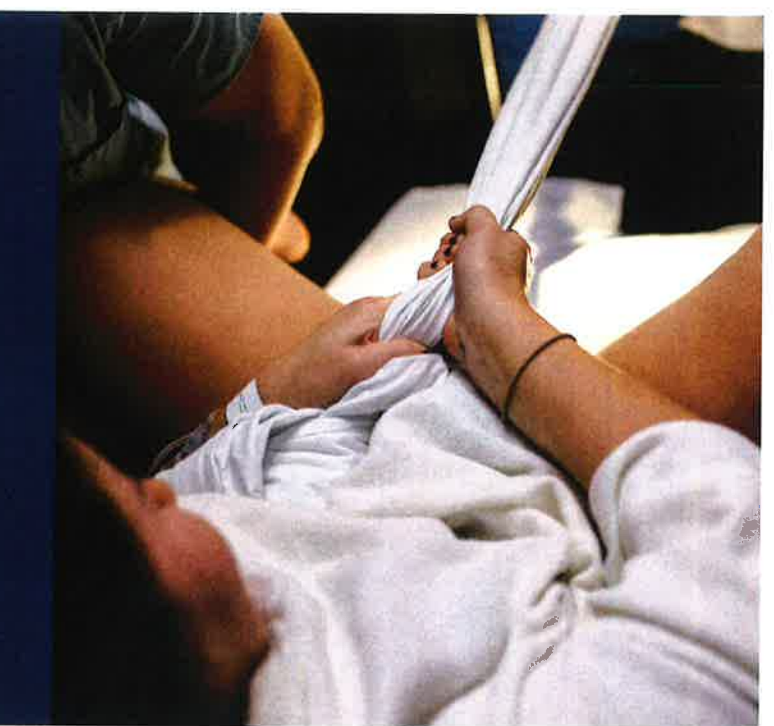
ROLE OF LABOR PARTNER

- Remember that the birth is near and offer encouragement
- Realize that you may have difficulty helping during this phase
- Stay together, reduce distractions (environmental or family)
- Hold eye contact and use short, simple statements
- Support breathing and stay focused
- Work in a calm, organized manner
- This phase may be hard for both of you

Second Stage of Labor

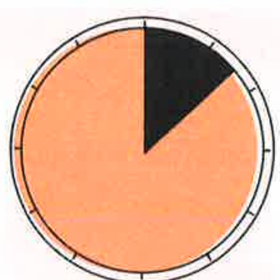
Pushing is a natural response as your baby's head moves through the birth canal. You'll want to keep your pelvic floor muscles relaxed and respond to the natural urge to push. Your instinct will be to push for about 5 to 7 seconds at a time, about 3 to 4 times during a contraction. Following the natural urge to push can help you feel less tired, prevent perineal trauma, and delay your active pushing time.

See page 58-59 for positions.



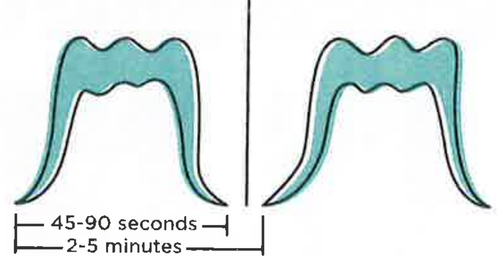
Pushing

LENGTH OF TIME



This stage can last from one contraction to 3 hours (average)

FREQUENCY OF CONTRACTIONS



Contractions may slow down to every 2 to 5 minutes and last 45 to 90 seconds

What to Expect

YOUR EMOTIONS/REACTIONS

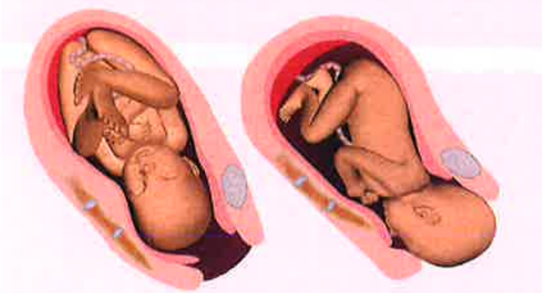
- Find strength and energy; there is a "light at the end of the tunnel"
- May have trouble knowing how to push at first
- May find pushing is a relief, now working with the contractions
- May occasionally belch, pass gas or stool
- May have the shakes
- May feel a burning, stretching sensation as baby moves down the birth canal
- This may be the hardest physical work you will ever do

PHYSICAL CHANGES

- Natural urge to bear down with contractions is like having a bowel movement
- May see or feel bulging of the **perineum** and rectum along with bloody show
- May fall asleep between contractions
- May make noises or grunt between contractions; feeling a lot of pressure
- May have natural rest period before next urge to push, use it to rest and relax
- If you don't have a strong urge to push, changing positions or squatting may help

NOTES

POSITIONING OF BABY



Cervix is completely dilated to birth of baby

MOOD

Finds strength and energy

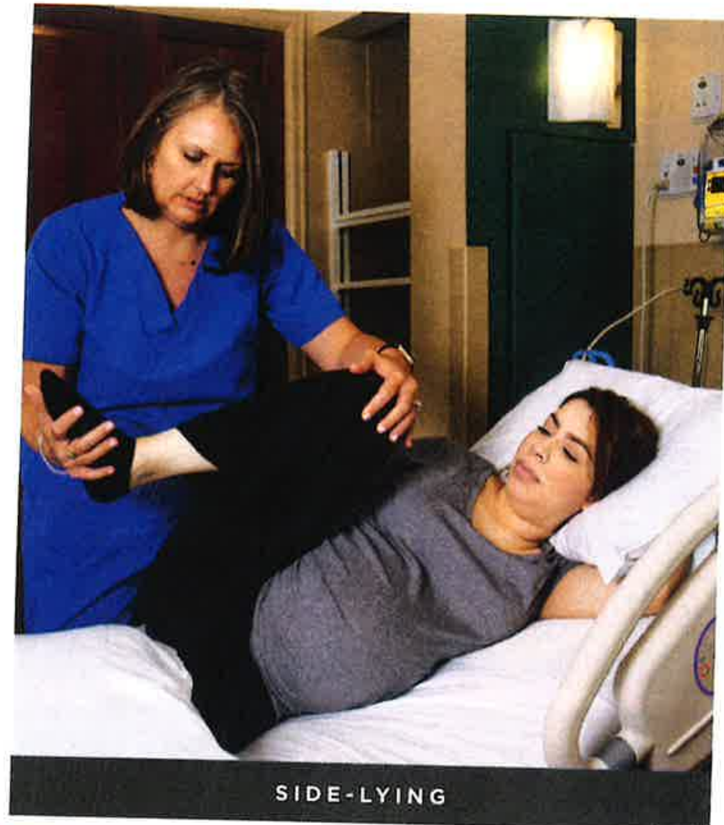
COMFORT MEASURES

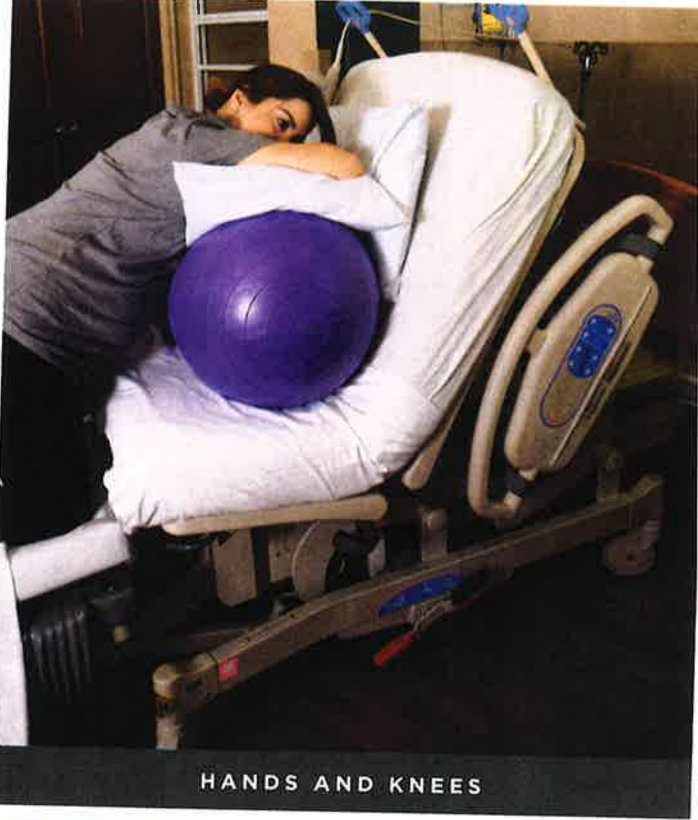
- Rest and relax between contractions
- Keep using any comfort measures that have been working for you
- Rely on your labor partner as much as you need to
- Focus on the imminent arrival of your baby

ROLE OF LABOR PARTNER

- Keep talking and offering encouragement
- Give physical support for any pushing positions
- Offer a cool washcloth and ice chips
- Help with pant-pant-blow if your partner is asked to slow or stop pushing
- Let staff help you with crowd control if it's a problem
- Focus your full attention on the baby's birth

PUSHING POSITIONS


SIDE-LYING


HANDS AND KNEES

TUG OF WAR

SQUAT BAR

REBOZO SQUAT

UPRIGHT

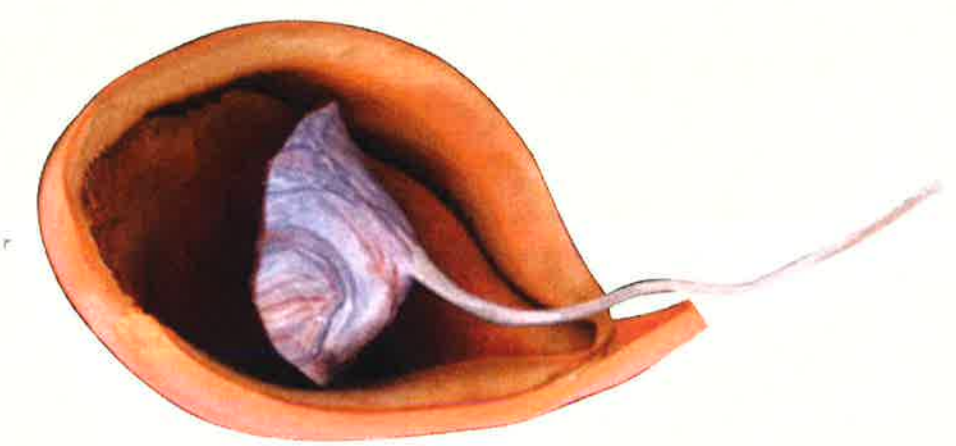
Third Stage of Labor

BIRTH OF THE PLACENTA

After the birth of your baby, the placenta will take a few (usually 5-60) minutes to separate from the wall of the uterus and be delivered through your vagina. These contractions won't be as strong, but you may need to use relaxation techniques to manage any pain. Your health care provider may ask you to give a couple of small pushes to help the placenta come out.

Overview:

- Begins with the baby's birth and ends with the delivery of the placenta
- The birth of the placenta can take anywhere from 5 minutes to 1 hour
- Remind your birth team if you are planning on keeping the placenta



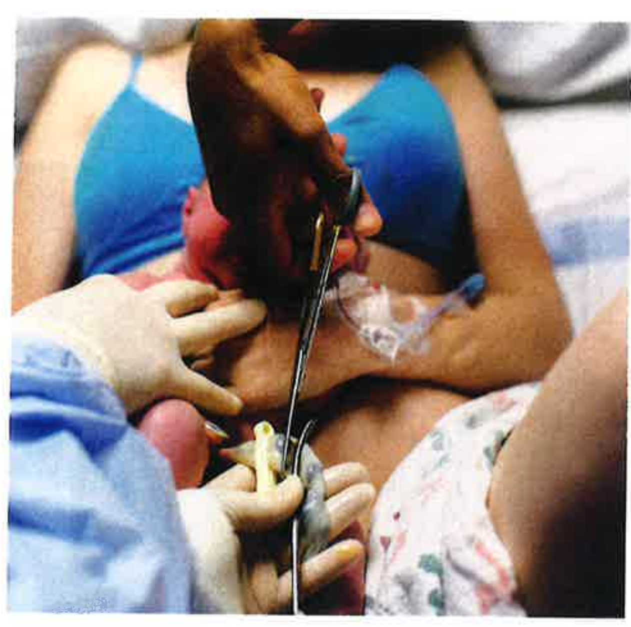
What to Expect

YOUR EMOTIONS/REACTIONS	PHYSICAL CHANGES
• May scream with delight or feel overwhelmed and exhausted • Involved and asking questions about the baby's well-being • Feel a sense of relief and accomplishment	• Contractions slow after your baby is born • Uterus is at belly button level and begins to shrink in size • You may feel cold, shaky, or sick to your stomach

COMFORT MEASURES	ROLE OF LABOR PARTNER
• Use relaxation techniques during delivery of the placenta • Focus attention on your new baby • Hold your baby skin-to-skin under a warm blanket	• Enjoy the new baby • Keep supporting partner's physical and emotional needs • Congratulate them for a job well done!

PLACENTA OPTIONS

What happens to the placenta depends on several factors. Your health care provider may want to have it analyzed for information about different health aspects of your pregnancy and birth. If your provider doesn't need to send the placenta to the lab, you can either discard it or take it home with you. If you are taking it home, you may need to sign a release form for the hospital and will need to arrange for someone to pick it up and refrigerate it promptly.



UMBILICAL CORD

Cutting the umbilical cord is one of the last steps in the labor process. You get to decide who will cut the cord, and often your spouse or partner will look forward to this opportunity. Before cutting, the cord will be clamped with a small plastic device near its base on the baby. A second clamp defines the area where it's safe to cut the cord with a pair of scissors. The umbilical cord doesn't have any nerve fibers so there's no pain when it's cut.

DELAYED CORD CLAMPING

Many hospitals and birth centers now practice delayed cord clamping. This is simply waiting to cut the cord until the blood in the cord has time to flow into the baby or until after you deliver the placenta. This blood is rich in iron. It can increase the baby's own iron supply, promoting healthy brain development and lowering the risk of anemia.

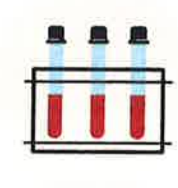
CORD BLOOD BANKING

Cord blood banking is the practice of collecting leftover blood from the umbilical cord and placenta after a birth. Cord blood has stem cells, which may be lifesaving for people with certain cancers, blood disorders, and immune diseases. Collected blood can be stored in a public or a private cord blood bank. If you want your cord blood collected after birth, talk with your health care provider at least 2 months before your due date so arrangements can be made with the birth facility.

1
Your baby's umbilical cord is attached to the placenta

2
The umbilical cord is clamped in 2 places and then cut

3
The blood is drained through a tube into a special collection bag



4
Package the collection kit and ship it to your chosen facility for processing and storage

5
The cord blood stem cells are preserved in a liquid nitrogen storage tank in a secure facility

PERINEAL REPAIR

Your perineum is the area between your vaginal opening and anus. It is common for this area to tear during childbirth. Or your health care provider may make a ***perineal*** incision called an ***episiotomy*** to allow more room for the baby to come out. In most cases, you'll receive stitches to repair the area soon after birth. With local pain medication, you'll probably feel some pulling and tugging but no sharp pain. The stitches will dissolve in your tissues and won't have to be removed.

Your nurse or medical provider will tell you how to take care of your perineum or stitches ("peri care") before you go home. Applying an ice pack can help with discomfort and swelling.

Fourth Stage of Labor

This final stage of labor is also called recovery. It includes the first 2 or 3 hours after your baby is born. For the first hour, your blood pressure, heart rate, and temperature will be checked closely. You may experience chills, dizziness, or discomfort from after-pains, an episiotomy, or tears.

The fundus is now at the level of your belly button. Your health care provider will use their hands to feel for it and check its firmness. If your uterus isn't firm, it could cause excessive vaginal bleeding. To help your uterus firm up and stop cramping, your provider may massage the fundus or give you medication. Fundal massage may be uncomfortable, but it is effective. Breastfeeding and skin-to-skin contact with your baby can also help your uterus contract and minimize bleeding.

Water Birth

Giving birth in a tub of warm water has gained popularity since the 1980s. Some people believe that since babies have been surrounded by amniotic fluid for nine months, it is easier for them to be born into a similar environment. Having a water birth may also be less stressful for you.

While this practice is more common in home births and at birth centers, some hospitals also offer water births. A hospital-based midwife may oversee the process. Birth centers and hospitals have specific policies, procedures, and equipment for water births. If you want to have a water birth, be sure to talk to your health care provider early in your pregnancy.

MEDICAL EMERGENCY

LABOR AND BIRTH

Emergency Birth

If this is your first baby, it's very unlikely that you will go into labor and give birth before you can get to the hospital or birth center. But snowstorms, natural disasters, and traffic gridlock do happen. This lesson will walk you through having an unplanned birth at home (or in the car before you reach the birth facility). Please read it and keep it handy, just in case.

Signs the birth is close

- Sudden long, strong contractions
- Contractions are less than 5 minutes apart
- You have an overwhelming urge to push

What to do

- Take a deep breath and stay calm; birth is a natural process
- Call 911 and tell the dispatcher your baby is coming fast
- Ask the dispatcher to call your provider, then stay on the line
- Unlock the door so the medical team can get in
- Wash your hands or use alcohol-based hand sanitizer
- Grab a handful of towels, sheets, or blankets
- Sit or lie down on a blanket; remove pants and panties
- Use panting or breathing patterns to keep from pushing

If the baby arrives before the medical team:

- Use a clean towel and dry the baby off
- Place the baby skin-to-skin on your chest
- Cover the baby with a dry towel or blanket
- If the baby doesn't start breathing after birth:
  - Firmly rub up and down on the baby's back, or
  - Lay the baby on their back, rub their chest, tap the bottom of the feet, or
  - Give the baby mouth-to-mouth resuscitation
- If the placenta emerges, place it in a towel or bag above or beside the baby
- Do not cut the cord

CHAPTER 5

Medical Interventions

What Are Interventions?

The word "intervention" has several different meanings. When talking about labor and birth, an intervention is simply a medical action taken by your health care team to help with the baby's birth. Even if your plan was for a birth with minimal interventions, one may become medically necessary to protect the health of you and/or your baby.

It's important to have a basic understanding of the most common labor and birth interventions before you go into labor. This will make it easier for you and your health care team to make decisions quickly if it becomes necessary. Common labor and birth interventions include:

- Intravenous (IV) fluids
- Pain medications
- Fetal monitoring
- Induced labor
- Assisted birth

INTRAVENOUS (IV) FLUIDS

Depending on where you give birth, you may or may not have an IV line put in place to deliver fluid or medication to you quickly and efficiently. Talk with your medical team before labor begins if you have any questions about having an IV line put into your hand or arm.

You may be required to have an IV if:

- You are having a cesarean birth or planning to have an epidural block
- You have ***Group Beta Strep*** (GBS) and need to receive intravenous antibiotics

IV advantages

- Provides quick access in case of an emergency
- Keeps you hydrated, which can help labor progress

IV disadvantages

- Discomfort when the IV needle is put in place
- Harder to move around freely for comfort measures

If you don't want to have a continuous IV while in labor, ask your health care team if a saline lock or venous access port can be placed and used only if necessary.

Pain Medications

Some people prefer not to use pain medication during labor and birth. Others want to. It really is your choice. This section will give you information about how you may receive medication; the different types of medications; and the benefits, drawbacks, and possible side effects of each.

NITROUS OXIDE

Nitrous oxide is a gas that is mixed with oxygen in equal parts and inhaled through a face mask.

