



Journey to a Healthy Baby

Your Guide to a Healthy Pregnancy

Johns Hopkins Medicine



JOHNS HOPKINS
MEDICINE

THE JOHNS HOPKINS
HOSPITAL

Book N°1

Important Phone Numbers

The Johns Hopkins Hospital

General Information	410-955-5000
Admitting Office	410-955-6495
Appointments	
GYN/OB Outpatient Offices	443-997-0400
Harriet Lane Pediatrics	410-955-5710
Maternal Fetal Medicine Faculty.....	410-502-3200
Community Physicians.....	410-338-3000
Physician Referral Line.....	410-955-5464
Billing Information – Gyn/Ob Billing.....	443-997-0100
Breastfeeding Center/Lactation Line	410-502-3221
Emergency Department	410-955-2280
Labor and Delivery.....	410-955-5850
Neonatal Intensive Care Unit.....	410-955-5255
Social Work Office	410-614-2679 or 410-502-3182
Genetic Counselor	410-955-3091

Other Community Services

American Red Cross	410-764-7000
--------------------------	--------------

Breastfeeding National Helpline

Toll Free: 1-800-994-9662	
La Leche League:	Marina : 410-566-7178
.....	Esther : 410-833-7004
.....	Jean : 443-512-8467

Car Seats	Toll Free: 1-800-370-SEAT(7328)
-----------------	---------------------------------

Crisis Response: Baltimore City.....	999
--------------------------------------	-----

Baltimore County	410-931-2214
------------------------	--------------

Domestic Violence/Sexual Assault

National Hotline	Toll Free: 1-800-799-SAFE (7233)
Baltimore County	410-377-8111
Baltimore City.....	410-837-7000
House of Ruth	410-889-7884

Maryland Department of Social Services:

Baltimore City.....	443-378-4600
Baltimore County	410-853-3000

Maryland Department of Vital Records.....	410-764-3038
---	--------------

MTA Bus Information	410-539-5000
---------------------------	--------------

Paternity Testing.....	1-800-332-6347
------------------------	----------------

Poison Control Center	Toll Free: 1-800-222-1222
-----------------------------	---------------------------

Transportation (Hospital Social Work office).....	410-550-0844
---	--------------

WIC Services

Johns Hopkins	410-614-3813
Baltimore City.....	410-396-9427
Baltimore County	410-887-6000



Pregnancy and Childbirth

You may have made many journeys in your life. But we believe you will discover that no experience is more demanding, emotional, or rewarding than your journey through your pregnancy into parenthood.

We at The Johns Hopkins Hospital are here to help you have the best possible birth experience. We know that the more information you have, the more secure you will feel and the safer your baby will be.

This guide covers things you need to know about your medical care, tests, pregnancy, and hospital stay. Use it to make your journey happier and healthier. Your health and the health of your baby are the two top priorities of everyone who works here.



The information contained in this guide is general. It is not intended to replace the advice and recommendations of your health care provider. If you have questions or special concerns, please consult your care provider.

© 2023 Johns Hopkins Medicine. All rights reserved. See page 122.

Table of Contents

Important Phone Numbers.....	ii
MyChart at Johns Hopkins	4
Pregnancy and COVID-19.....	5
Metro Area and Campus Maps	6
OB Education and Tour Information,	8
MyChart at Johns Hopkins	8
Visitor Guidelines.....	8
Doula Guideline	9
Financial and Medical Assistance	10
When You Need Help	14
Prenatal Care 15	
Getting the Prenatal Care You Need.....	16
Prenatal Visits.....	17
Common Tests During Pregnancy	20
Over-the-Counter Medicines and Vaccines.....	22
You and Baby: Month-by-Month	24
Preterm Labor: Coming Too Soon.....	30
Warning Signs: Knowing When Something’s Wrong.....	31
Pregnancy Health 33	
Feel Your Best: Physical and Emotional Changes.....	34
Everyday DOs and DON’Ts	38
Smoking, Drugs, Alcohol.....	39
Healthy Eating	40
Weight Gain	42
Healthy Exercise.....	44
Healthy Relationships and Family Support	46
Travel and Activity	50
Decisions Before You Deliver 51	
Choosing A Pediatric Provider for Baby	52
Planning Your Birth Experience.....	52
Cord Blood Storage or Donation	53
The Circumcision Decision	53
Pain Relief During Labor	54
Deciding How to Feed Your Baby	56
Birth Certificate and Social Security Number	58