When to use

- Self-administered through a face mask
- Can be used during any stage of labor

Benefits

- Simple to administer and noninvasive
- Doesn't interfere with your body's production of *oxytocin*
- Doesn't affect the alertness of your baby
- Helps with relaxation and decreases pain
- Clears your body within 5 minutes after you stop using it

Drawbacks

- Not available in all birth facilities
- Can't use if you've had a narcotic or regional anesthesia

Possible side effects

- Sedation
- Nausea/vomiting
- Dizziness

ANALGESICS-NARCOTICS

These medications (known as opiates) include Demerol, morphine, Stadol, Nubain, and fentanyl. Opiates have a systemic effect. That means they enter your bloodstream and affect your entire body. The type of medication you receive will depend on your health care provider and the facility where you give birth.

When/how to use

- In active labor
- Through IV or injection

Benefits

- Increases pain tolerance
- Increases ability to relax
- Works quickly
- Doesn't affect muscles for pushing
- Doesn't slow down labor

Drawbacks

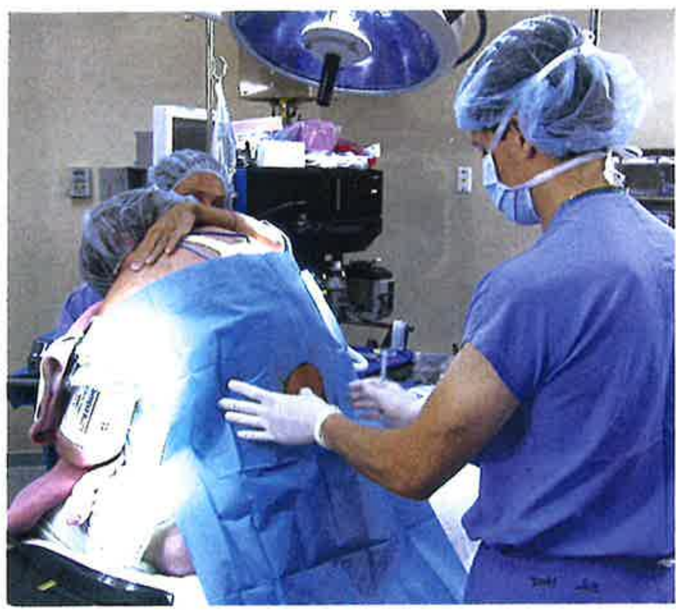
- Doesn't stop pain
- Can only receive every so often (depending on medication)
- Can only receive at certain times during labor

Possible side effects

- May cause nausea, dizziness, drowsiness, disorientation
- May decrease heart rate, breathing rate, or blood pressure
- Possible allergic reaction
- Possible temporary breathing problems for your baby

LOCAL ANESTHESIA

Local anesthesia helps numb the area around any skin tears, lacerations, or an episiotomy incision. If you need stitches and didn't take pain medication during the birth, local anesthesia can numb the perineum for the stitches.



SCAN + PLAY

EPIDURAL BLOCK

Epidural anesthesia is the most common form of regional anesthesia used during labor. Regional anesthesia blocks sensations of pain across a large area of the body while you remain conscious. An epidural block offers pain relief to your lower abdomen during contractions and may even decrease sensation to the legs and birth canal.

You will receive the anesthetic medication through a small, flexible tube called a catheter placed in your lower back. Because no one knows how long you will be in labor, the epidural catheter can stay in place and deliver a continuous flow of pain-relieving medication until your baby is born.

Before you can receive an epidural, you'll need to have an IV in place and have normal results from your lab tests. Once the epidural tube is in place, you'll receive continuous fetal monitoring, frequent blood pressure checks, and possibly a ***urinary catheter***. You will also have to stay in bed because of numbness in your legs.

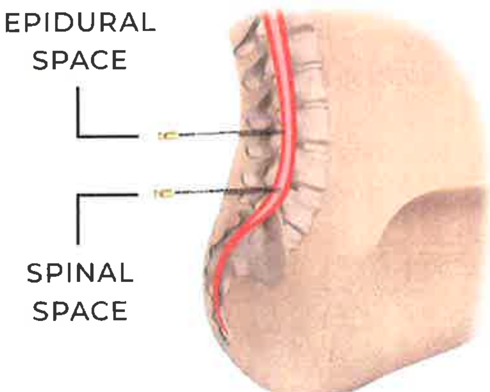
Not everyone can have an epidural block. Tell your health care provider if you know or suspect you may have any of the following conditions:

- Bleeding or ***coagulation*** problems
- Infection near the site of needle or catheter placement
- Certain neurological disorders
- Some types of earlier lower back surgery
- Any significant spinal irregularities
- A recent tattoo at the injection site

Possible side effects

- **Inadvertent spinal block** – If the membrane holding your spinal fluid is punctured by a needle or catheter, you may absorb a higher-than-optimal level of anesthetic. This can cause you to have a post-spinal headache after delivery that may require treatment.
- **Ineffective pain relief** – Approximately 85% of people experience total pain relief from an epidural block. Others experience only partial relief, and some get no relief at all.
- **Effect on labor** – Epidural anesthesia can slow labor, especially if you receive it too soon. An epidural can also interfere with pushing, making it harder for the baby's head to crown. At other times, it may actually speed up labor.
- **Blood pressure** – One of the most common effects of an epidural block is a slight drop in blood pressure. Your blood pressure will be carefully checked and you will receive a steady stream of fluids through your IV to minimize this risk.

POINTS OF INSERTION FOR SPINAL AND EPIDURAL ANESTHESIA



SPINAL BLOCK

A spinal block is sometimes called a "spinal." How you receive spinal anesthesia is similar to how you receive epidural anesthesia. The main difference is that with a spinal, the anesthetic medication is injected directly into the space around your spine instead of into a catheter.

A spinal block can help relieve pain in your lower abdomen, legs, and birth canal for as long as 2 hours. This makes it a good choice for a scheduled cesarean birth or an unplanned cesarean birth if you haven't already had an epidural block.

GENERAL ANESTHESIA

This type of anesthesia is systemic, meaning that it affects your entire body, including your baby. You won't receive general anesthesia if you are in labor. You may receive it if you need an emergency cesarean birth and time is a factor. General anesthesia may also be used if you need a cesarean but are unable to have an epidural block or spinal block for some reason.

An anesthesiologist administers the medication through your IV. Once this is done, you will be unconscious and feel no pain. You will have an endotracheal tube placed down your throat to help you breathe while you're under anesthesia.

After the baby is born and your incision is closed, the anesthesiologist will gently wake you up. You'll probably be groggy for a short time and will need pain medication in the recovery room. The breathing tube may also cause you to have a sore throat for a couple of days.

Be sure to talk to your health care provider about anesthesia and pain control before your labor begins. Share any concerns you may have about the effects on you and your baby. Keep an open mind and know your options ahead of time so that you can make informed decisions (if you need to) during labor.

Some people will feel pain even when they use pain medication. If you keep practicing the comfort measures that have worked for you, it can help you relax through the pain.

SCAN + PLAY

Fetal Monitoring

Monitoring a baby's heart rate during labor is a good way to track how well the baby (fetus) is doing and if there are any problems. There are 2 types of fetal monitoring: external and internal.

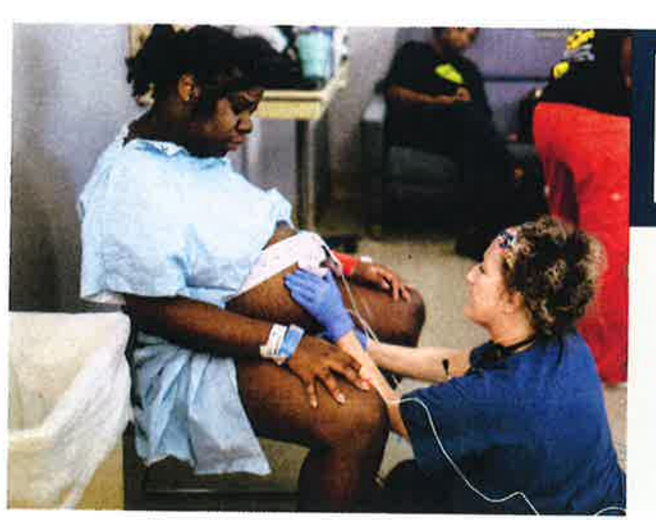
EXTERNAL FETAL MONITOR

An external fetal monitor includes 2 devices called transducers that are placed on your belly when labor begins. One continuously gathers information about the baby's heart rate. The other records the frequency and duration of your contractions.

During labor, your health care team will check your baby's heart rate using a hand-held doppler or electronic fetal monitor. If you're healthy and your pregnancy is considered low risk, ACOG recommends that your baby's heart rate be checked every 30 minutes while you're in active labor and every 15 minutes while you're pushing. If you have risk factors, monitoring may be done more often.

Continuous fetal monitoring will be required:

- If labor is induced or augmented with ***Pitocin***
- If you have an epidural block
- If your baby's heart rate changes
- If you or your baby has a health problem



NEED TO KNOW

Telemetry is a type of ***electronic fetal monitoring*** that uses radio waves instead of wires. Telemetry monitoring gives you more freedom to move around and do comfort measures such as walking, showering, or using a birthing ball.

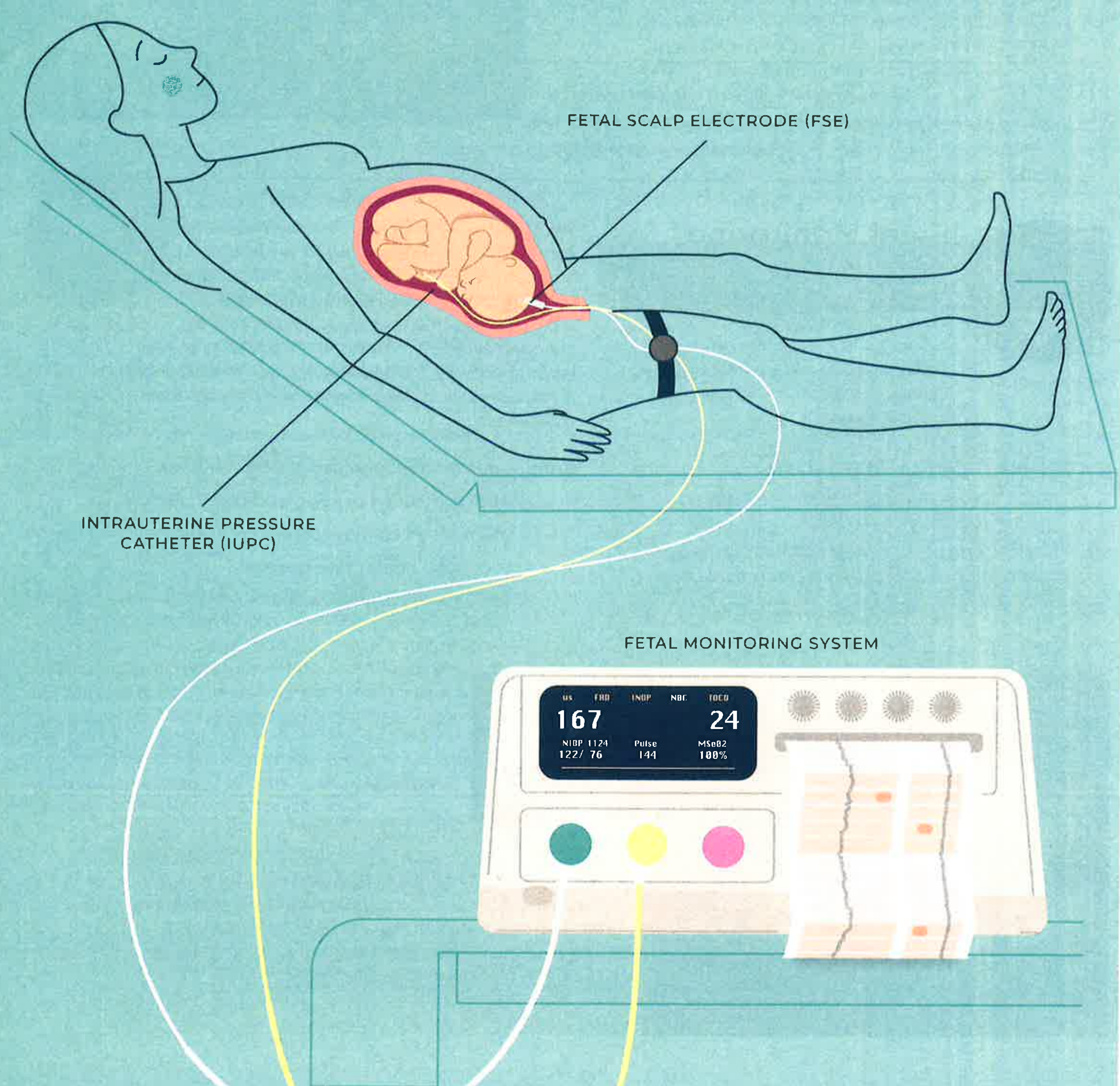
INTERNAL MONITORS

Internal monitors give your birth team more detailed information about the baby and your labor.

There are 2 types of internal monitors:

- A **fetal scalp electrode (FSE)** may be placed on the baby's head to track precise changes to their heart rate
- An **intrauterine pressure catheter (IUPC)** may be threaded through the cervix and placed in the uterus next to the baby to deliver detailed information about the strength, frequency, and duration of your contractions

Labor will often progress smoothly with only external monitoring. Your provider will only use an internal monitor if they need specific types of information to protect the health of you and your baby. To place internal monitors, your cervix must be open and your amniotic sac must have ruptured.



Induced Labor

Induced labor, or labor ***induction***, refers to an action used to start uterine contractions before labor begins on its own. Induction is done to encourage a vaginal birth.

If labor hasn't started naturally, there are several ways to start the process. Your health care provider will decide on the best course of action based on your health and any other relevant factors or special circumstances. They may recommend an early birth because the benefits outweigh the risks. Medical reasons to induce labor may include:

- High blood pressure, diabetes, preeclampsia
- Rh disease that causes problems with your baby's blood
- Overdue pregnancy (2 weeks past your due date)
- Your baby stopped growing or there isn't enough amniotic fluid
- Your water breaks before labor begins
- Known complications with the baby

PREGNANCY DEFINITIONS

According to definitions endorsed by ACOG and the Society for Maternal-Fetal Medicine, a pregnancy is not full term until 39 weeks.

Current pregnancy definitions

- **Early term** – 37 weeks through 38 weeks and 6 days
- **Full term** – 39 weeks through 40 weeks and 6 days
- **Late term** – 41 weeks through 41 weeks and 6 days
- **Post term** – 42 weeks and beyond

CERVICAL RIPENING

Normally, your body will produce prostaglandins to painlessly "ripen" (shorten, soften, and dilate) your cervix during the last weeks of pregnancy. If your health care provider feels that labor induction is necessary but your cervix has not ripened naturally, they may act to speed up this process.

There are several ways to ripen the cervix. Your provider may place a prostaglandin suppository in your vagina next to the cervix. Or they may insert a small silicone tube with a balloon on the end into the cervix. When filled with water, the balloon will physically begin dilating the cervix. Both procedures are typically done in the hospital.

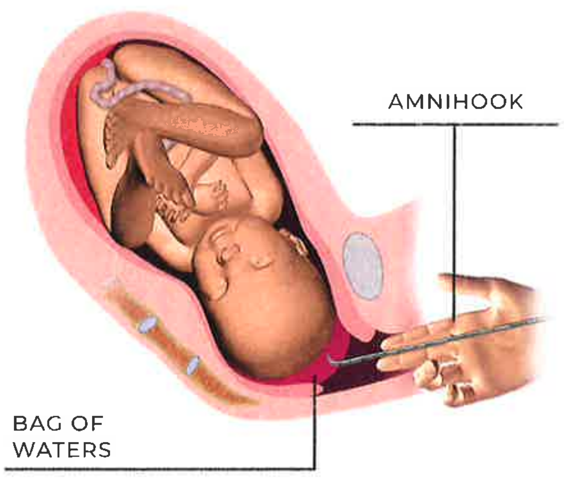
STRIPPING THE MEMBRANES

Stripping the membranes, also known as a membrane sweep, is a procedure your health care provider can do in their office. During a vaginal exam, one finger passes through the cervix and in a circular motion separates the amniotic sac from the wall of the uterus. This causes your body to release oxytocin, which causes contractions. This procedure is not always successful and can be quite uncomfortable. It may also cause some bloody vaginal discharge.

NIPPLE STIMULATION

Scientific research has confirmed that massaging your nipples is an effective way to induce labor. It releases the hormone oxytocin in the body, encourages labor, and makes your contractions longer and stronger. You or your partner can stimulate your nipples manually or with a breast pump. Ask your health care provider if nipple stimulation is safe for you to try.

BREAKING YOUR WATER



ARTIFICIAL MEMBRANE RUPTURE

If your water hasn't broken, your health care provider may decide to artificially rupture the membrane (amniotic sac, bag of waters) to help labor begin. This procedure, called amniotomy, is done by inserting a small instrument called an amnihook into the cervical canal to rupture the sac. It is done in the birth facility. Because the amniotic sac has no nerve endings, this is generally painless.

Amniotic fluid is generally clear to straw-colored but may sometimes contain bits of ***meconium***. Meconium is a greenish-brown material that is the baby's first bowel movement. If there is meconium in the fluid, your provider will take extra actions to keep your baby from breathing in any of the fluid.

PITOCIN

Pitocin is a medication used to either start contractions or speed up labor. A set amount of Pitocin will be automatically delivered to you through an intravenous pump. You will need fetal monitoring if you receive Pitocin.

Pitocin concerns

- Overstimulation of the uterus
- Infection in you or your baby
- Increased risk of cesarean birth
- Uterine rupture

SCAN + PLAY

Assisted Birth

In an assisted birth, your health care provider may decide to perform an episiotomy or use a medical instrument (***forceps*** or ***vacuum extractor***) to help you give birth vaginally.

An episiotomy is a surgical incision between the vagina and anus to widen the vaginal opening and allow more room for the baby to be born or for your health care provider to use forceps to complete the birth. You will receive a local anesthetic to lessen any discomfort during the episiotomy repair (stitches).

Using forceps or a vacuum extractor can help guide the baby through the birth canal as you continue to push. Both instruments are considered safe choices.

Reasons for use

- Fetal distress, although baby's head is low enough in the pelvis to be born quickly
- Baby's head is facing up (persistent posterior position)
- You can't push because of epidural anesthesia
- You are too exhausted to push

Possible concerns

- Forceps may cause temporary bruising on the baby that tends to fade within 48 hours
- The suction from the vacuum may cause some swelling of the baby's scalp
- Using a vacuum extractor may increase the chance of ***jaundice***
- May cause injury to the vagina, perineum, or anus

MIDLINE EPISIOTOMY

VAGINAL OPENING

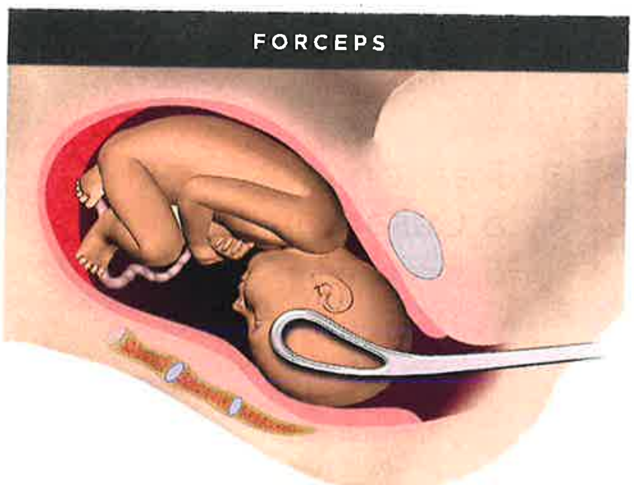
ANUS

MEDIOLATERAL EPISIOTOMY

VAGINAL OPENING

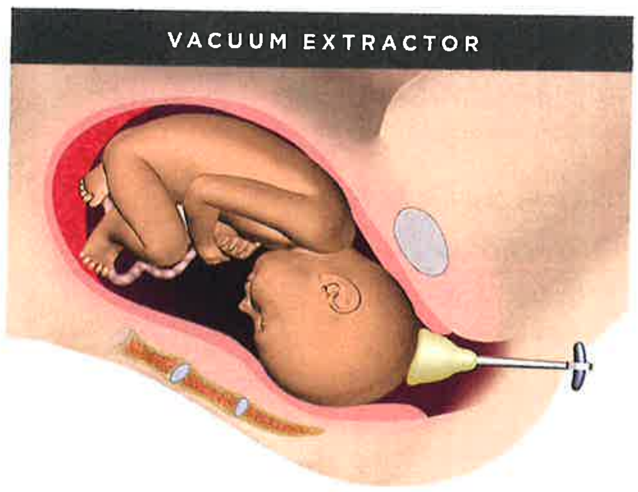
ANUS

FORCEPS



Forceps are gently inserted into the vagina around the baby's head.

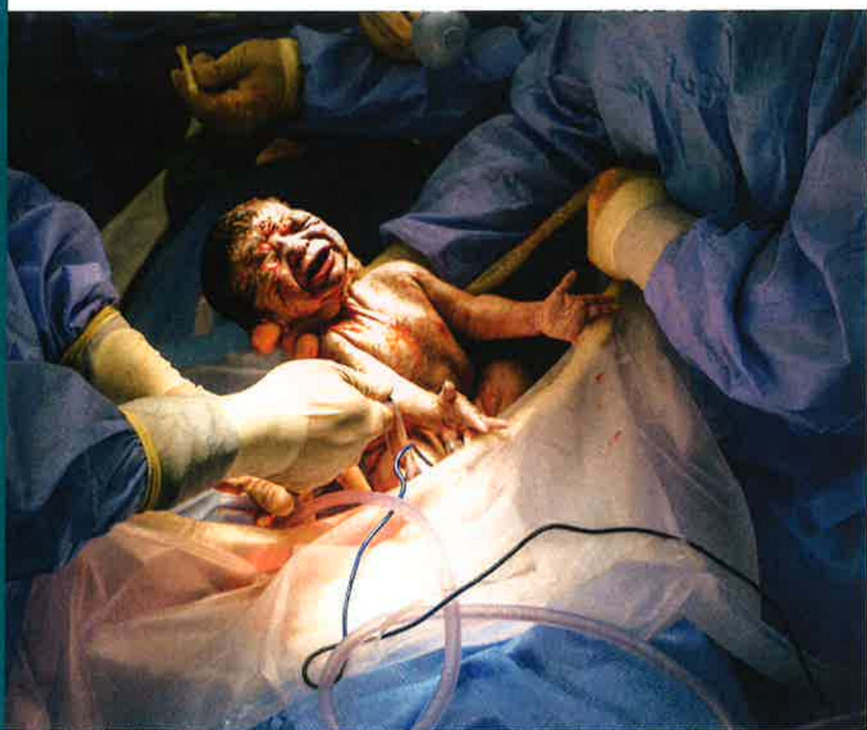
VACUUM EXTRACTOR



A suction cup is placed on top of the baby's head.

CHAPTER 6

Cesarean Birth



SCAN + PLAY

Reasons for a Cesarean

A cesarean birth is a major surgery. When you have a cesarean birth, your baby is born through surgical incisions in your abdomen and uterus. You may need a cesarean birth if a vaginal birth is not possible or if there is concern for the safety and health of you and your baby.

Regional anesthesia (spinal block, epidural block) that numbs only the lower part of your body allows you to stay awake during a cesarean birth. In an emergency, you may need general anesthesia and be unconscious through the entire procedure. Cesarean births take less than an hour, and your labor partner may be able to stay with you in the operating room.

Factors that may require a cesarean birth

- Prolonged labor
- Fetal distress
- The baby's position
- Placenta and cord problems
- Medical complications
- Multiple births (twins, triplets, etc.)

PROLONGED (STALLED) LABOR

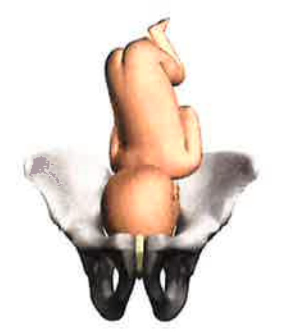
Prolonged, or stalled, labor is when your cervix doesn't continue to dilate or efface or your baby doesn't move into the birth canal during the first or second stages of labor. This can happen for a variety of reasons, including weak contractions, the position of the baby's head, or a difference between the size of your pelvis and the size of your baby's head. Patience, augmentation to strengthen your contractions, and trying to change the baby's position may help.

FETAL DISTRESS

Fetal distress can happen when a baby isn't receiving enough oxygen during pregnancy or labor. A fetal monitor can detect this as an abnormal heart rate. Fetal distress may happen if the umbilical cord wraps around your baby's neck, loops around their body, or becomes caught between their head and your pelvis.

If the umbilical cord is in one of these positions, a contraction can pinch the cord and cut off some oxygen to your baby. If this happens, you may receive oxygen through a mask and turn on your side to stop pinching the cord. Your care team may also lower the head of your bed so your feet are higher than your head. Your provider may try using forceps or a vacuum extractor to deliver the baby vaginally. If these efforts are not successful, you may need an emergency cesarean.

BABY'S POSITION



FACE OR BROW SHOWS FIRST

A face or brow presentation is when the baby's face or forehead (instead of the back of the head) comes through the birth canal first. Some people can give birth vaginally in this position, but many can't.

TRANSVERSE LIE

When your baby is sideways in the uterus, it's called a ***transverse lie***. Almost all people with babies in a transverse lie must have a cesarean birth.

BREECH

If your baby's bottom or feet show first (instead of their head), it's called ***breech***. Today, most people with a breech presentation in labor will have a cesarean birth.

FOOTLING

COMPLETE

FRANK

PLACENTA AND CORD COMPLICATIONS

PLACENTAL ABRUPTION

The placenta detaches from the wall of your uterus before the baby is born. If this happens, your baby may not get enough oxygen. You will bleed, have pain in your uterus, and you may need to have a cesarean birth.

PLACENTA PREVIA

The placenta is attached too low on the wall of your uterus or is covering the cervix, causing painless bleeding. If your provider finds the condition early, you may have to stay in bed until the birth. If there is too much bleeding, the baby may need to be born by cesarean.

PROLAPSED CORD

The umbilical cord slides out of your cervix before the baby. If this happens, compression on the umbilical cord can block blood flow to the baby. This may happen in a pre-term birth, if the baby is in breech position, or if the baby's head hasn't settled into your pelvis when your water breaks.

MEDICAL COMPLICATIONS

A complication refers to any serious medical condition that could affect your health or your baby's health during labor. Sometimes complications may require you to have a cesarean birth.

Complications can include:

- A very ***premature baby***
- A heart condition
- Poorly controlled diabetes
- Preeclampsia
- High blood pressure
- An active case of ***genital herpes***
- Rupture of membranes with signs of infection
- An earlier cesarean with a classical or vertical incision into the uterus

Preparing for Surgery

If you need to have a cesarean birth, your health care team will explain why you need the procedure, what to expect, and what your anesthesia choices are. Having surgery can be scary. But your care team will keep you informed and provide enough medication before the surgery to keep you comfortable.

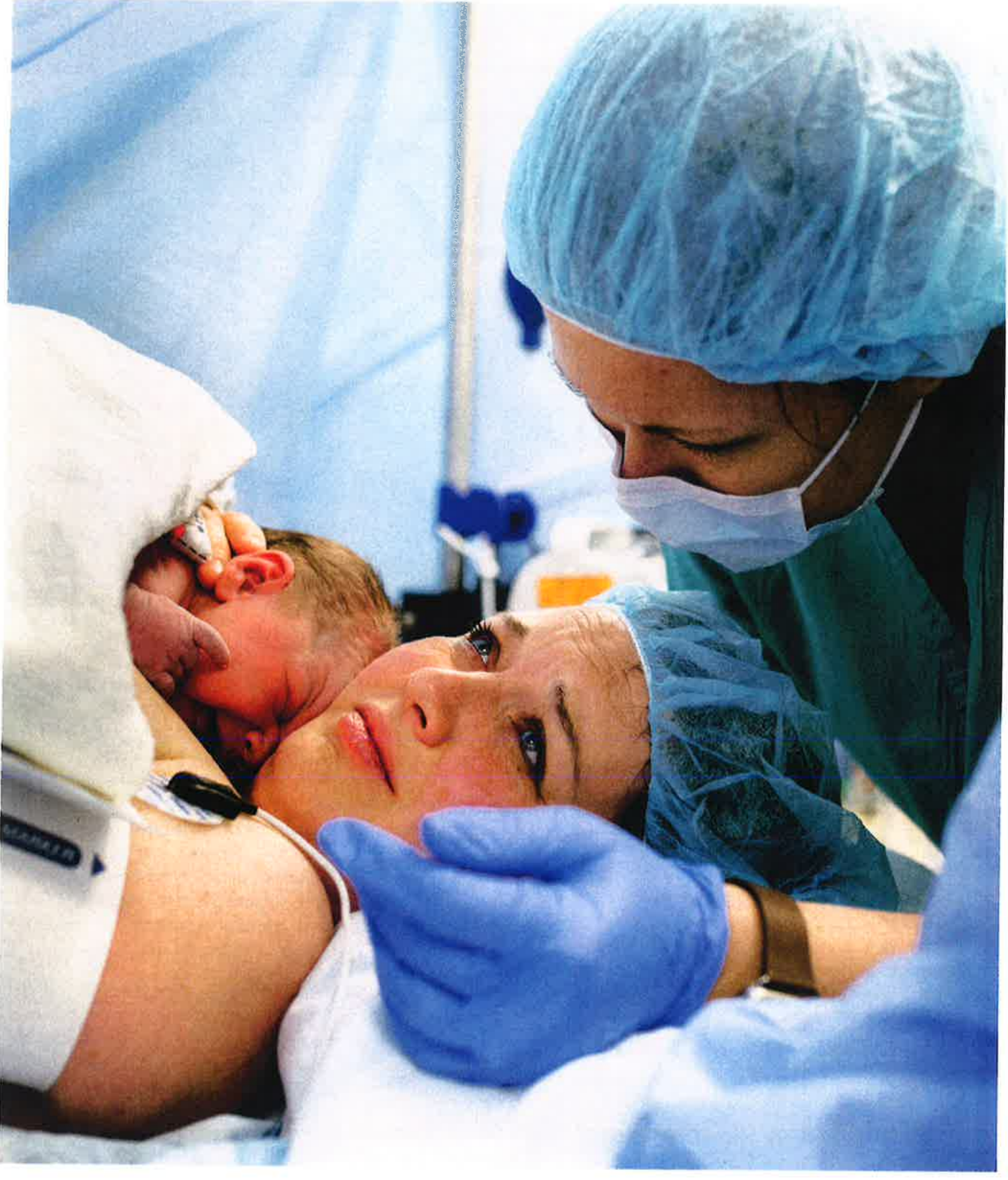
During your cesarean birth, you can expect to feel pulling, tugging, and pressure sensations. There may also be other sights, sounds, and smells that are new to you. If you feel anxious, the anesthesiologist will be nearby to offer encouragement, support, and medications if you need them. You can also use the relaxation techniques that you practiced for labor during your cesarean birth.

In an emergency cesarean birth, it may take only 2 minutes for your baby to be born. If it's not an emergency, the birth may take up to 10 minutes. Your health care provider will gently lift out your placenta and examine it. Then it will take about 45-60 minutes to close the incisions in your uterus and belly. If your baby is doing well, the care team can place your newborn skin-to-skin on your chest right away.

Before and during surgery:

SCAN + PLAY

- You may receive an antacid to calm your stomach
- You'll have a blood sample taken and an IV line started
- Your belly will be prepared for the incision
- You'll have a catheter inserted into your bladder to keep it empty
- You'll be connected to heart and blood pressure monitors
- Your labor partner will change into scrubs, wash their hands, and join you
- A drape will be placed across your belly
- Your provider will make incisions in your belly and uterus
- Your baby will be lifted out of your uterus and born



In the Recovery Room

If your baby is doing well, a nurse will place them on your chest right after birth. If the baby needs extra support, they will be placed in a warming bed in the operating room. After everything is completed in the operating room, you and your baby will go to a recovery room or back to the LDR room. During recovery, your health care team will see if you need any pain medication, watch for vaginal bleeding, and check your incision site. Your partner can stay with you. This is a great time for the first breastfeeding.

VAGINAL BLEEDING

Just like with a vaginal birth, someone on your care team will check your uterus to see how firm it is at the top. To minimize vaginal bleeding, your caregiver may need to massage this area, which can be uncomfortable. Using relaxation techniques may help relieve some of this discomfort.

INCISION SITE

Your surgical incision may be closed with internal sutures, external staples, surgical glue, or wound closure strips, then covered by a bandage, or dressing. You may have a transparent dressing or a non-stick dressing pad held in place by flexible surgical tape. Patients with a high body mass index (BMI) may receive an advanced dressing that uses a vacuum to create negative pressure, wick away moisture, and create a dry environment around the incision to help it heal.

Check your incision daily and call your provider if it:

- Is red
- Separates
- Is swollen
- Is warm to the touch
- Is tender or painful
- Drains

POST-SURGICAL PAIN

If you received a spinal or an epidural block for anesthesia during the surgery, you should be comfortable for several hours as it slowly wears off. If you received general anesthesia, post-operative pain management will be a priority to make you comfortable. You may receive tablets, injections, or an IV attachment called a patient-controlled analgesia (PCA) pump. A PCA pump has a button you can press to receive medication when you need it. It is important that only you push the button. The pump is set according to the prescription from your provider, so you won't get too much medicine.

Some health care providers may place a device in the incision site that delivers localized pain medication. Understand that medication won't relieve pain entirely over the course of your recovery. Using the relaxation techniques that you learned for labor may help.

The sooner you get up and move around, the faster you will heal and the better you will feel. Your nurse will have you sit up on the side of the bed, then sit in a chair, and finally walk in the hallway.

To avoid complications after surgery, it's very important to take deep breaths and cough to expel any collected mucus. To help with pain when you breathe and cough, place a pillow over your incision and put pressure on the pillow as if you are hugging it. This action is called "splinting." Using a pillow for splinting can also make you more comfortable when you get up or change positions.

Frequently Asked Questions about Your Cesarean Birth

CESAREAN BIRTH

What can I eat?

After surgery your digestive system slows way down, causing gas buildup and decreased bowel function. Wait until your intestines begin moving again before you eat any solid foods. Getting out of bed and walking will help. As your intestines wake up, you can slowly start eating solid foods again.

How long will I be in the hospital?

The average hospital stay after a cesarean birth is 48 to 72 hours. Your nurse or health care provider will review your discharge instructions for home care with you before you go. Once you get home from the hospital, don't hesitate to call your provider with any questions.

When do they remove the IV and catheter?

Your care team will remove the urinary catheter that's been draining your bladder after you can get out of bed and move around. They'll remove your IV when you are able to tolerate food.

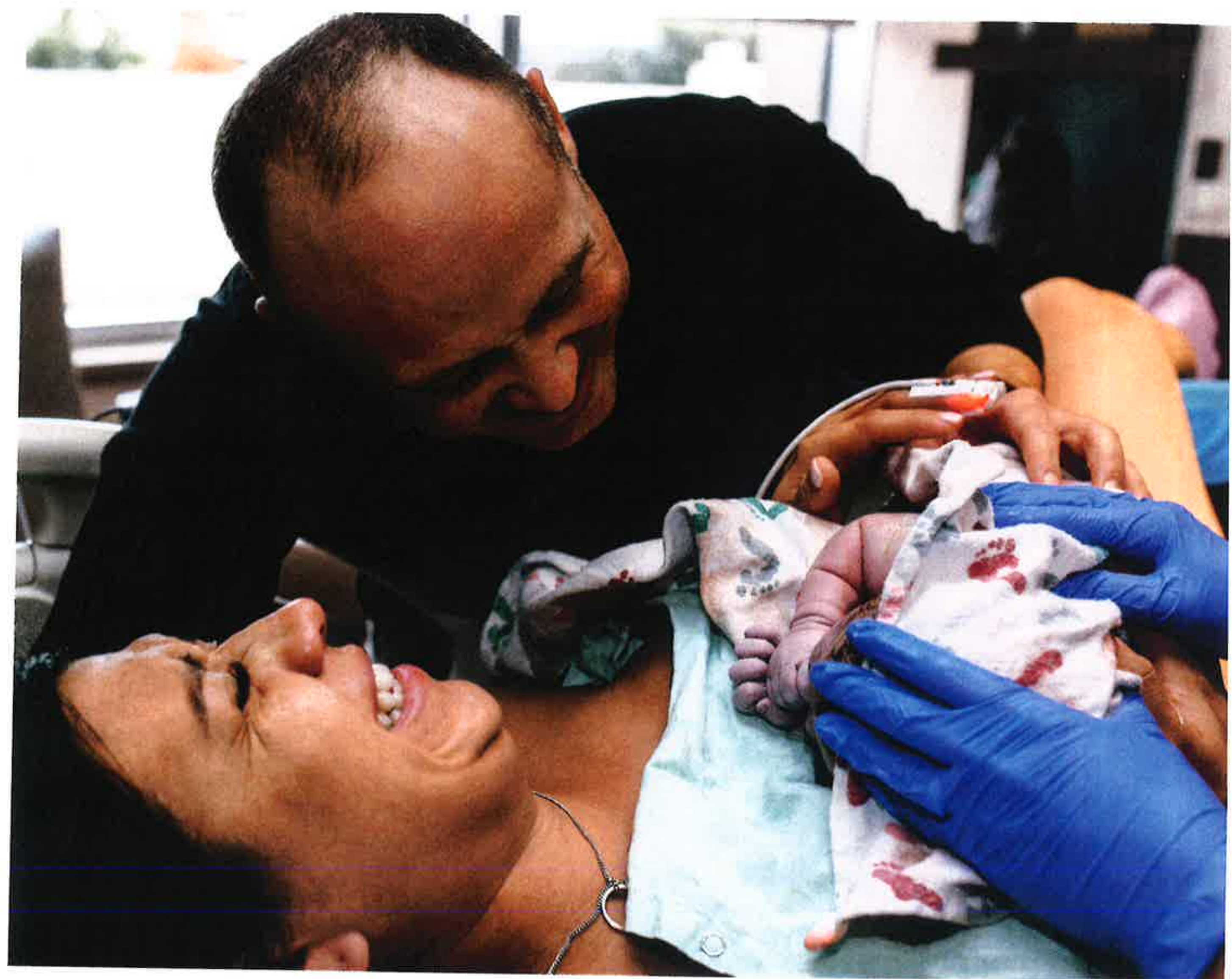
Will I have a vaginal discharge?

You can expect to have some bloody vaginal discharge after your cesarean birth. It will be bright red the first few days, then change to a deeper red, then brown, and, finally, clear or yellow.

WARNING!