Before Delivery Checklist	58
Labor and Delivery: Videos, Photos	59
Car Safety Seat	60
What to Bring to the Hospital	62

Labor and Baby's Birth 63

Signs That Labor Is Near	64
Coming to the Hospital	67
Breathing and Relaxation	68
Stages of Labor & Back Labor	69
Assisted Delivery	74
Cesarean Birth.....	75
Your Care at Birth - Vaginal, VBAC, C-section.....	76
Baby's Medical Care At Birth	77

Baby's Homecoming & Breastfeeding 79

Sleep Basics	80
Benefits of Breastfeeding.....	82
Feeding Cues	83
Latch	84
Breastfeeding Positions.....	86
How Long to Nurse and How Often	88
Breastfeeding at Home	91
Burping Your Baby	93
Monitoring Baby's Weight Gain	93
Pacifiers.....	94
Breastfeeding and Birth Control	94
Breastfeeding Tips	95
Expressing Breast Milk	97

If Your Care Provider Says ... 101

Glossary of Terms	102
Prenatal Diagnostic Tests	104
Medical Conditions During Pregnancy.....	106

Special Help 111

Paternity.....	112
Adoption.....	114
Preventing an Unplanned Pregnancy.....	116

MyChart at Johns Hopkins

Ask our staff how to sign up - for you and your baby - and then visit: MyChart.HopkinsMedicine.org

You can easily communicate with your medical team, check on lab results, request prescription renewals, make appointments, and more.



Patient Rights and Responsibilities

Our staff are committed to supporting and upholding your rights to considerate and compassionate care, including safeguarding your confidentiality, personal dignity and safety, and respecting your cultural, psychological and spiritual values. Understanding and accepting your rights and responsibilities (including those of your family and visitors) strengthens the partnership between you and your care team, and supports better health outcomes for you.

See our complete policy on Patient Rights and Responsibilities at hopkinsmedicine.org/patient_care/patients-visitors/patient-rights-responsibilities.html



Pregnancy and COVID-19

CDC and obstetric experts (ACOG) strongly recommend that those who are pregnant, recently pregnant, or breastfeeding stay up to date on their COVID-19 vaccines, including booster shots when it's time. Changes in the body during pregnancy make severe illness from COVID more likely — with higher rates of hospital stays, ICU and ventilator care, or even death. Risks increase for preeclampsia and blood clotting problems. Expectant people with COVID are more likely to have preterm birth or stillbirth.

Symptoms include fever, cough, difficulty breathing, and fatigue. Digestive problems (nausea and diarrhea) or loss of taste or smell are also reported. Symptoms occur 2 to 14 days after being exposed. Some COVID carriers do not feel ill (asymptomatic).

To stay healthy during and after pregnancy

People who are pregnant or recently pregnant, and those who live or visit with them, should take steps to protect themselves and others.