Call your health provider right away if:

- You have bright red bleeding (more than a heavy period)
- You pass a clot or clump of blood larger than your fist
- Your vaginal discharge has a bad odor
- You have a temperature higher than 100.4° F



Vaginal Birth After Cesarean (VBAC)

Even if you had a cesarean birth in the past, it may be possible to have a vaginal delivery in the future. *VBAC* offers several important advantages:

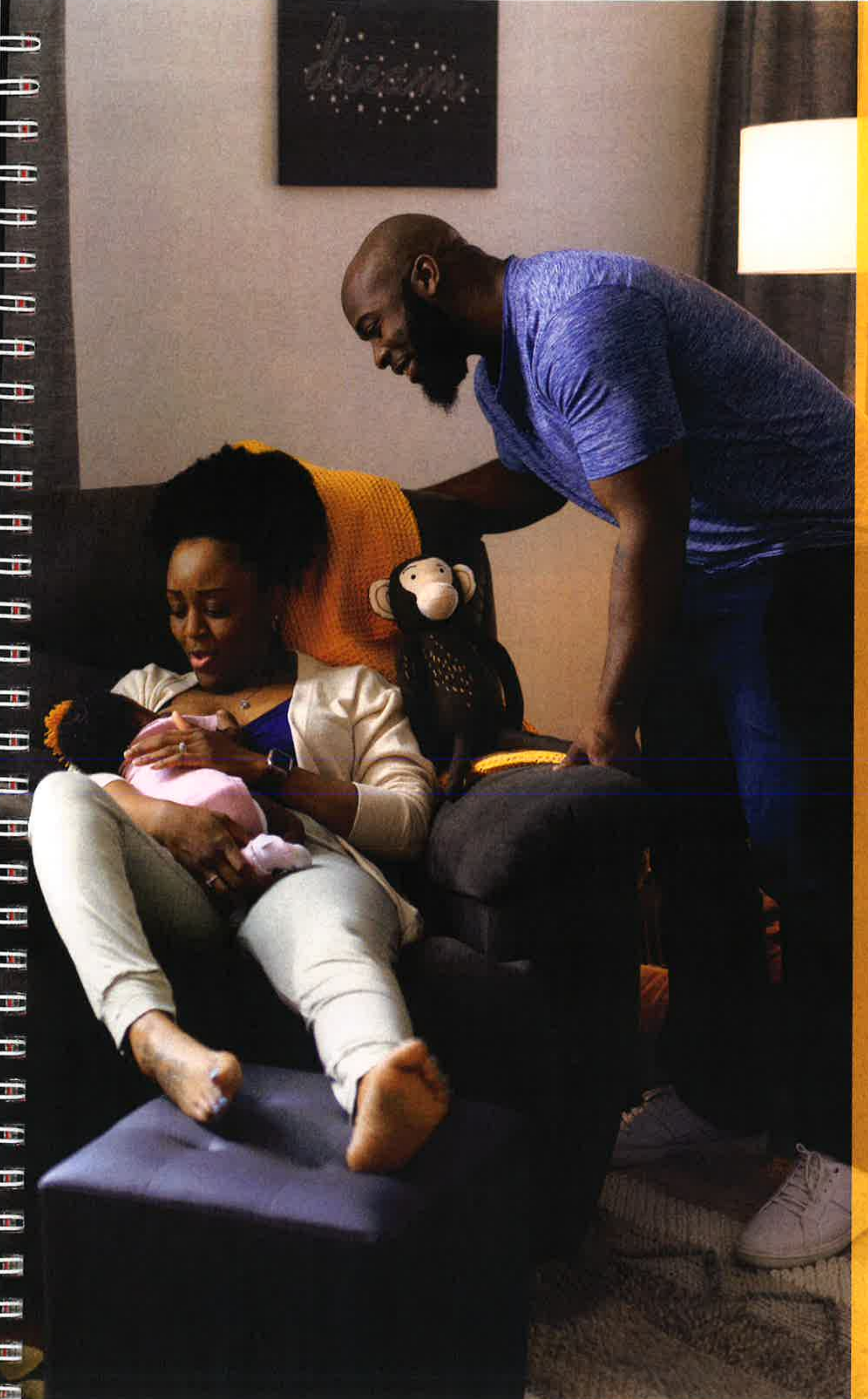
- You get out of the hospital sooner
- You recover and get back to normal activities faster
- You avoid possible infection, bleeding, or trouble healing from a cesarean

Your health care provider will need to see your surgery records to decide if you can try a VBAC. One factor to consider is the direction of the uterine incision from your past cesarean. It may or may not run in the same direction as the scar on your belly, which is why the surgical record is necessary.

Talk with your medical provider about the risks and benefits of a VBAC delivery. During a VBAC, you may still have an IV in your arm in case complications arise and you need a cesarean. Your care team will also watch your baby closely for any potential problems.

You may not be able to have a VBAC if:

- Your baby is in the breech position
- Your baby is bigger than most babies
- Your placenta is in the way



AFTER YOU GIVE BIRTH

CARING FOR YOUR NEWBORN, POSTPARTUM CHANGES AND SELF-CARE, BREASTFEEDING, AND MORE

CHAPTER 7

Your New Baby

SCAN + PLAY

Skin-to-Skin Contact

Immediately after birth, the care team will quickly check your baby, place them on your chest, and cover you both with a warm blanket. Holding your baby's bare skin next to yours is comforting for both of you. Your baby will learn the sound of your voice and your smell. You'll finally get to see this tiny person you've carried around inside you for more than 9 months and can begin bonding.

According to the American Academy of Pediatrics (AAP), the best start for breastfeeding is when you hold your baby skin-to-skin after birth and keep holding them until after they have breastfed for the first time. Of course, you can keep holding your baby skin-to-skin even longer if you want to. Your baby's sense of smell helps them find the breast, and they instinctively know how to latch on and suck. No matter how you plan to feed your baby, skin-to-skin bonding after birth is a best practice for all babies.

Benefits of skin-to-skin contact

- Soothes and calms both of you
- Helps regulate baby's temperature, heart rate, breathing, and blood sugar
- Enhances bonding
- Supports breastfeeding
- Helps your uterus contract

Safe skin-to-skin position

- You're semi-reclined or sitting up, alert or with an alert adult nearby
- Baby is high up in the middle of your chest, close enough to kiss
- Baby's head is turned on one side, with mouth and nose visible
- Baby's chin is in a neutral position, not slouched
- Baby's arms and legs are flexed, held tight to the side of their body

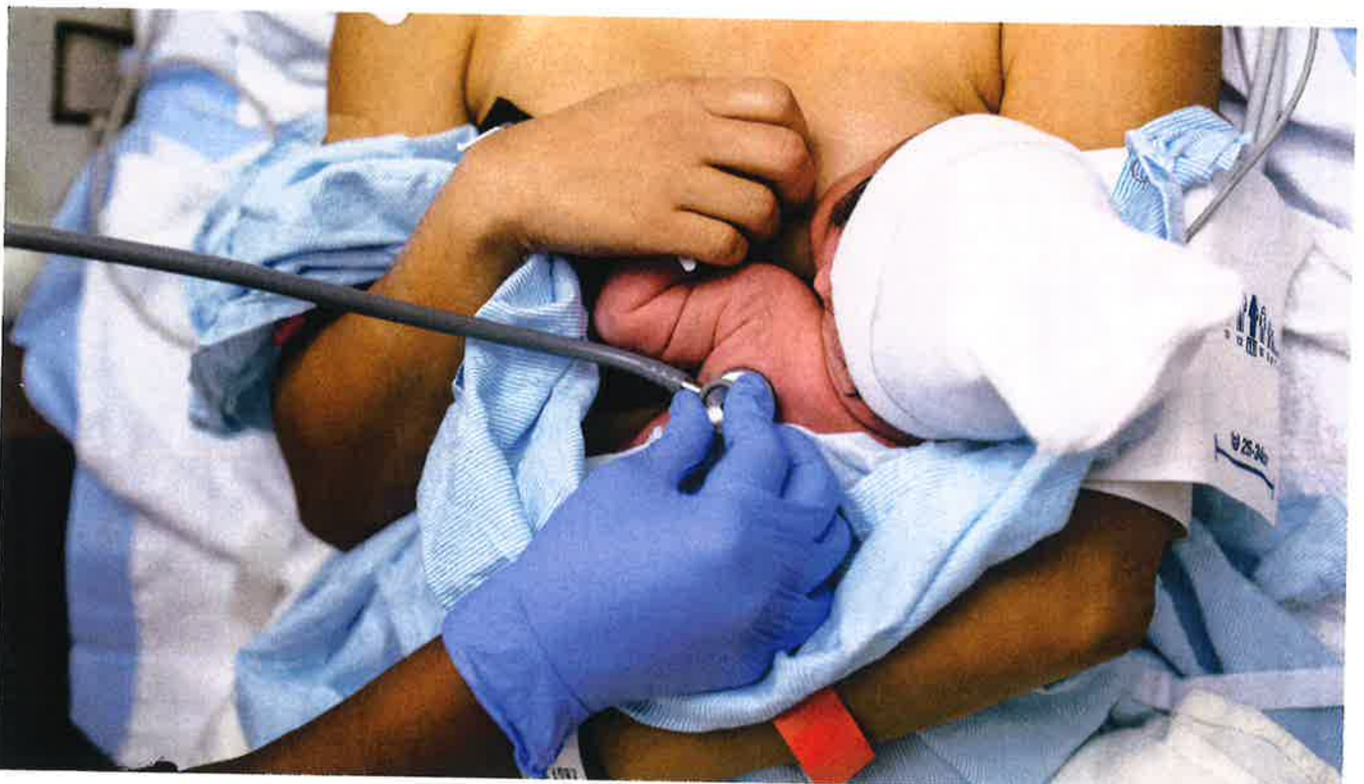
Good to remember

- Babies are usually calm and relaxed during skin-to-skin contact
- Babies should keep a good skin color and respond to stimulation
- Your baby also benefits from skin-to-skin contact with other family members

APGAR SCORE

The *Apgar test* is a quick and simple evaluation used by health care providers to find out how well your baby is doing outside the womb. Your baby will be checked for 5 different signs at 1 minute and again at 5 minutes after birth. Most healthy babies score 7 to 9 points, and a very few score the full 10 points.

FIVE AREAS EVALUATED	POINTS GIVEN FOR APGAR SCORE		
	0 points	1 point	2 points
HEART RATE	Absent	Under 100 beats/minute	Greater than 100 beats/minute
COLOR	Blue to pale	Body pink — feet and hands blue	Pink
BREATHING	Absent	Not regular	Crying/good rate
MUSCLE TONE	Absent/flaccid	Some movement	Active movement
REFLEXES	No response to stimulation	Grimace	Sneeze or cough — responds to stimulation



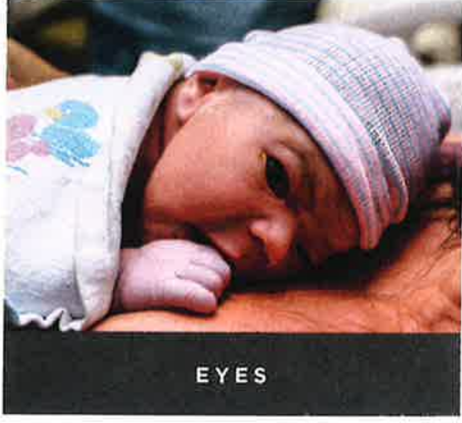
YOUR NEW BABY

What New Babies Look Like

Babies come into the world wet, tiny, and sometimes looking different than you expected. What is amazing is how much your baby's appearance will change in the hours and days after birth.

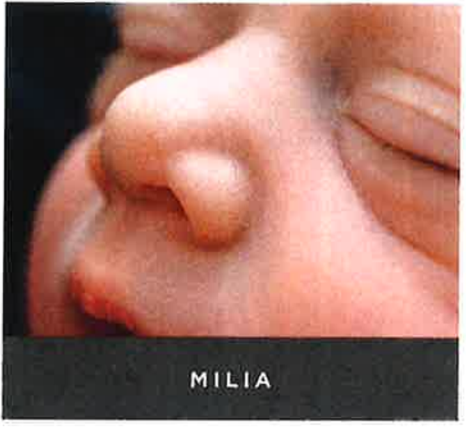
COLOR

Your baby's skin color will look bluish gray at birth. This is normal. As they begin to breathe and oxygen circulates in their bloodstream, their skin, lips, mucous membranes, and nail beds will become pinker. Their hands and feet may take a few days to turn pink.



EYES

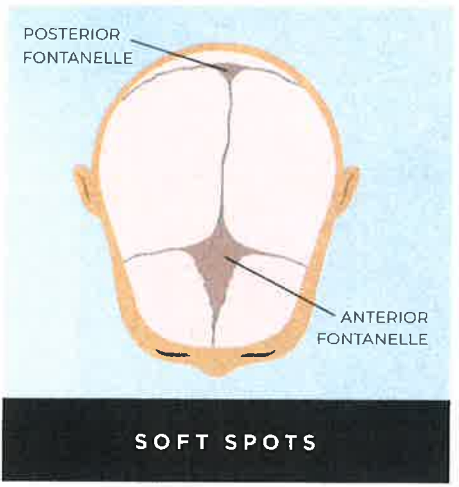
Newborns can be very alert, turning their head toward different sounds even though they can see almost 12 inches away. A baby's eyes may be gray-blue or brown at birth. Babies with dark skin are usually born with dark eyes. You will know their final eye color in about 9 to 12 months. If your baby's eyes occasionally cross, this is normal and should stop in 3 to 4 months. Red spots in the whites of your baby's eyes are also normal and will disappear in 1 to 2 weeks.



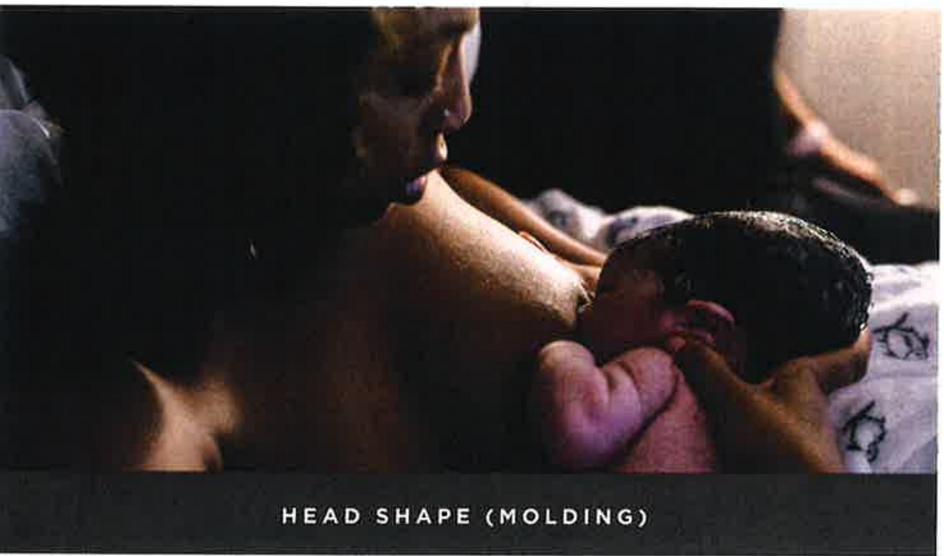
MILIA

Your baby's nose may look flat or have small, white, pimplelike bumps called ***milia*** on it. Milia can also appear on the baby's cheeks and forehead. Milia is different from baby acne. Both result from hormones still circulating in the baby's body, but baby acne produces red pimples. Don't squeeze or pick at any skin bumps. Keeping your baby's skin clean may help, although both milia and baby acne will eventually go away on their own.

There are two soft spots called ***fontanelles*** on your baby's head where the skull bones will eventually grow together. One is at the top and one is at the back of the baby's head. The soft spots will close in about 2 to 18 months.

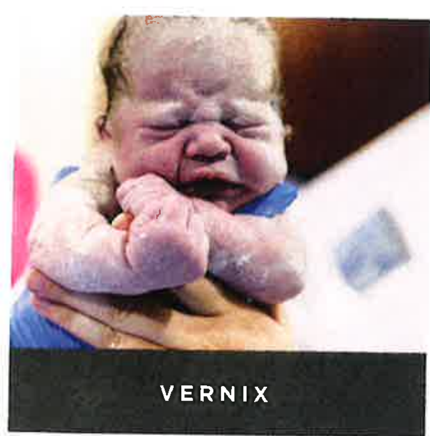


SOFT SPOTS



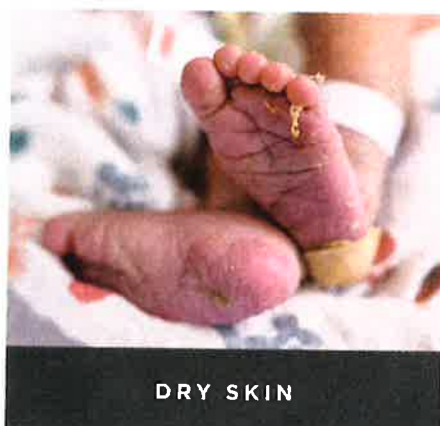
HEAD SHAPE (MOLDING)

When a baby is born, the plates of their skull bones are not fused together. This allows the baby's head to change shape as it moves through the birth canal and makes room for their rapidly growing brain. Your baby's head may also look out of shape, called "***molding***." The molding will correct itself in a few days.



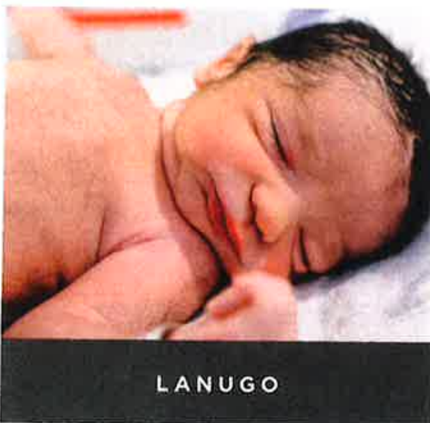
VERNIX

You may see a white, waxy coating called ***vernix*** on your baby's skin. Vernix protected your baby's skin from infection and wrinkles while the baby was floating in amniotic fluid in the womb. If your baby has vernix, you don't need to wash it off. Their skin will absorb it soon after birth.



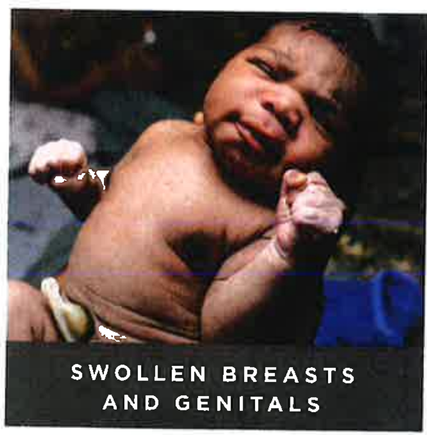
DRY SKIN

Babies born after their due date may have dry, wrinkly skin. That's because vernix starts to slough off around 38 weeks of pregnancy. Your baby's dry skin will improve quickly after birth because the skin underneath is moist and healthy.



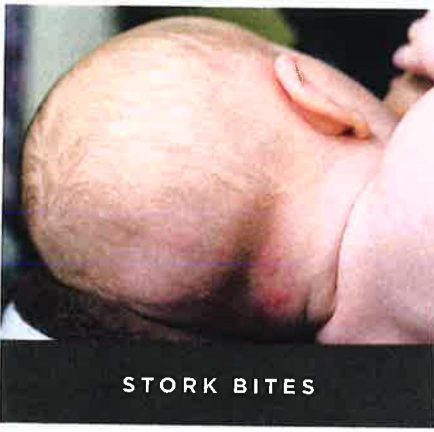
LANUGO

You may notice some very fine hair called ***lanugo*** covering your baby's body. In the womb, lanugo helps regulate the baby's temperature, holds in heat, and keeps the baby warm. Babies born early may have more of this fine hair on their body. It will start to disappear in a week or two.



SWOLLEN BREASTS AND GENITALS

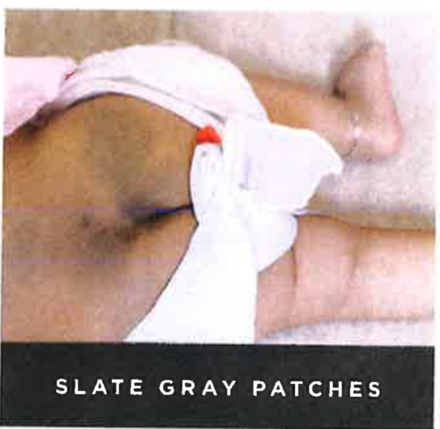
After birth, the breasts and genitals of both male and female newborns may look a little swollen. Their breasts may secrete a small amount of fluid. You may also find a small amount of blood-tinged discharge in your baby girl's diaper. This is all normal. These issues are caused by the last of your pregnancy hormones remaining in the baby's bloodstream. Within a few days after the birth, breast and genital swelling and fluid discharge should stop.