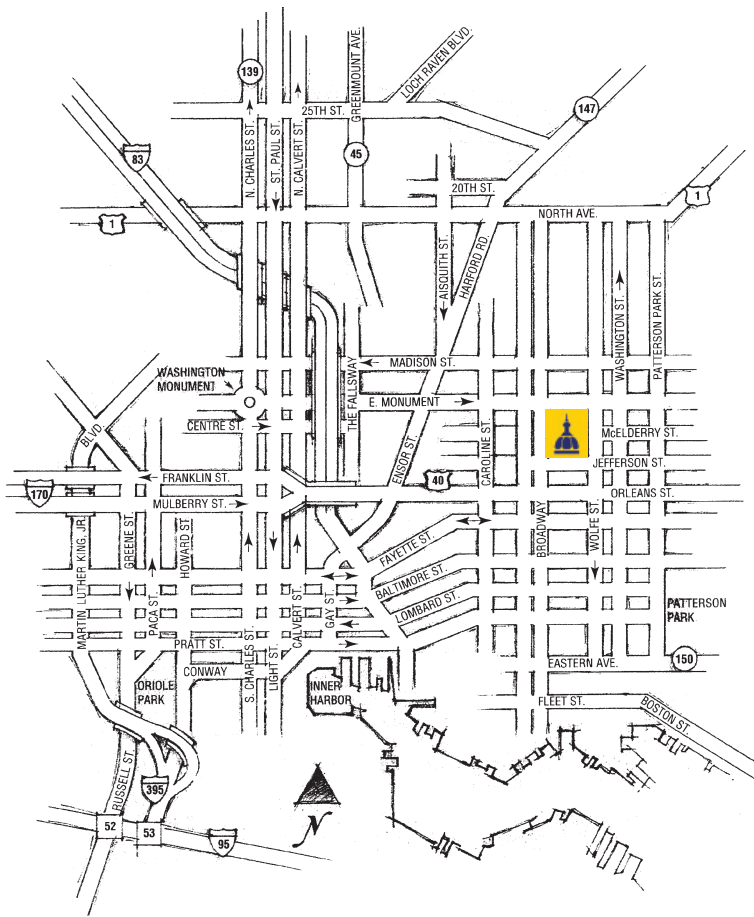
- Keep your healthcare appointments.
- Get emergency care when you need it, even during COVID. Tell the staff you are pregnant or were recently pregnant.
- Get a COVID-19 vaccine and boosters when it's time.
- Even when fully vaccinated and you are around people who do not live with you, you may still choose to:
 - Mask indoors in public areas of high community transmission.
 - Wash your hands frequently with soapy water for 20 seconds.
 - Avoid crowds and indoor spaces with poor ventilation
- Get a flu vaccine every year and a Tdap vaccine during each pregnancy. Signs of flu and whooping cough are similar to COVID.
- Call your health provider if you have questions, feel sick, or are worried that you have COVID.

If you have symptoms

- Contact your care provider if you have been exposed to COVID and have symptoms that are severe or concern you.
- Call 911 or go to the hospital if you have emergency warning signs: more trouble breathing than usual, chest pain or pressure that doesn't go away, sudden confusion, not able to respond to others or stay awake, or blue lips or face. Call ahead to let the emergency provider know you are coming.

Visit the [CDC website for COVID-19 updates and warning signs.](#)