STORK BITES

A ***stork bite*** is a playful name for a birthmark. Birthmarks are areas of discolored skin on a baby's body that may be present at birth or show up within a few months after birth. Over 80% of babies have a birthmark of some type. Some last for life, while others fade away. Birthmarks come in a wide range of shapes, sizes, and colors, and they can appear anywhere on the body.

Most birthmarks are harmless and many go away on their own in the first few years of life. It's important to have your baby's health care provider look at all birthmarks. Sometimes medical treatment is necessary. You can always get a second opinion and learn about any other options for treatment.

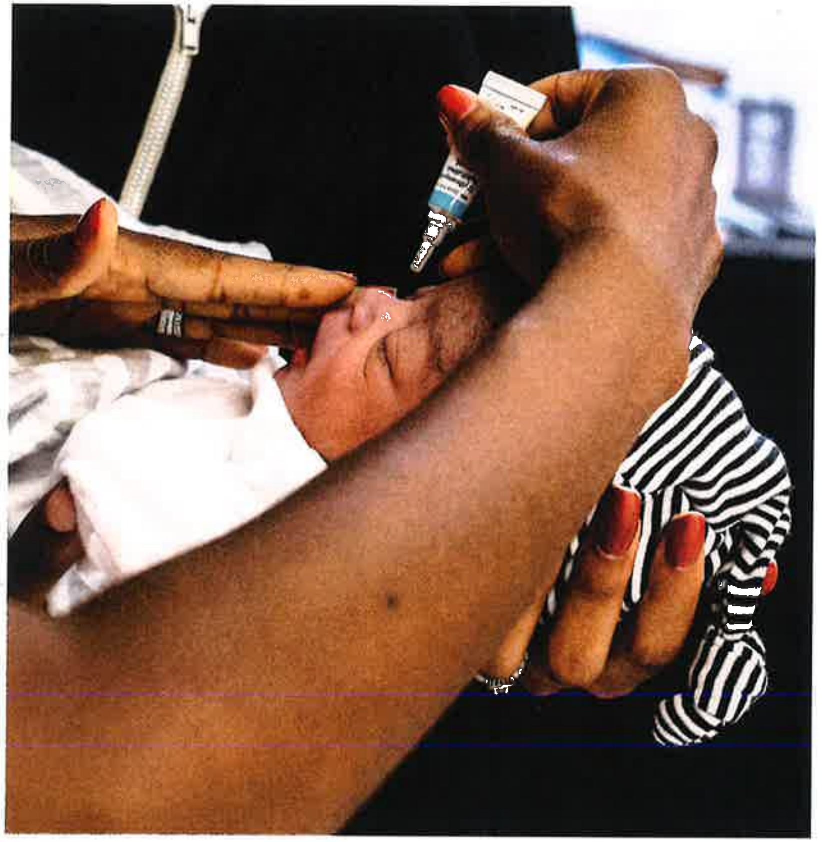


SLATE GRAY PATCHES

Slate gray patches are flat birthmarks that are very common in dark-skinned babies of Native American, African, Asian, or Hispanic descent. They can be deep brown, slate gray, or blue-black. These spots may look like bruising but are completely different. Some marks may be small, while others may be up to 6 inches or more in diameter. They may appear on the baby's shoulders, lower back, or buttocks area. Most will fade after the baby's first year of life.

Initial Procedures

Your baby may undergo several routine procedures, screening tests, and treatments before you both go home. Some will be done right after birth, while others will be done closer to discharge. Talk to your health care provider if you have questions about any routine tests or procedures.



EYE TREATMENT

Health organizations recommend that all newborns receive eye treatment to protect them from infection. This involves placing a small amount of antibiotic ointment (such as erythromycin) in a newborn's eyes shortly after birth to kill or weaken any bacteria. Some states have laws that require this treatment, while others leave the decision up to the parents.

VITAMIN K

Vitamin K helps with blood clotting. Because babies are born with only a small amount of vitamin K, they are at risk for vitamin K deficiency bleeding (VKDB). Bleeding can develop spontaneously from an unknown cause, or there may be an underlying disorder that causes it. A baby may receive a vitamin K injection soon after birth. Some parents prefer that their baby receive this injection while holding them skin-to-skin or during breastfeeding to minimize any pain.

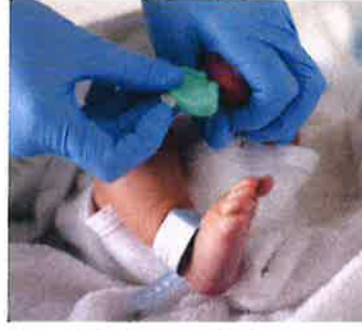
IDENTIFICATION AND SECURITY

Most hospitals use a 4-band system with a number or barcode to identify your newborn and keep them safe in the hospital. One bracelet will be placed on your wrist, two on your baby (ankle and wrist), and one on another person you choose. Some hospitals use ID tags with a computer chip or radio frequency identification (RFID) chip for added security.

Many hospitals also use tamper-resistant alarms with embedded technology to help keep your baby safe. No matter what type of ID is used, never give your baby to someone you don't know. Hospital personnel will have proper identification and it's OK to ask to see it.

Health Screening

Babies are routinely tested shortly after birth to see if they have any medical conditions that are treatable but not immediately apparent. Every state has screening requirements, although they may mandate different tests.

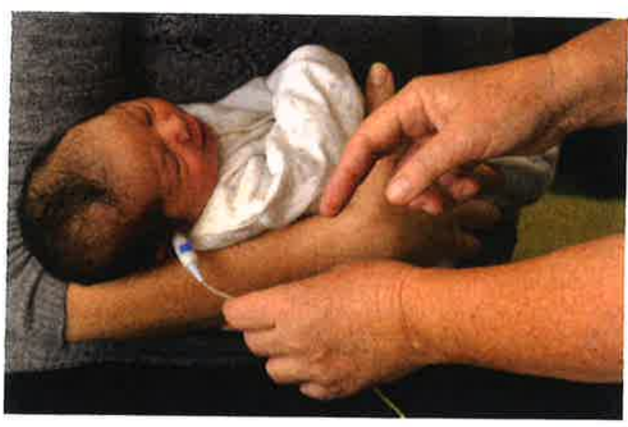


METABOLIC SCREENING

Metabolic screening involves testing your baby for severe developmental, genetic, or other metabolic disorders. If found early, many of these rare conditions can be treated before they cause serious health problems. Some disorders are more common in certain states, making this type of screening even more important.

About the test

- A technician takes a few drops of blood from your baby's heel
- Usually done on discharge day but no more than 2 to 3 days after birth
- Sample is sent to a lab for testing
- Let the hospital and baby's provider know how to reach you with test results

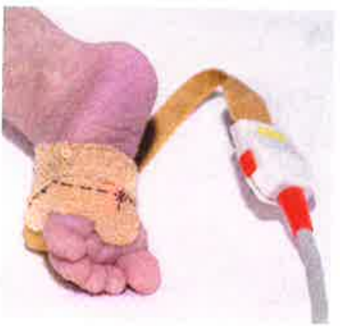


HEARING SCREENING

Of every 1,000 babies born, about 1 to 3 will have serious hearing loss. Experts recommend that all newborns have their hearing tested, and screening is now standard practice before leaving the hospital or birth center. If hearing loss is not found early in a baby's life, their brain's hearing center will not be stimulated. This can delay speech and other development.

About the test

- Painless; takes about 10 minutes while your baby is sleeping
- 2 types: otoacoustic emission (OAE) and auditory brainstem response (ABR)
- Done in the hospital using a tiny earphone, microphone, or both



PULSE OXIMETRY SCREENING FOR HEART DISEASE

Pulse oximetry is a simple, painless test used to measure how much oxygen is in your baby's blood. It can help identify certain congenital heart diseases in newborns. Screening can be done when the baby is more than 24 hours old.

About the test

- Sensors are placed on the baby's hand and foot
- Sensors consist of a sticky strip and small red light or probe
- Sensors measure the baby's oxygen level and pulse rate
- Takes a few minutes; done while baby is still, quiet, and warm

JAUNDICE

Jaundice is common in newborns, giving their skin and the whites of their eyes a yellow color. A buildup of a substance called ***bilirubin*** in the baby's blood and skin commonly causes jaundice.

Before your baby is discharged or if there are any signs of jaundice, the baby's bilirubin level may be tested in one of two ways:

- **By light meter** – A small device called a bilirubinometer will shine light on your baby's skin, then calculate the bilirubin level by analyzing how the light is reflected or absorbed by the skin.
- **By blood test** – After taking a sample of your baby's blood from their heel, the lab will measure the level of bilirubin in the baby's blood serum.

If the bilirubin level appears high after only light meter testing, a blood test may also be needed to confirm the diagnosis.

Most cases of jaundice will go away without medical treatment. Your baby's health care provider will check the bilirubin level and treat it if it is too high. Left untreated, high levels of bilirubin can cause serious health complications. It's important to take jaundice seriously and follow your provider's instructions for appointments and recommended care.

Treatment for Jaundice

There are two types of treatment for jaundice. ***Phototherapy*** treatment involves placing your baby under a special light, wearing only a diaper and eye protection. Another treatment option is to place a fiberoptic blanket under the baby. The light and blanket may be used together.

After treatment, your baby's provider will do another blood test to check that the treatment is working. Make sure your baby is getting enough to eat. Babies get rid of excess bilirubin through their stools. Breastfeed your baby at least 8 or more times a day for the first few days. This will help you make enough milk for the baby and will also help keep their bilirubin level down.

Rooming-In

After birth, your baby may stay with you in your hospital room with one nurse to care for both of you. This is called rooming-in or rooming together. Having your baby close to you helps you both relax. Your baby learns to recognize your voice, smell, and heartbeat. Rooming-in is good for your baby's health and also has health benefits for you.

Benefits for babies

- Breastfeed sooner, longer, and more easily
- Better body temperature and blood sugar levels
- Cry less and you can soothe them more quickly
- Lower levels of stress hormones

Benefits for parents

- Make breast milk faster and make more of it
- Learn to recognize your baby's feeding cues
- Learn what baby's cries mean (sleepy, hungry, stressed, etc.)
- Get more rest and it's easier to watch over your baby
- Less likely to have "baby blues" or *postpartum depression*

Rooming-in is so valuable that the AAP encourages parents to do it at home. Rooming-in until your baby is at least 6 months old — and preferably one year — is part of the AAP's strategy for preventing SIDS.

SCAN + PLAY

Safe Sleep and SIDS

SIDS is a term used to describe the sudden and unexplained death of a baby. It's the leading cause of death in babies 1 to 12 months old. Children can also die during sleep if they can't breathe. Bedding and other things in the crib can trap the baby or cut off their air supply.

Although there is no absolute way to prevent SIDS, there are things you can do to help your baby sleep more safely. Be sure babysitters, grandparents, and other caregivers also know how to put your baby down for naps or sleep safely.

YOUR NEW BABY

ABCS OF SAFE SLEEP

A stands for Alone.
Your baby should sleep alone, not with other people, pillows, blankets, or stuffed animals.

B stands for Back.
Your baby should always be placed on their back, not their side or stomach.

C stands for Crib.
Your baby should sleep in a crib, not on an adult bed, sofa, cushion, or other soft surface.

Basic guidelines for safe sleep

- Always lay your baby down on their back to sleep, even for naps
- Use a **firm and flat** (not inclined) sleep surface, like a mattress in a safety-approved crib, play yard, or other flat surface covered by a fitted sheet
- Dress your baby in a well-fitting, one-piece sleeper
- Keep baby's head and face uncovered so they don't get too hot
- Share your room with your baby but not your bed
- Breastfeed to lower your baby's risk of SIDS

To read more about safe sleep, visit **www.healthychildren.org** and **www.nichd.nih.gov**.

WARNING: Abusive Head Trauma (Shaken Baby)

Abusive head trauma is a head or neck injury caused by physical abuse. It happens when someone shakes a baby or hits a baby against something hard. Shaken Baby Syndrome is a form of abusive head trauma that occurs when someone loses control and shakes the baby back and forth.

The back-and-forth movement of the baby's head when shaken can cause bleeding and increased pressure on the brain. This happens because a baby's neck muscles are not strong enough and their brain is too fragile to handle this type of "whiplash" motion. In fact, many shaken babies will die or have irreversible brain damage.

No matter how tired, upset, or angry you are when they cry: NEVER SHAKE YOUR BABY!

IF YOU GET FRUSTRATED

If you feel like you can't deal with your baby's crying and you have met their basic needs (clean diaper, fed, proper clothes, gently rocked, held, etc.) then you need to stop, think, and reach out for help. There may be times when nothing you can do will stop the crying. This is normal.

What you need to do

- Take a deep breath, close your eyes, and count to 10
- Put the baby in their crib and leave the room
- Ask a close friend, neighbor, or family member to take over for a while
- Don't pick the baby up again until you feel calm and in control
- If you think your baby is sick, call their provider or take them to the hospital
- DO NOT THROW OR SHAKE YOUR BABY NO MATTER WHAT

SIGNS THAT A BABY HAS BEEN SHAKEN

- Irregular, difficult, or stopped breathing
- Very fussy
- Seizures or vomiting
- Hard to feed
- Hard to stay awake
- No smiling or vocalization
- Can't focus or track movement with their eyes

If anyone has violently shaken your baby out of frustration or anger, you must SEEK MEDICAL ATTENTION IMMEDIATELY! Don't let fear, shame, or embarrassment keep you from doing the right thing and trying to save your baby's life.

SCAN + PLAY

Car Seats and Safety

Your baby must always ride in a car seat. Holding a baby in your arms in a car or other vehicle is NOT safe under any circumstances. The safest place for a baby in a car is securely fastened in a rear-facing car seat. The back of the car seat cradles the baby's head, neck, and spine if the car is involved in a frontal crash, the most common type of vehicle accident.

Use a rear-facing car seat until your child reaches the highest weight or height allowed by the seat's manufacturer. Use the lowest slots for the harness for your newborn baby. This makes it easier to adjust the harness as your baby grows. Check the instructions to set up the harness in the lowest slots for your newborn.

Choosing a car seat

- The "best" car seat fits your newborn and can be set up safely in your car
- Learn to install and use the seat in your car before going to the hospital
- Meet with a child passenger safety technician
- You must use a car seat EVERY time you put your baby in the car

Car seat safety tips

- Never place a rear-facing car seat in front of an active airbag
- The safest place is in the middle of the back seat (in most cars)
- Check your car owner's manual for car seat guidelines
- Don't attach any toys, wraps, or other items to a car seat
- Never use a used car seat that has been in a prior crash
- Have a certified passenger safety technician check the seat's installation

HOT CAR WARNING

Never leave your baby alone in a car for even 1 minute! Even if the car is running and the air conditioner is on, your car can heat up faster than you think. And your baby's body temperature can rise 3 to 5 times faster than yours.

Heat stroke or heat injury can happen when a baby's body temperature reaches 104°F or higher. It causes life-threatening injury to their brain, kidneys, heart, and muscles, sometimes resulting in death. Heat stroke can happen after only 15 minutes in a hot car. Even if it costs a couple of extra minutes, take your baby with you every time you leave your car.

WARNING

Protect your baby from a heat stroke:
ALWAYS LOOK BEFORE YOU LOCK!

HOW TO PUT YOUR BABY INTO A REAR-FACING SEAT

- The baby's head must be 1 inch below the top of the car seat shell.
- Place the harness retainer clip at the baby's armpit level.
- Use only head support and harness protectors that come with your car seat.
- Harness slots should be at or below the baby's shoulders.
- Harness straps must be snug enough that you can't pinch any slack at the baby's shoulders.

Tightly install the rear-facing infant seat in your car's back seat.	The seat shouldn't move more than 1 inch side-to-side where the base is attached.	An infant seat should recline at about a 45-degree angle.	Avoid bulky clothing under the snug harness; put a blanket over your baby after they're buckled in.

Learn how to choose, install, and keep your baby safe in a car seat at **www.nhtsa.gov/equipment/car-seats-and-booster-seats**

Baby's Health Warning Signs

You will learn what's normal and what's not for your baby. If you think your baby may be sick, don't hesitate to call their health care provider or take them to the emergency room if it seems serious. The nurse will probably ask your baby's temperature, so take it before you call. They may also ask how you took the temperature and what type of thermometer you used.

CALL 911 IMMEDIATELY IF YOUR BABY:

- Has blue lip color
- Has difficulty breathing or turning blue

Contact your health care provider if your baby has any of these signs or symptoms:

- Temperature of 100.4˚F or higher (in babies younger than 3 months)
- Yellowing of the skin or eyes
- Eating poorly or refusing to eat
- Repeated vomiting
- No wet diaper for 12 hours
- No stool for 48 hours
- Low energy or hard to wake up
- Changes in typical behavior
- An unusual or high-pitched cry
- An uncommon or severe rash (other than prickly heat)
- Frequent bowel movements with excess fluid, mucus, or unusually foul odor
- Bloody vomit or stool
- Signs of dehydration
- Dry or cracked lips
- Dry skin
- Dry or rough tongue
- Increased sleepiness or irritability

CHAPTER 8
Postpartum Care

Coming Home

After months of pregnancy, hours of labor, and finally giving birth to your baby, it's time to bring your little one home. Taking care of a tiny person who is completely dependent on you for everything can be a challenge. Especially when you're still physically recovering from giving birth yourself.

It will take some time to create new routines and adapt to your new role as a parent. Before you feel like yourself again, your body will also need to deal with some changes. This section provides practical information about some of the most common physical and emotional changes you may experience after your baby is born, how to take good care of your postpartum body, dealing with pain, and more.

Be good to yourself!

- **Get enough rest and sleep.** Let your family and friends help you with meals, household chores, caring for other family members, and just about anything else that needs to be done. Naps are a wonderful thing.
- **Take a break when you need one.** Every new parent deserves some down time. Taking a break helps you manage fatigue and keep a healthy emotional outlook. Don't feel guilty about wanting or needing some time alone.
- **Eat well and get some exercise.** Eating a balanced, nutritious diet (less sugar and processed foods) really will help you feel better. Going for a walk in the fresh air is good for both your body and your emotional outlook.

SCAN + PLAY

Physical Changes

The medical term for the first six weeks after you give birth is the postpartum period. These weeks are important as your body returns to a new normal after labor and birth. Your body will gradually move toward its pre-pregnancy state during these 4 to 6 weeks, depending on the type of birth you had and any other medical conditions.

It will take a few weeks for your uterus to return to its pre-pregnancy size and weight. You can feel your uterus by pressing right below your belly button. During pregnancy, it's normal for a uterus to grow to about 11 times its normal weight. After the birth, your uterus will weigh more than 2 pounds and be about the size of a grapefruit. In about 6 weeks, it will return to its normal weight of about 2 ounces.

VAGINAL DISCHARGE (LOCHIA)

While the lining of your uterus heals completely, you can expect to have a bloody vaginal discharge called ***lochia*** for a few days. The discharge may have a fleshy, musty, or earthy smell. You'll want to use pads (not tampons) until your lochia stops because tampons can increase the chance of an infection.

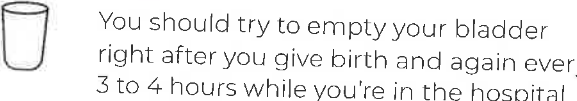
Lochia will decrease and lighten in color to a pale pink, then a pale yellow or white. You will have this lighter discharge for up to 6 weeks. The drainage will be heavier when you first get out of bed or after physical activity.

WARNING

Call your health provider if you:

- Soak more than 1 pad in an hour
- Pass blood clots the size of an egg or bigger
- Have bright red bleeding after day 4
- Notice your lochia has a bad odor
- Have a fever over 100.4°F
- Have severe pain in your lower abdomen

FIRST 1 TO 3 DAYS	ABOUT DAYS 3 TO 10	ABOUT DAYS 10 TO 14 (MAYBE LONGER)
Bright to dark red	Pink or brownish	Yellowish-white color
Heavy to medium flow	Medium to light flow	Very light flow
May have small clots	Very few or no clots	No clots or bright red color



BLADDER

You should try to empty your bladder right after you give birth and again every 3 to 4 hours while you're in the hospital. If your bladder becomes full and pushes on your uterus, it can keep your uterus from contracting and cause you to bleed more. When you get home, you'll probably pass large amounts of urine for the first few days. Besides urine, you're also getting rid of the extra fluid that made your legs and hands swell late in your pregnancy.

WARNING

Tell your nurse or provider if you:

- Have a frequent or urgent need to urinate
- Have severe pain or rectal bleeding
- Feel you need to take a laxative

BOWEL MOVEMENTS

Hormones, medications, dehydration, pain in your perineum (area between the vagina and anus), and less physical activity may slow your bowel function. You may not have a bowel movement for 2 to 3 days after giving birth. When you do, it may be uncomfortable or cause you to feel a little afraid.

When it's time:

- Take some deep breaths and try to relax your body
- Put your feet on a stool and rest your elbows on your knees
- From the front, hold a clean sanitary pad over your perineum for support
- Avoid straining because it can make hemorrhoids worse

What can help

- Don't resist the urge to go
- Drink 6 to 8 glasses of water a day
- Eat lots of grains, fruits, and vegetables
- Walk or do yoga stretches
- Ask your provider about taking stool softeners

HEMORRHOIDS

Hemorrhoids are swollen veins inside the rectum or outside on the anus. They can become painful, itchy, and even bleed. Hemorrhoids are not usually serious but can be uncomfortable.

What can help

- Avoid sitting or standing for long periods of time
- Lie down as much as you can
- Try a cold washcloth or a warm bath
- Use wet wipes instead of toilet paper
- Ask your provider about using creams, suppositories, or pain medication

SCAN + PLAY

Self-Care

If you can, it helps to get up and move around soon after you give birth. If you received medication during labor, you may need to wait for it to wear off before you can safely get up. Moving around lowers the risk of blood clots, helps your bladder and bowels work better, and can reduce some of your pain and discomfort, even after a cesarean birth.

It may take 4-6 weeks before you feel more like your pre-pregnancy self. Even though you're busy with your baby and family, it's important to take good care of your own body, inside and out. Giving yourself plenty of personal care and attention will help you feel more comfortable, healthy, and confident as you adapt to life with your new baby.

PERINEAL CARE

You may experience tears and lacerations in your perineum when having a baby. Perineal and vaginal tears can cause pain and tenderness for several weeks. Good hygiene can help relieve pain, prevent infection, and promote healing.

Tips for a healthy perineum

- Wash your perineum with mild soap and water at least once a day
- Use a hand-held shower or squeeze bottle, or take a sitz bath
- Pat your perineum dry with soft toilet paper or antiseptic towelettes
- Try an antiseptic spray or analgesic cream to help relieve discomfort
- Rinse with lukewarm water after urinating and bowel movements
- Wash and wipe from the front to the back
- Carefully wash your hands before and after changing sanitary pads
- Apply sanitary pads from the front to the back
- Always change your pad after urinating or a bowel movement
- Check the amount and color of lochia when you change the pad

If you had an episiotomy, your perineum may be especially sore. It may take up to 4 weeks for an episiotomy incision to heal; the sutures will dissolve on their own. Call your health care provider if your pain increases or becomes intense.

"Padsicle" is a play on the words "pad" and "popsicle." These frozen sanitary pads can help ease swelling and discomfort in your perineum during the postpartum period. They also work for hemorrhoids.

To make a padsicle:

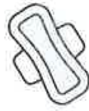
- Unfold a large pad
- Place about 4 tablespoons of witch hazel along it
- Cover with about 1 tablespoon of aloe gel that is made without unnecessary ingredients
- Fold the pad back up and store in a large freezer bag until needed

BATHS AND SHOWERS

If you had a **vaginal birth**, you can usually shower as soon as you can safely walk around. Sitz baths are soothing if you had an episiotomy or have a sore bottom. Check with your health care provider about when you can take a tub bath.

If you had a **cesarean birth**, you can shower after the first day if you are walking and steady on your feet. Your nurse or health care provider will need to remove the bandage first. It's OK to use soap on the upper part of your body and let it rinse down over your incision. Wait a few weeks before taking a tub bath.

MENSTRUAL CYCLE



You will probably have your next period in about 7 to 9 weeks. If you're breastfeeding, it may take 12 weeks or longer before you have another period. But even if you don't have a period, your body may produce eggs, and you could get pregnant again.

RESUMING SEX

Babies take a lot of time and energy, making it tough for many new parents to recapture their closeness as a couple. It's a good idea to talk to your partner about resuming sexual activity to prevent any misunderstanding.

If you had a tear, episiotomy, or cesarean, it may take up to 6 weeks to heal and feel less painful. When you do decide to have sex, a water-based cream or jelly can help with any vaginal dryness. Let your partner know if any sexual activities are painful for you.

Managing Pain

The amount of pain or discomfort you feel after giving birth depends on how long you were in labor, the type of birth, and how you respond to pain. In the first 1 to 2 days after giving birth, you may feel muscle aches and fatigue, especially in your shoulders, neck, and arms. You may also have some stiffness in your hands from IV fluids.

Comfort measures for pain

- Massage and relaxation
- Deep breathing
- Listening to music
- Ice packs the first 24 to 48 hours
- Warm pad on your abdomen for cramps
- Warm sitz baths/herbal baths

Medical pain relief

- Topical creams or sprays
- Over-the-counter medication (acetaminophen, ibuprofen)
- Prescription medication

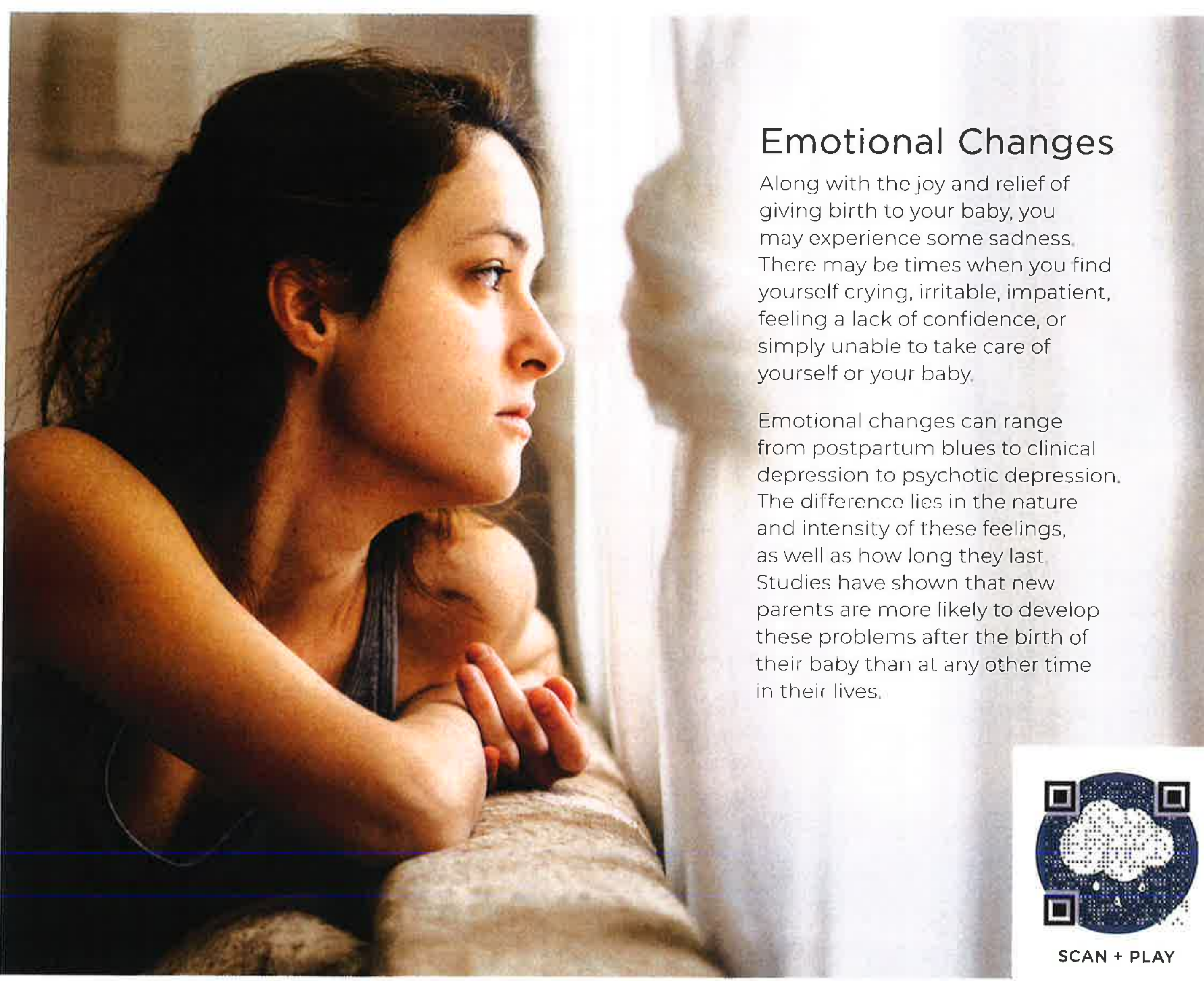
RATING YOUR PAIN

In the hospital or birth center, let your nurse know if you are feeling pain and need medication. Typically they will ask you to describe your pain level using a 1 to 10 rating scale. About an hour after you receive medication, they will ask you for a new pain rating to see if the medication is working. Be sure to ask if you have any questions about the prescribed medications.

WARNING

Tell your nurse or health care provider if your pain is:

- Constant
- Unusual
- Worse than what it was before
- Keeping you from doing things you were able to do before
- Located in the right upper area of your abdomen or just below your breastbone
- A headache with any vision changes, confusion, mental changes, dizziness, or new swelling



Emotional Changes

Along with the joy and relief of giving birth to your baby, you may experience some sadness. There may be times when you find yourself crying, irritable, impatient, feeling a lack of confidence, or simply unable to take care of yourself or your baby.

Emotional changes can range from postpartum blues to clinical depression to psychotic depression. The difference lies in the nature and intensity of these feelings, as well as how long they last. Studies have shown that new parents are more likely to develop these problems after the birth of their baby than at any other time in their lives.

POSTPARTUM BLUES

As many as 9 out of 10 people who give birth experience what's called "postpartum blues" for a few days after the baby's birth. You might worry that you won't be a good parent or be able to take care of your baby. These feelings are normal and are probably related to hormone changes and fatigue. They typically go away within a few days to a few weeks.

If you have postpartum blues, you may:

- Wonder what's wrong with you
- Cry or get annoyed easily
- Be anxious or extra-sensitive
- Feel exhausted all the time
- Have trouble concentrating or sleeping
- Feel like everything is too much for you to handle

HANDLING POSTPARTUM BLUES

It helps to keep your expectations realistic. Remember, you just gave birth to a baby and that can change many things around you. You will need some time to learn about your baby and for your baby to learn about you. In the meantime:

- Rest as much as possible
- Limit your number of visitors
- Let others do things to help
- Let your partner know how you're feeling
- If you're single, find and develop a good support system

Have I had a hard time laughing or finding things funny?

Have I stayed away from activities I used to enjoy?

POSTPARTUM DEPRESSION AND ANXIETY

Postpartum depression is a serious condition. About 1 or 2 out of every 10 women who've had a baby suffer emotional symptoms that are much stronger than the postpartum blues. These symptoms may start as soon as a few days after giving birth or occur any time during the first year after the birth. If you feel depressed for more than 2 weeks, you may have postpartum depression.

Questions to ask yourself:

Have I been anxious or worried for no good reason?

Have I blamed myself when things went wrong?

Have I been so unhappy that I've had trouble sleeping?

Have I felt scared for no good reason?

Have I felt sad?

Have I let things make me feel "down" or sad?

NEED TO KNOW

If you answered "yes" to some of these questions you may have postpartum depression. Call your health care provider right away. There are many resources out there that can help you. Talking honestly to a close friend about how you feel may also be helpful.

DEPRESSION AND ANXIETY

When the "blues" last more than 2 weeks and get worse instead of better, you may have postpartum depression or anxiety. Many of the signs and symptoms are the same as those of postpartum blues, but they are more severe or intense. This is common. Postpartum depressive symptoms can appear any time during the first few months to 1 year after you give birth. About 1 or 2 out of every 10 people who give birth will suffer from them.

These feelings and experiences may lead you to either become possessive of or avoid your baby. This can pose a risk to the baby's physical and emotional safety. If left untreated, the symptoms can last up to a year. The good news is that there are several treatment options and people who get treatment usually respond very well. If you are experiencing symptoms of postpartum blues, depression, or anxiety, please reach out to your health care provider and ask for help.

WARNING

Contact your health care provider if you experience:

- Loss of identity
- Complete loss of control
- Feelings of withdrawal, isolation, and loneliness
- Change in appetite (either undereating or overeating)
- Exhaustion, but are unable to sleep
- Feelings of hopelessness, a sense of failure, or guilt
- Mood swings, constant crying, anxiety, or doubt
- Difficulty sleeping, sleeping too much, or nightmares
- Lack of interest in yourself, your baby, or others
- Irrational concerns about cleanliness, germs, or the baby
- Feeling like you need to keep moving or pacing
- Difficulty focusing or concentrating

If you have some of these symptoms, don't be afraid to be open and honest about how you're feeling. Your health care provider can connect you with therapy, support groups, and other resources that can help you get better. You are not alone; there is help if you ask for it.

POSTPARTUM PSYCHOSIS

When compared to the rates of postpartum depression or anxiety, postpartum psychosis is rare. It occurs in approximately 1 or 2 out of every 1,000 people who give birth. The onset is typically very fast, usually within 3 to 14 days after having the baby. Not every person will have every symptom. And the symptoms can vary and change quickly.

Warning! **If a new parent has any of these symptoms, take them to the closest emergency room. DO NOT leave them alone with the baby:**

- Can't remember how to do things they've done in the past
- Appears to be extremely confused
- Has a lot of energy and racing thoughts, can't sleep
- Has strange feelings, like something is crawling on them
- Hears or sees things no one else does
- Feels like someone else is controlling them
- Appears very restless and agitated
- Has a rapid or nonsense speech pattern
- Doesn't like how they feel and may be afraid
- Has thoughts of harming themself or their baby

WARNING: Postpartum Warning Signs

It's normal to have discomforts such as soreness and fatigue after you give birth. But if you develop more serious symptoms, you may need to call your health care provider or go to the nearest emergency room or urgent care center.

Call your provider if you have:

- Soaked more than 1 pad in an hour
- Passed blood clots the size of an egg or bigger
- Bright red bleeding after day 4
- Noticed your lochia has a bad odor
- A fever over 100.4°F
- Incision or abdominal pain that will not go away
- Swelling, redness, discharge, or bleeding from your cesarean incision or episiotomy site
- An incision that begins to separate
- Problems urinating, including inability to urinate, burning or extremely dark urine
- No bowel movement within 4 days after giving birth
- Any type of visual disturbance (double vision, blurring, etc.)
- Severe headache
- Pain in the upper right area of your belly
- Excessive swelling of hands, feet, or face
- Flu-like symptoms
- Pain or redness in one or both of your breasts
- Pain, warmth, tenderness or swelling in your legs, especially the calf area
- Frequent nausea and vomiting
- Signs of depression or anxiety

Call 911 immediately if you have:

- Bleeding you can't control or stop
- Chest pain
- Trouble breathing
- Sudden onset of arm or leg weakness
- Sudden facial drooping (may be on one side)
- Slurred speech, trouble speaking, can't speak
- Chills, clammy skin, dizziness, fainting, racing heartbeat
- Dramatic emotional changes such as insomnia, severe agitation, confusion

CARE

CHAPTER 9

Breastfeeding

Benefits of Breastfeeding

Breastfeeding has many health benefits for both your baby and you. Your breast milk meets all their nutritional needs and gets them off to a great start in life. Breastfeeding promotes bonding and contributes to your baby's emotional development. In fact, the health benefits your baby receives from your breast milk will last a lifetime.

Benefits for your baby

- Lowers risk of SIDS
- Protects against respiratory and diarrheal disease
- Reduces ear infections
- Decreases obesity later in childhood
- Lowers risk of developing type 1 diabetes
- Decreases risk of childhood cancer
- Protects against allergies

Benefits for you

- Reduces your risk of osteoporosis later in life
- Lowers risk of breast, uterine, endometrial, and ovarian cancer
- Decreases insulin use if you have diabetes
- Releases a hormone that helps your uterus shrink and prevents bleeding

Exclusive Breastfeeding

The AAP and the World Health Organization (WHO) recommend exclusive breastfeeding for about 6 months. Breastfeeding, along with appropriate complementary foods introduced at about 6 months, as long as mutually desired by mother and child for 2 years or beyond.

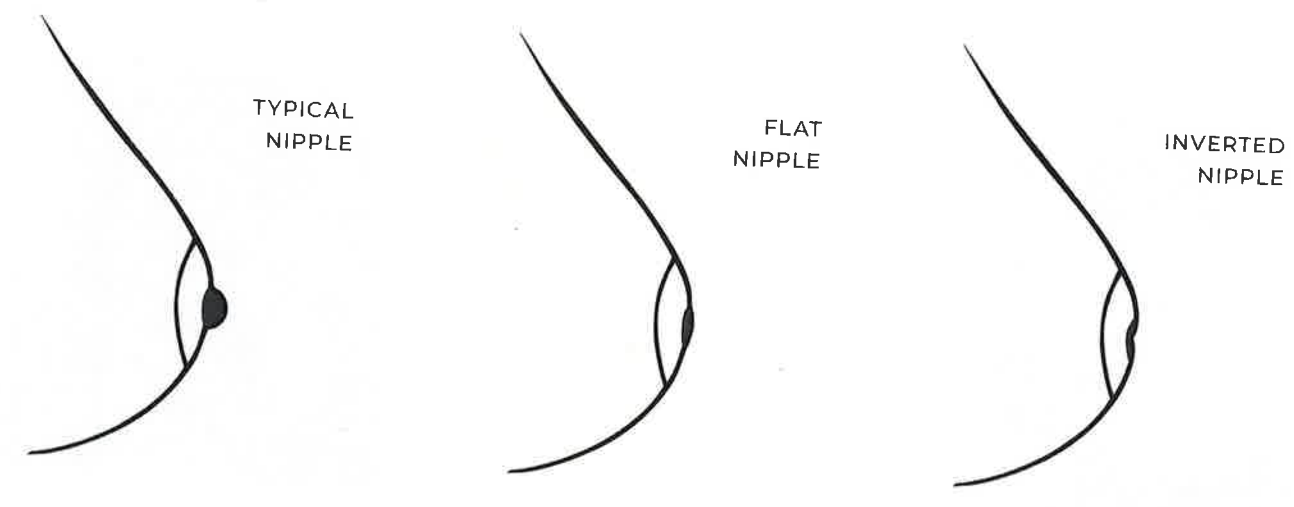
Breastfeeding tips

- Room-in with your baby in the hospital and at home
- Hold your baby skin-to-skin as much as possible
- Learn your baby's feeding cues and breastfeed often
- Avoid pacifiers and nipples in the first few weeks after birth
- After feedings, hand express and give any extra milk to your baby
- Find support through friends, breastfeeding groups, or play groups

YOUR BREASTS

Breast size is related to the amount of fatty tissue in the breast. But the size of your breasts doesn't affect how much milk you will make for your baby. That's because breast milk is made in a breast's glandular tissue, not fatty tissue. A few breast health issues could interfere with breastfeeding. If you have any concerns, please contact a lactation consultant or talk to your health care provider.