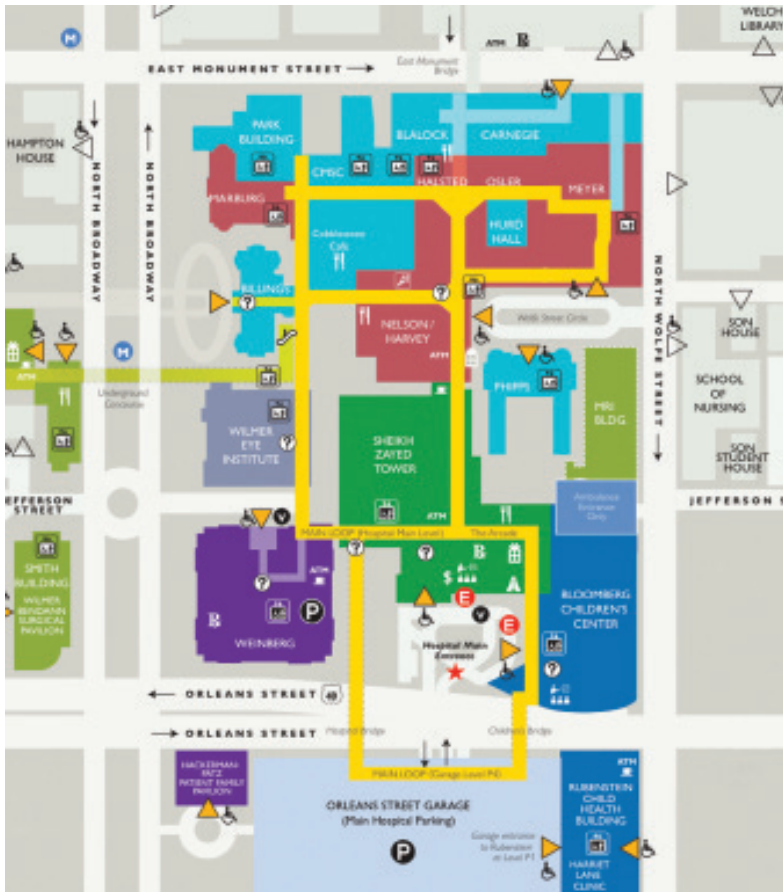
Metro Area and Campus Maps



To Park at the Outpatient Center

Turn from Broadway onto Orleans Street. Continue one block to Caroline Street and turn right. Follow the signs to patient parking, which is in the garage on the right toward the middle of the block, after employee parking.

Hospital Campus Map



When You Are In Labor

Where to go. If you are dropped off by a friend or family member, they can drive directly up to the Main Entrance at 1800 Orleans Street, and you can come straight into the hospital from there. Stop by the concierge desk for assistance. The green Zayed Tower elevators at the rear of the lobby will take you to the birthing center on the 8th floor of the Zayed Tower.

Visitor parking. Valet parking is available at the Main Entrance on Orleans Street for your convenience. Patient and visitor parking is located directly across the street from the Main Entrance of the hospital, in the Orleans Street Garage. Take the garage elevator to Level 4 to directly enter the hospital via the pedestrian bridge.

OB Education and Tour Information

Group, Private, and Online Classes for Childbirth & Breastfeeding.

Prepared childbirth education classes are offered as a group class with other parents, online, or as a private consult. Breastfeeding education classes are also offered.

For more information or to register,

- Visit our website for Birthing/Breastfeeding Classes at hopkinsmedicine.org/gynecology_obstetrics/specialty_areas/birthing-services/johns-hopkins-hospital/birthing-breastfeeding-classes.html
- Call 410-955-5502
- Email ChildbirthEdCares@jhmi.edu

Breastfeeding Classes and Support Groups. In addition to breastfeeding classes, we also offer breastfeeding support groups. Your provider can give you the specific times and locations. You can also visit our website above for more information.

Tours. For an online virtual tour, please visit YouTube and search “Johns Hopkins Birthing Center Virtual Tour.” hopkinsmedicine.org/gynecology_obstetrics/specialty_areas/maternal_fetal_medicine/videos/

MyChart at Johns Hopkins

Ask our staff how to sign up - for you and your baby - and then visit:

MyChart.HopkinsMedicine.org.

You can easily communicate with your medical team, check on lab results, make appointments, and more.



Visitor Guidelines

Our visitor guidelines change at times due to the COVID-19 virus. Please check this link for updated visitor guidelines in effect at the time of your stay with us:

hopkinsmedicine.org/coronavirus/visitor-guidelines.html

1. Visitors not in a patient room must wait in designated waiting areas. For the safety of visitors and the privacy of patients, no one may wait in the hallways.
2. Visitor rest rooms are in the Labor and Delivery waiting area.

Doula Guideline

Some people choose to have doula support at their birth. When you come to Johns Hopkins Medicine, your doula is also welcome. We have a written guideline for doulas when they are working to support you in a labor and delivery setting. Your doula will likely be familiar with them—they are based on positions from the DONA (Doulas of North America) organization. Please ask for the complete guideline handout and share it with your doula.

What should a doula DO during labor & delivery?

- Offer guidance and help with your comfort during labor.
- Foster a positive environment and support good communication between you and your healthcare team.
- Provide physical and emotional support for you and your partner during labor and birth.
- Protect your privacy and confidentiality as required by HIPAA.

What should a doula NOT DO during labor & delivery?

- Perform clinical or medical tasks.
- Interfere with medical treatment or disrupt the positive birthing environment. Does not speak for you or make decisions for you.
- Diagnose medical conditions or present your options for medical care.
- Object to following the policies of the hospital and the direction of your healthcare team.