Nipples come in all shapes and sizes. Your nipples have tiny openings for milk to flow through and muscles around the openings that make the nipples stand up. Around the nipple is darker skin called the areola that gets larger and darker when you're pregnant. The bumps that look like pimples around each areola are called ***Montgomery glands***. They put out an oily fluid that keeps your nipples moist and clean.



Making Milk

After you have your baby and deliver the placenta, your progesterone level drops. Your body goes into high gear to produce the milk-making hormone ***prolactin***. In your breast, the alveoli take proteins, sugars, and fats from your blood and start making breast milk.

SCAN + PLAY

At this point, if you do nothing, your prolactin levels will drop and your milk will subside. This is where the principle of supply and demand comes in. Every time your baby breastfeeds, your brain gets the message to produce more prolactin and oxytocin. Prolactin sends the signal to make more milk, and oxytocin stimulates your milk glands to move the milk to your nipples.

Whether your baby takes the milk directly or you pump and store extra milk to empty your breasts, **the more milk you take out, the more milk you will make**. It's simple supply and demand. To start breastfeeding off successfully, you need to do 2 things:

- First, feed your baby **as soon as possible after birth**
- Second, feed them again at least **8 or more times in every 24-hour period**

Healthy full-term babies do not need to be fed commercial formula (supplementation) unless it is for medical treatment and breast milk is not available. Giving your baby formula for nonmedical reasons has some risks for your baby. Formula can decrease the healthy bacteria in the baby's intestines that protect against infection. Formula is also harder to digest, so your baby may not breastfeed as often.

Using formula also puts you at risk. If your baby isn't breastfeeding as often, you may experience engorgement (breasts are very full of milk), not produce as much milk, and not reach your breastfeeding goals. If you need help with breastfeeding, call your health care provider or a lactation consultant.

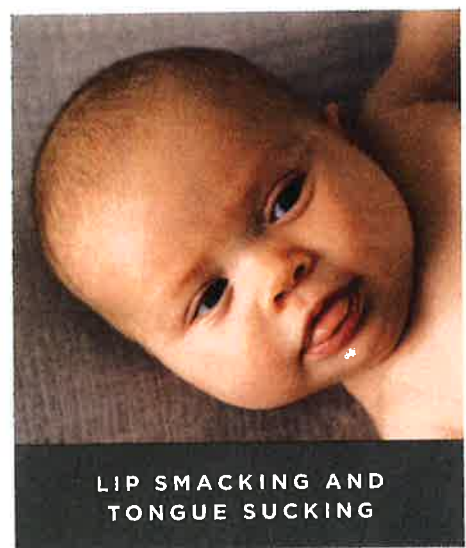
Feeding Your Baby

Newborns should breastfeed at least 8 to 12 times every 24 hours during their first month of life. Because breast milk is easy to digest, your baby will want to eat often. By around 1 to 2 months of age, they will want to nurse around 8 times a day.

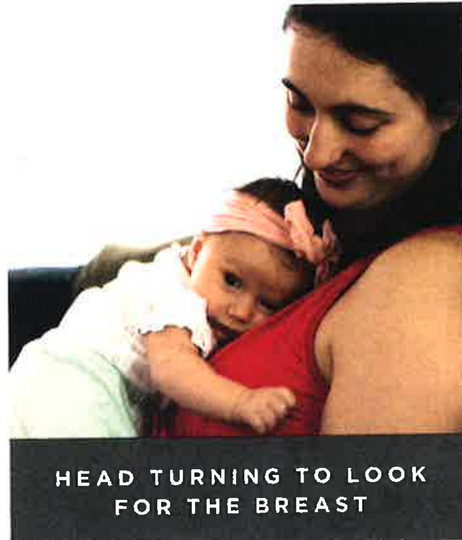
SCAN + PLAY

FEEDING CUES

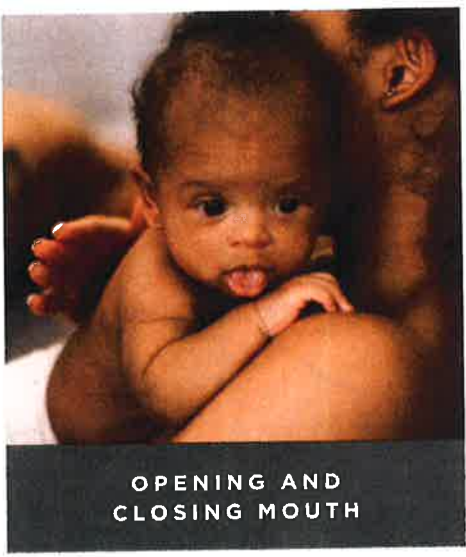
When your baby is ready to breastfeed, they'll show you signs or behaviors called "feeding cues." Placing your baby skin-to-skin on your chest makes it easier to learn their feeding cues and begin breastfeeding. If your baby is crying, they may be too upset to breastfeed. Try calming the baby first by gently rocking them side to side or holding them skin-to-skin.



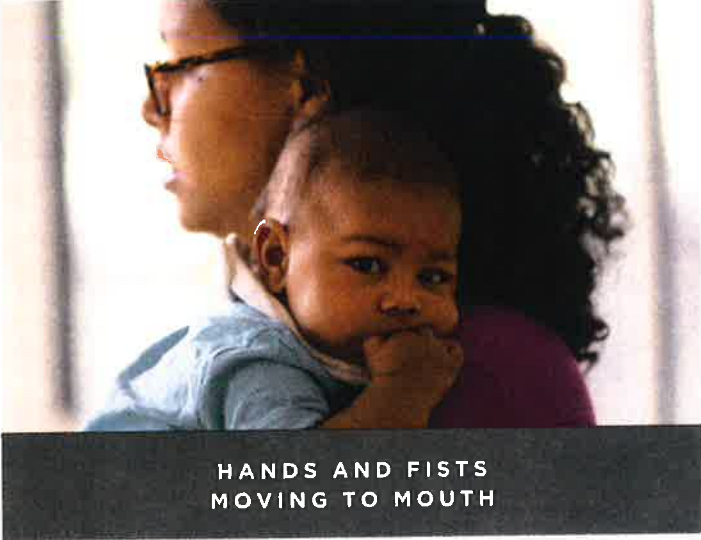
LIP SMACKING AND TONGUE SUCKING



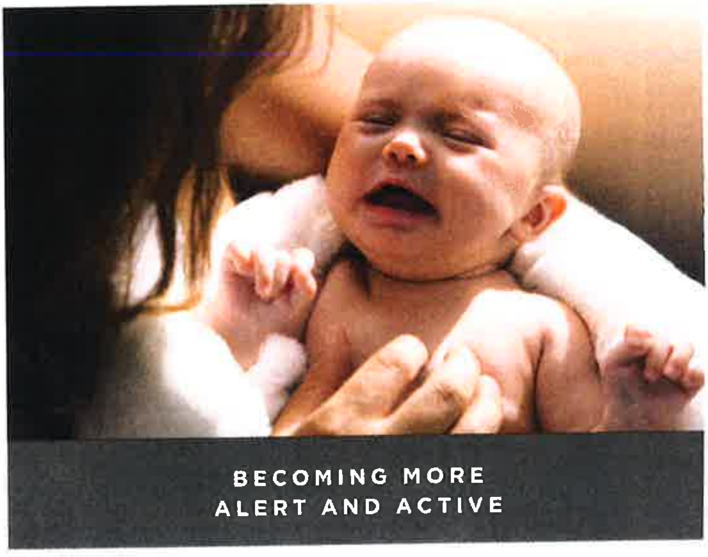
HEAD TURNING TO LOOK FOR THE BREAST



OPENING AND CLOSING MOUTH



HANDS AND FISTS MOVING TO MOUTH



BECOMING MORE ALERT AND ACTIVE

Crying is a late feeding cue, and crying babies are challenging to breastfeed. You'll want to calm your baby first by gently rocking them or holding them skin-to-skin.

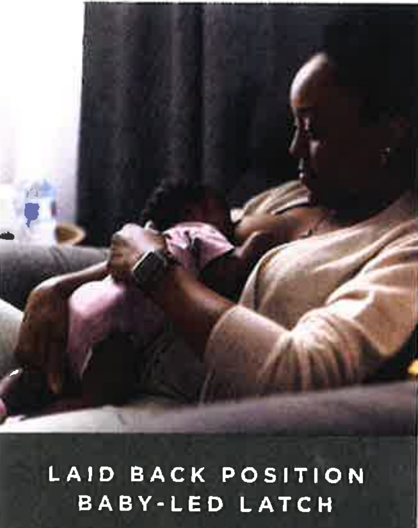
BREASTFEEDING POSITIONS

There are different ways to hold your baby during breastfeeding, called "positions" or "holds." No matter which position you choose, you need to hold your baby securely with their head at a good level to latch on deeply and comfortably to your breast.

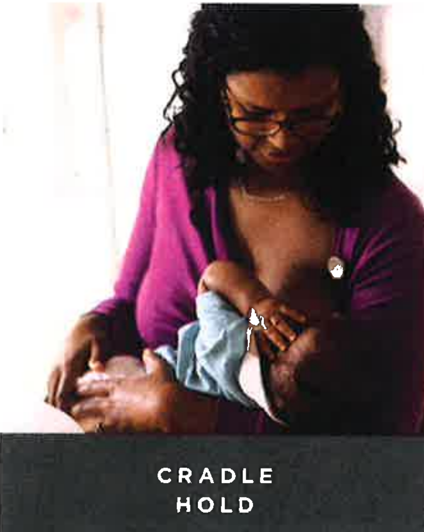
SCAN + PLAY

Positioning guidelines

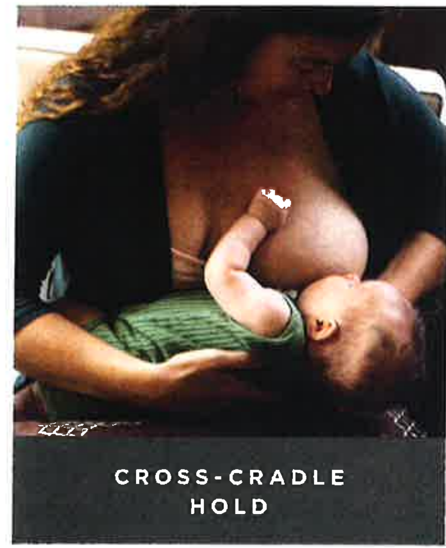
- Hold your baby chest-to-chest
- Keep your baby's ear, shoulder, and hip in a straight line
- Support the base of your baby's head



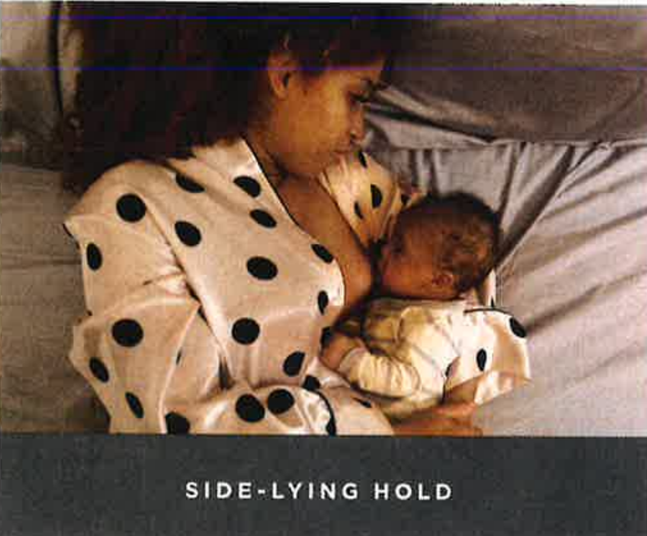
LAID BACK POSITION
BABY-LED LATCH



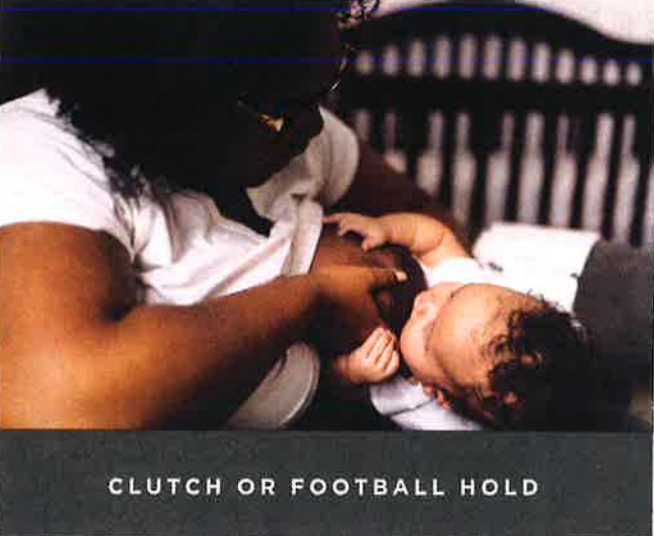
CRADLE HOLD



CROSS-CRADLE HOLD



SIDE-LYING HOLD



CLUTCH OR FOOTBALL HOLD

Not all positions work for everyone, so you'll want to try several to find which ones are best for you and your baby. A small change in position can make a huge difference in how comfortable you and your baby are during each feeding.

LATCH-ON

Latch-on, or latch, is the term used to describe how your baby's mouth attaches to your breast to feed. Babies use their sense of smell to find your breast but may need some help learning how to latch on and suck. When you find a comfortable position and your baby can successfully latch on to your breast, breastfeeding is a great way to bond with your baby.

When your baby latches on to your breast correctly, both your nipple and a large portion of the areola (dark area around the nipple) will be inside the baby's mouth. This gives them more milk and helps prevent your nipple from feeling sore.

Proper latch guidelines

- Line up baby's nose to your nipple
- Run nipple lightly across baby's upper lip
- Aim nipple toward the roof of their mouth
- Pull baby onto your breast quickly and gently

Signs of a good latch

- Nipple and much of the areola are in baby's mouth
- Baby's lips are turned out
- Baby's chin is pressed firmly against the lower part of your breast
- Baby's nose is away from your breast
- Baby stays on your breast
- Don't let baby suck only on your nipple; it will hurt

BABY-LED LATCH (BIOLOGICAL NURSING)

This leaning-back position is comfortable and lets you both follow your natural instincts. It may also help your baby get a better latch and help you relax. Choose a bed or couch where you can comfortably lean back with good support for your head, shoulders, and arms.

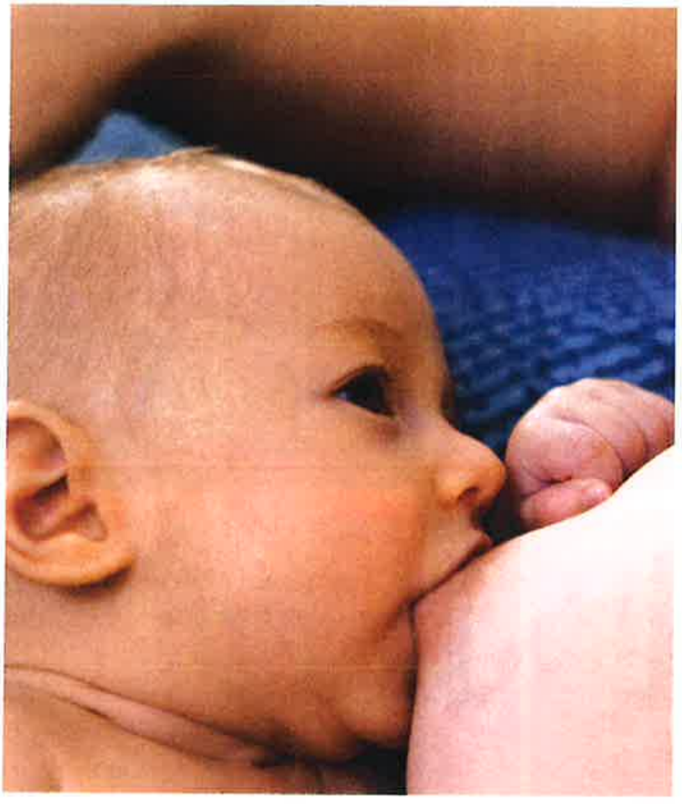
How to do it

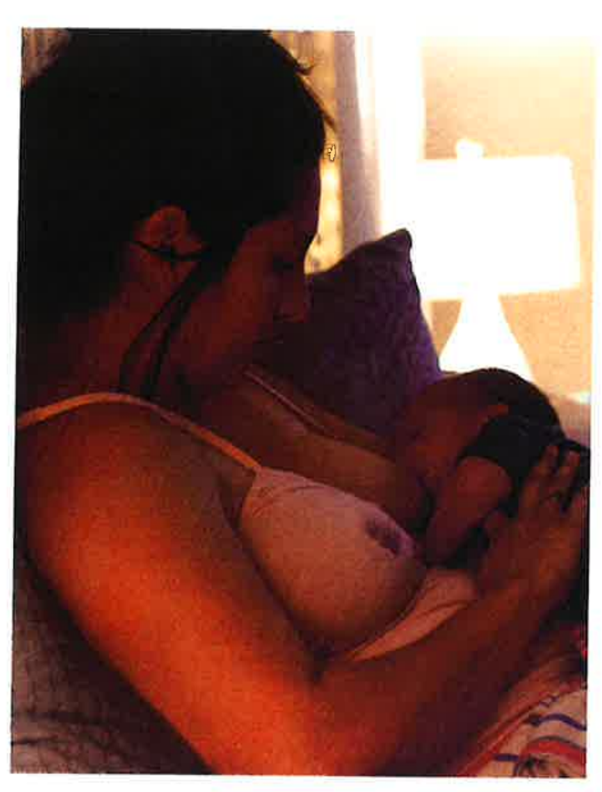
- Let your baby snuggle into your chest
- Place the front of your baby's body on the front of your body
- Let your baby's cheek rest close to your breast; they may start squirming and bobbing their head toward your nipple
- Support the baby's neck and shoulders with one hand and their hips with the other
- Follow your baby's lead; when you see their chin hit your breast you may see them open their mouth and latch on
- Stay calm and relaxed as your baby seeks your breast and follows their instinct to feed

CLUSTER FEEDING

Cluster feeding is when your baby wants to breastfeed more often at certain times of the day. It usually happens in the evening, although all babies behave differently. Cluster feeding is very common in newborns. Because so many feedings may work your body overtime, here are some things to keep in mind:

- You're doing nothing wrong — this is normal
- Make sure you are getting enough to eat and drink
- Make yourself a nest for the day and rest between feedings
- Talk to other parents who've experienced this issue
- Reach out for help and support when you need it
- Let your baby breastfeed whenever they want to
- Don't give your baby formula; it may decrease your milk supply
- Babies who are fed formula still have fussy periods
- Know that this fussy period is a normal stage in a baby's life





HOW MUCH BABIES EAT

Babies have very tiny tummies. That's why you need to feed them 8 or more times in a 24-hour period. The goal is for babies to double their birth weight within 4 to 6 months. Full-term healthy infants can regulate their milk intake when you feed them in response to their feeding cues instead of trying to feed them on a preset schedule. This is called "feeding on cue."

It's normal to wonder if your baby is getting enough to eat. Here are some of the signs that everything is going well:

- Your baby is breastfeeding 8 or more times every 24 hours
- Your breasts feel less full after a feeding
- You can hear your baby swallowing milk
- Your baby is relaxed or falls away from your breast
- Your baby is happy between most feedings
- You're tracking your baby's feedings on a feeding log

If you think your baby isn't taking in enough milk, talk to your health care provider or a lactation consultant.

Approximate Milk Volumes and the Newborn Stomach Size

DAY 1

Size of a grape

5-7 ml

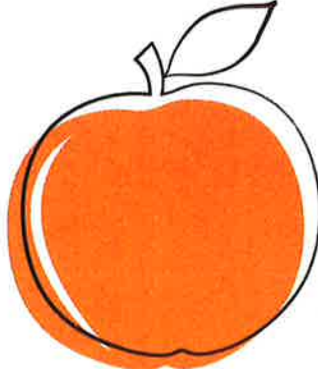
1-1 ½ teaspoons

DAY 3

Size of a cherry tomato

22-27 ml

1 ½-2 tablespoons



DAY 7

Size of an apricot

45-60 ml

1 ½-2 ounces

At 1 month, newborn tummies hold about 80-150 ml (3-5 ounces).