Doula certification or registration is required to receive approval to work at Johns Hopkins Medicine. A COVID vaccination card is required to support a patient at Johns Hopkins. The hospital reserves the right to dismiss the services of a doula if the doula exceeds the performance of their role.

Financial and Medical Assistance

Medical Assistance

Medical Assistance provides health insurance coverage for qualified families who do not have private health insurance. To apply for Medical Assistance coverage, call 443-378-4600 in Baltimore city, 410-853-3000 in Baltimore county. Hospital financial counselors can help you. Ask at your next visit.

Temporary Cash Assistance

This assistance provides extra money to low-income families with children in times of need. Each state has different rules and those rules change from time to time. Contact your local social services agency for details. In Baltimore city: 443-378-4600. In Baltimore county: 410-853-3000.

Maryland Children's Health Insurance Program

MCHIP helps families with children in times of need. The State of Maryland pays for this health care program. The MCHIP program is for:

- Average to low-income children under 19 years of age
- Pregnant people of any age.

MCHIP covers health services like:

- Hospital care
- Prescription medicines
- Mental health, drug, and alcohol abuse services
- Care provider visits, check ups, prenatal care, and delivery
- Dental and vision care
- Shots, lab work, and tests
- Home health care and more

MCHIP is available to those who apply and meet special requirements. It is easy to apply. You may call the Maryland State Department of Health at 1-800-456-8900 or ask to speak with the hospital financial counselor. For more information or an application, call your local health department in Baltimore city at 410-396-4398 or Baltimore county at 410-887-3725.

Our financial counselors can give you details or set up an appointment to complete an application. Call Johns Hopkins Hospital at 410-955-3574.

Baltimore Pregnancy Centers

Contact your local Pregnancy Center for assistance with car seats, formula, or cribs.

- Center for Pregnancy Concerns 410-391-3911
- Pregnancy Center North..... 410-377-2871
- Pregnancy Center West..... 410-788-4433
- Baltimore Pregnancy Center 410-426-9992

Women, Infants and Children (WIC) Supplemental Food Program

The WIC food program may be able to help you if you have

- Low or no income and
 - You are pregnant, OR breastfeeding, OR have small children.

You receive nutritious foods to supplement your diet, information on healthy eating, and referrals for health care – all free. WIC provides nutritional benefits for you and for your baby during critical times of growth and development:

- If you're pregnant, during pregnancy, and up to 6 months after the birth
- If you are breastfeeding, up to 1 year after the birth if you continue to breastfeed
- Newborns and children are covered up to 5 years of age

To see if you are eligible, call 410-396-9427 in Baltimore city, 410-887-6000 in Baltimore county. You must have a form completed by your health care provider during your pregnancy, and you must reapply after your baby is born. For more information online, visit fns.usda.gov/wic.

Car Safety Seats

Families in need can contact Safe Kids Baltimore at 410-328-7532. See details at “Car Safety Seat” on page 60.

Food Stamp Program

Food stamps help families buy foods they need for good health. Please call 443-378-4600 in Baltimore city, 410-853-3000 in Baltimore county.

Housing

In the Baltimore area, call 443-378-4600 for a public housing application.

Legal Aid

Call Maryland Legal Aid Bureau in Baltimore City at 1-800-999-8904 or in Baltimore County at 1-877-878-5920.

Day Care

Call Locate Childcare for childcare information. In Baltimore city, call 410-539-2209. In Baltimore county, call 410-625-1111.

Depression

If you need help dealing with depression, talk to your care provider at once or contact Maryland's HealthyNewMoms.org; or the helpline, 24 hours a day, 7 days a week at 1-800-PPD-MOMS (1-800-773-6667).

Web Links to Services

Johns Hopkins Hospital services:

MyChart MyChart.HopkinsMedicine.org

Virtual tour.....hopkinsmedicine.org/gynecology_obstetrics/specialty_areas/maternal_fetal_medicine/videos/

Birthing/breastfeeding classes hopkinsmedicine.org/gynecology_obstetrics/specialty_areas/maternal_fetal_medicine/birthing_services/birthing_breastfeeding_classes.html

Breastfeeding support

WomensHealth.gov..... [womenshealth.gov/breastfeeding](https://www.womenshealth.gov/breastfeeding)

La Leche League LLL.org

International Lactation Consultants..... ILCA.org

Patient privacy policy . hopkinsmedicine.org/Privacy/patients.html

Health and safety resources:

Car seat safety advice..... NHTSA.gov/equipment/car-seats

Cord blood.....parentsguidecordblood.org

USDA healthy eating..... MyPlate.gov

Identity theft..... major credit companies, consumer.ftc.gov

Experian experian.com

Equifax equifax.com

Transunion..... transunion.com

Substance abuse and addiction

Stop Smoking support Smokefree.gov

Alcoholics Anonymous aa.org

Narcotics Anonymous na.org

SAMHSA 24-hour Referral Line samhsa.gov

Travel & pregnancy

Internat'l Medical Assistance to Travelers.....iamat.org

CDC Travel Risks (COVID, zika, food safety)..... cdc.gov/travel

USDA Nutrient Database..... fdc.nal.usda.gov

Workplace safety.....osha.gov and cdc.gov/niosh

WIC locations.....fns.usda.gov/wic

Some have breastfeeding support.

A Map of Your Care

Pregnancy Health

- Read your Pregnancy care guide, *Journey to a Healthy Baby*
- Attend childbirth classes
- Go to all prenatal visits and
- Review common medical tests
- Learn how to feel your best
- Choose your baby's pediatrician
- Consider infant feeding options.



If you have questions or want details about breastfeeding, attend our free prenatal breastfeeding class, read about breastfeeding in this book, or read the *Breastfeeding: A Great Start* book. During your hospital stay, you will have expert help from our nurses and lactation consultants.

- For optimal weight, eat healthy and exercise
- How you and baby grow: What to expect: A month-by-month description of what's happening to you and your new baby
- Know warning signs
- Get the support you need
- Take NO medications without provider's okay
- Decide about pain relief during delivery

Labor and Baby's Birth

- Learn about labor and what you need to do when labor begins
- Your support person and care team help you through labor phases to the delivery of your baby
- If assisted delivery:
 - Cesarean birth
 - VBAC (Vaginal Birth After Cesarean)
- Care at birth for parent and baby
- Begin your journey into parenthood with your You & Your Baby care guide, *Journey to a Healthy Baby*
- Family planning

When You Need Help

Prenatal Clinic Appointments

- If you are late or can't keep a clinic appointment, use MyChart to cancel the appointment and then reschedule right away by sending a MyChart message or calling Access Services at 443-997-0400.
- Having problems with transportation? Call the hospital social work office at 410-550-0296 for assistance. More on page 17.

Urgent Medical Concerns about Your Pregnancy

If you think you are having a **life-threatening emergency**, call 911.

For other **urgent** medical concerns, use MyChart messaging to contact your care provider or call Access Services at 443-997-0400. See more about “Prenatal Office Guidelines” on page 17.

In Labor, Going to the Hospital

Before you leave for the hospital, let your health care provider know that you are in labor and coming to the hospital. See page 7.

Breastfeeding Support

We want to help your breastfeeding experience get off to a good start.

- **While in the hospital**, call lactation support at 410-550-0309.
- **After you go home**, get in touch with the weekly parent's club, the MarylandBreastfeedingCoalition.org, or our Breastfeeding Warm Line at 410-502-3221.

Car Seat Program

Safe Kids Baltimore at 410-328-7532 has a low-cost car seat program for Baltimore City families in need. Also see car seats on page 60.

Safe Sleep Program - The ABCs of Safe Sleep

Alone. Babies should sleep alone in a crib or bassinet. It is okay to share a room, but not your bed.

Back. The safest sleep position for babies is on their back.

Crib. Baby's sleeping place should be clean and clear. Just a tight-fitting sheet on a firm mattress. No blankets, toys, pillows, stuffed animals, or bumper pads. See more on page 80.