Frequently Asked Questions about Breastfeeding

Will my breasts leak all the time?

Everyone is different. If your breasts start to leak when you're not feeding your baby, gently press on your nipples with your hand or your arm to stop the leak. You can do this discreetly by crossing your arms and pressing them against your chest. Wearing disposable or washable breast pads inside your bra will help keep your clothes dry. Change a damp pad as soon as you can to protect the skin on your nipple.

Do I need to give my baby water or formula?

Breast milk has everything your baby needs to be healthy. Healthy full-term babies don't need formula unless it is for medical treatment or if breast milk is not available. Formula can decrease the healthy bacteria in your baby's gut that protects against infection. If your baby receives formula, they may not breastfeed as often. This can lead to ***engorgement***, a lower milk supply, and not reaching your breastfeeding goals. Talk to your baby's provider before giving your baby formula.

Can I breastfeed if I'm taking certain medicines?

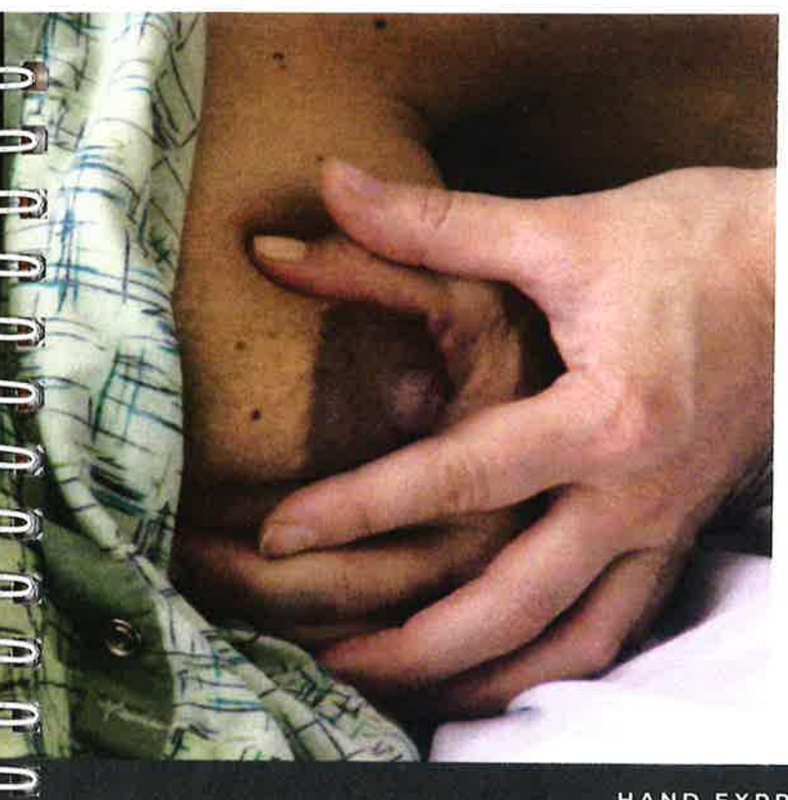
Many medications pass into your breast milk in very small amounts. Most are not a problem for breastfeeding, although you may need to pump and discard your milk if you must take a specific medication. Talk to your health care professional or lactation consultant before you start taking any new medication.

Is it OK to use alcohol or caffeine while I'm breastfeeding?

Alcohol gets into your breast milk and into your baby. If you drink any alcohol, wait 2 to 3 hours for each drink you had before you nurse your baby. Both alcohol and caffeine have been shown to interfere with the breast milk ***let-down reflex***. Caffeine can cause symptoms of colic or irritability in a baby, so avoid it completely or limit yourself to only 1 or 2 servings per day.

Can I breastfeed if I've had breast surgery?

It depends on what type of surgery you had and when you had it. Any type of surgery (biopsy, lumpectomy, lift, reduction, implants) may decrease breast stimulation and interrupt the flow of breast milk. A lactation consultant can help you make a plan to feed your baby. You may have to pump or do other things to help you breastfeed. Talk to your baby's health care provider about any breast surgery you've had. They will monitor your baby's weight to make sure they are getting enough to eat.



Hand Expression

Removing breast milk without nursing your baby is called "expressing" milk. You can do this with your hand or using a breast pump. Hand expressing your milk makes it easier to:

BREASTFEEDING

- Confirm that you have milk
- Get your baby to latch on quicker
- Stimulate breasts to make more milk
- Collect milk to spoon-feed a fussy baby
- Relieve engorged breasts

HAND EXPRESSION STEPS

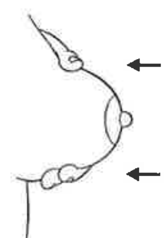
1 Wash your hands with soap and water.

2 Have a clean container (bowl or cup) ready to catch your milk.

3 Gently massage your breasts, stroking from the top toward the nipple.

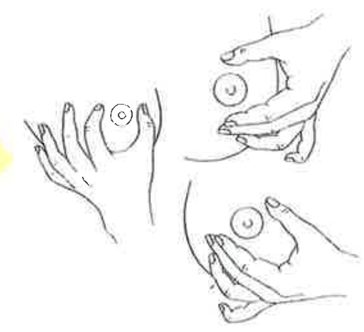
4 Place your hand in a wide, C-shaped hold on the breast.

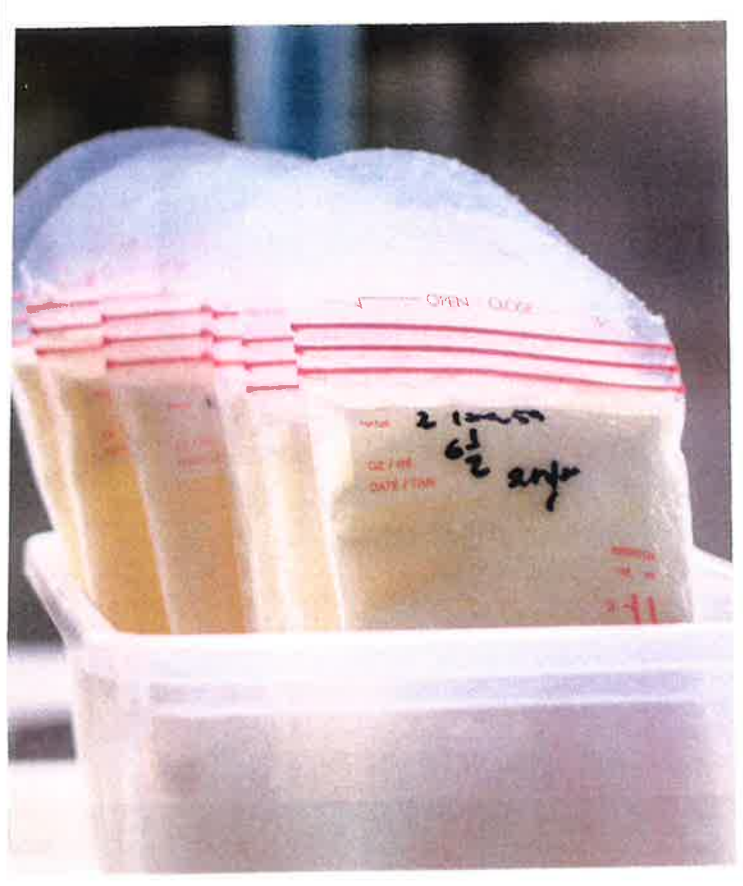
5 Press in and toward your chest wall.



6 Gently squeeze the breast to express milk, then relax. Don't rub or move your fingers on your skin.

7 Rotate your fingers to another position on the breast and repeat.





Storing Breast Milk

You can hand express or use a breast pump to collect your milk. Make sure you wash your hands and the breast pump with soap and hot water, then rinse thoroughly. You can store your milk in hard plastic or glass containers that are clean and can be sealed. You can also buy special milk storage bags.

To store breast milk safely:

- Write the date on the container (and baby's name if going to day care)
- Store in small amounts (2 to 4 ounces)
- Don't mix milk that you collected on different days
- You can add milk you just pumped to other milk from the same day to get the right amount in one container; make sure to refrigerate the new milk for 1 hour before adding it to the other milk

MILK STORAGE GUIDELINES (FULL-TERM BABIES)

Because milk storage guidelines may vary depending on which study or book you read, please ask your lactation consultant or health care provider for their recommendation. If you are pumping and storing milk for a premature baby, talk to your health care team about proper storage.

TYPE OF BREAST MILK	STORAGE LOCATION			
	COUNTERTOP 60-80°F (16-29°C) (room temperature)	REFRIGERATOR 40°F (4°C)	FREEZER 0°F or colder (-18°C)	DEEP FREEZER -4°F (-20°C)
FRESHLY EXPRESSED OR PUMPED	4-8 hours 4 hours ideal	4-8 days 4 days ideal	3-6 months 3 months ideal	6-12 months is acceptable
THAWED, PREVIOUSLY FROZEN	1-2 hours	Up to 1 day (24 hours)	Never refreeze human milk after it has been thawed	
LEFT OVER FROM A FEEDING (BABY DID NOT FINISH THE BOTTLE)	Use within 2 hours after the baby is finished feeding			

ABM Clinical Protocol #8: Human Milk Storage Information for Home Use for Full-Term Infants," Revised 2017

Note: Because milk storage guidelines may vary depending on which study or book you read, please ask your lactation consultant or health care provider for their recommendations. ***If you are pumping and storing your milk for a premature baby, talk to your health care team about proper storage.***

LOOKING AHEAD

Choosing to give birth and become a parent can change just about everything — your life, your routines, your outlook, your family, your relationships. And so much more.

Parenting may be the toughest job you'll ever have. But it may also be the most rewarding one. It requires you to constantly learn, grow, and change. To find ways to celebrate the good times and push past the harder ones.

You already have what it takes to light the way for your child to grow into a healthy, happy adult. If you trust your instincts, pack your patience, pay attention, and reach out to others when you need help, you can do it. And do it well.

We hope this book has been a source of information, clarity, and comfort as you're finding your way through pregnancy, labor, birth and beyond. We wish you and your new baby a lifetime of love, health, and happiness!

Baby's Daily Feeding Log

Quality: Evaluate each feeding by writing **G** for good, **F** for fair and **P** for poor*
Diapers: Circle around one **W** for each wet diaper and one **S** for each soiled diaper
For more details, scan the Scan + Play code and watch the video.

SCAN + PLAY

Sample (The first box on day 1 is the first feeding after birth. The first box on day 2 should be 24 hours after the birth time.)

Time	2:30 PM	5PM	8PM	10:30 PM	1:30 AM	4AM	7:30 AM	10:15 AM
Quality	F	P	G	G	F	P	F	F

Wet diaper: (W) W W W W W W W W   Black soiled diaper: (S) S S S S S

Day 1 (Birthday 0 to 24 Hours) **Day 1 Goals:** Attempt 8 feedings ◆ 1 wet diaper ◆ 1 black soiled diaper

Time

Quality

Wet diaper: W W W W W W W W W   Black soiled diaper: S S S S S S

Day 2 (24 to 48 Hours) **Day 2 Goals:** At least 8 feedings ◆ 2 wet diapers ◆ 2 brown soiled diapers

Time

Quality

Wet diapers: W W W W W W W W W   Brown soiled diapers: S S S S S S

Day 3 (48 to 72 Hours) **Day 3 Goals:** At least 8 feedings ◆ 3 wet diapers ◆ 3 green soiled diapers

Time

Quality

Wet diapers: W W W W W W W W W   Green soiled diapers: S S S S S S

Day 4 (72 to 96 Hours) **Day 4 Goals:** At least 8 feedings ◆ 4 wet diapers ◆ 4 yellow soiled diapers

Time

Quality

Wet diapers: W W W W W W W W W   Yellow soiled diapers: S S S S S S

Day 5 (96 to 120 Hours) **Day 5 Goals:** At least 8 feedings ◆ 5 wet diapers ◆ 4 yellow soiled diapers

Time

Quality

Wet diapers: W W W W W W W W W   Yellow soiled diapers: S S S S S S

*__Good__ – latches easily, steady sucking, some swallowing heard
Fair – took several attempts to latch, short sucking with long pauses, minimal swallowing
Poor – difficulty remaining latched, baby fell asleep, no swallowing heard

Glossary

amniotic fluid – Waterlike fluid that surrounds the baby in the uterus.

amniotic sac (bag of waters) – Thin membrane that encloses the developing baby and contains the amniotic fluid. It prevents bacteria from reaching the baby. The bag tears when the "water breaks" and releases the amniotic fluid outside of the body through the vagina.

anesthesia – General or localized pain relief.

Apgar test/score – A rating or score given to newborns at 1 and 5 minutes of age. The score is based on 5 categories: color, cry, muscle tone, respiration and reflexes. A baby can score 0 to 2 points in each category, or a maximum total score of 10.

areola – The dark area around the nipple.

back labor – A condition that occurs in approximately 25% of all labors. The back of the baby's head is directed to the pregnant person's back or turned toward their sacrum, which causes extreme back discomfort.

bilirubin – A yellowish substance formed during the normal breakdown of old red blood cells in the body.

bloody show – Pink or blood-tinged mucus discharge from the vagina that can occur sometime before or during labor.

Braxton Hicks contractions – Intermittent uterine contractions with unpredictable frequency throughout pregnancy. These contractions are most often painless and occur more frequently as pregnancy progresses.

breech – The buttocks or feet of the baby appear first in the birth canal instead of the baby's head.

cesarean birth – The method used to birth a baby through a surgical incision in the abdomen and uterus.

cervix – The necklike lower part of the uterus that dilates and thins during labor to allow the baby to pass through.

circumcision – The removal of the foreskin of the penis.

coagulation – Clotting of blood.

colostrum – The yellow to almost colorless forerunner to breast milk. It is present in the breasts during pregnancy and is the initial fluid that baby will receive for approximately 3 days until breast milk is established.

contractions – The rhythmical tightening and relaxing of the uterine muscles that cause changes to occur to the cervix.

crowning – The appearance of the infant's head at the vaginal opening.

diaphragm – The muscle that separates the chest cavity from the abdominal cavity.

dilation – The gradual opening of the cervix to permit passage of the baby into the vagina. It is measured in centimeters from 0 to 10.

effacement – The gradual thinning, shortening, and rawing up of the cervix. This is measured in percentages from 0 to 100%.

electronic fetal monitoring – Using a machine to record baby's heartbeat and uterine contractions. It is placed on the abdomen externally by 2 belts — one applied on the fundus to track contractions and the other placed on the abdomen to pick up the heart rate. Monitoring can be done through the vagina to achieve more accurate readings. An electrode is attached to the baby's scalp to monitor baby's heart rate, and a pressure catheter is inserted through the cervix into the uterus to measure strength of contractions.

engorgement – Swelling of the breasts after giving birth caused by milk, blood flow, and other fluids. This can cause the breasts to feel hard and painful.

epidural anesthesia – Regional anesthesia administered through the patient's back by a thin flexible tube placed in the epidural space. It numbs the lower part of the body.

episiotomy – A surgical incision of the perineum that enlarges the vaginal opening for birth of the baby.

fontanelles (soft spots) – Gaps between the bones in the baby's head that allow for shaping through the birth canal during the birth process.

forceps – Instruments used while pushing to assist the baby in moving under the pubic bone or through the lower part of the birth canal.

fundus – The rounded upper portion of the uterus (womb).

genital herpes – A virus that is characterized by small sores in clusters on the genitals. The infection is generally sexually transmitted and can affect the baby.

Group Beta Strep – A bacterial infection that can be found in the pregnant person's vagina or rectum and can be passed to the baby during birth.

hemorrhoids – Dilated blood vessels inside the anus and beneath its thin lining (internal) or outside the anus and beneath the surface of the skin (external).

hormone – A chemical substance produced in the body that is carried through the blood stream and causes the function of another gland.

induction – The use of medications or amniotomy (rupture of membranes) to stimulate labor contractions.

insomnia – The inability to sleep.

jaundice – A newborn condition caused by excess yellow bilirubin pigment. Treatment may be required but it is generally not necessary.

Kegel exercises – Exercises contracting the pelvic floor muscles that improve pelvic floor muscle tone and help prevent urinary incontinence.

Glossary

lanugo – Fine hair that covers the baby's body and may be seen at birth.

let-down reflex or response (milk ejection reflex) – The release of milk from the milk glands stimulated by the baby during nursing.

lightening – The sensation of the baby "dropping" as the baby descends into the pelvic cavity.

local anesthesia – The numbing of a certain area with anesthetic medication.

lochia – The discharge from the uterus during the 6-week period following birth (postpartum).

meconium – The greenish black material that collects in the baby's intestines as they develop in the uterus. It will become the first bowel movement the baby has. It can stain amniotic fluid if expelled before birth.

milia – White spots on the baby's nose and cheeks that disappear over time.

molding – The shaping of the baby's head during labor to adjust to the size and shape of the birth canal.

Montgomery glands – Pimplelike structures on the areola. These glands secrete a substance that aids in lubricating and cleansing the area.

mucus plug – A thick mucus plug that develops in the cervix early in pregnancy due to hormone shifts. It protects the pregnant uterus from bacteria present in the vagina.

oxytocin – A hormone in the body that contributes to the start of labor and later stimulates the "let-down" response for breastfeeding.

pelvis – The basin-shaped ring of bones at the bottom of the body that connects the spinal column to the legs. It is composed of 2 hip bones (iliac) that join in the front (pubic bones) and back (sacrum).

perineal – Relating to the perineum.

perineum – The layers of muscles and tissues between the vagina and rectum.

phototherapy – Treatment of jaundice in a newborn through light therapy.

Pitocin – A synthetic oxytocin used to induce or enhance labor. Also given after delivery of the placenta to contract the uterus.

placenta – The circular, flat organ in the pregnant uterus that serves as the exchange station for nutrients and oxygen. It is delivered after the baby and is often referred to as the "afterbirth."

postpartum depression and anxiety disorders – Conditions that can occur in up to 10% of people who recently gave birth. It most likely results from changing physiology, certain hormones and other changes such as self-image, lifestyle, stress, and fatigue. It is a treatable condition.

postpartum – The 6-week period of time after the birth of a baby.

premature baby (preterm) – An infant born before 37 weeks gestation.

presentation – Refers to the part of the baby that is lying closest to the cervix.

prolactin – A hormone secreted from the pituitary gland that stimulates the milk gland cells in the breast to begin producing milk.

prostaglandins – Chemical substances that cause uterine contractions.

round ligament pain – Pain in one or both groin regions from stretching or spasm of the round ligaments.

station – Indicates the location of the baby's head in the pelvis in relation to the bony ischial spines of the pelvis.

stork bite – a playful name for a birthmark.

transverse lie – A horizontal (sideways) position of the baby in the uterus.

trimester – A period of 3 months. One-third of a full-term pregnancy.

umbilical cord – Structure that contains blood vessels that connect the baby to the placenta. The cord contains one vein to transport nourishment to the baby and two arteries to remove wastes from the baby.

urinary catheter – A flexible tube that is placed through the urethra into the bladder to drain it of retained urine.

uterus – The muscular organ that contains the products of conception: the baby, placenta, membranes, amniotic fluid and umbilical cord. It contracts during labor to move the baby through the birth canal. It is commonly referred to as the womb.

vacuum extractor – A special instrument that is attached to the baby's head to help guide them out of the birth canal.

vagina – The lower part of the birth canal that is normally 5 to 6 inches long.

VBAC (Vaginal Birth After Cesarean) – When a person previously had a cesarean birth but plans to have a vaginal birth with their next pregnancy.

vernix – A greasy, white material that coats the baby at birth.

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