For information on free portable cribs, a 24-Hour Parent Helpline, Substance Use/Mental Health Help, and Smoking Cessation support, visit healthybabiesbaltimore.com/safe-sleep

Section

Prenatal Care

Getting prenatal care	16
Use/Share your medical information, Health insurance, If you work	
Prenatal visits	17
Common tests	20
Blood tests, Blood pressure, Pap smear, Pelvic exam, Ultrasound, Urine test, STIs, Genetic carrier screens, Cystic fibrosis, Prenatal screens, Diabetes, GBS, HIV, Prenatal diagnostic tests	
Over-the-counter medicines	22
Vaccines	
Month-by-month	24
You and baby, week/month/trimester	
Warning signs: Knowing when something's wrong	31
PROM, Preterm labor, Warning signs, Trauma	

Getting the Prenatal Care You Need

The Use and Sharing of Your Health Information

To care for your baby, your baby's health care provider may need information from your electronic medical record. Unless you tell us not to, we will share your health information about your pregnancy, delivery, and post-partum care with your baby's care provider.

The Johns Hopkins Privacy Policy describes other uses of your information. You can ask for a copy at your clinic visit. Or you can get it online at hopkinsmedicine.org/Privacy/.

Health Insurance Coverage and Medical Expenses

Do you have health insurance? If so, ask your insurance company what it will cover. Always bring your insurance card to each visit. Find out if your insurance company requires a pre-certification number or referral authorization from your primary care provider.

No health insurance? Check your state's health insurance Marketplace and see resources on page 10. Our financial counselors may be able to help. You may qualify for medical assistance or for a self-pay schedule.

If You Work (Medical Leave)

Most people continue to work throughout pregnancy. To cope with nausea or fatigue, take advantage of flex time, drink fluids, bring some snacks, and nap if you can.

Talk with your employer about any medical or obstetric problems. Talk with the personnel office or employee clinic if you need workplace accommodation. Heavy lifting, carrying, climbing, or standing might increase the risk of falls. Working around certain chemicals, fumes, or radiation might be harmful. Find workplace hazards and safety tips at the Occupational Safety and Health Administration ([osha.gov](https://www.osha.gov)) and National Institute for Occupational Safety and Health ([cdc.gov/niosh](https://www.cdc.gov/niosh)).

The law treats maternity leave as it does other medical disability leave. Check with your employer. Two federal laws protect your worker rights:

- The Family and Medical Leave Act (companies with 50+ employees)
- The Pregnancy Discrimination Act (all employers)

Prenatal Visits

The Johns Hopkins OB/GYN Care Providers

Prenatal Office Guidelines

The Johns Hopkins OB/GYN care providers look forward to caring for you during this exciting time in your life.

Our provider groups are diverse. We have both male and female providers. We want to ensure the best and safest care for our patients. That's why one or more attending physicians from our group will be at the Labor and Delivery suites at all times. We're there 24 hours a day, 7 days a week.

If you are late or cannot make a scheduled appointment. Use MyChart to send a message or call your provider's office to reschedule right away.

When it comes time for your delivery. One of our physicians will be in the suites that day to manage your care. We practice as a group so all of your prenatal information is on our electronic medical record.

During your stay at the hospital. Your attending physician and other members of our teams will care for you. Your care team may include nurses, nurse midwives, medical students, fellows, and resident physicians. We believe that these different roles help give you the best care.

Care beyond regular visits

If you think you are having a **life-threatening emergency**, call 911.

If you have a medical concern that cannot wait for your regular prenatal visit, you can use MyChart messaging to ask your care provider for advice.

For more information about your regular prenatal care visits, see "Prenatal Appointments" on page 18.

Medical forms

HIPAA regulations protect your privacy and confidentiality. They say we cannot discuss any patient issues with anyone except the patient. If you would like the office staff to discuss your health care with someone in your household, you will need to complete a form when you are in our office. It's called the "Standing Authorization to Discuss Health Information with Designated Persons" form.

You may have medical forms such as FMLA, short-term disability, etc. that we need to complete. Give them to the registration desk when you check in for your appointment. You should allow 7 to 10 business days for us to complete the forms.

Please include this information on the form:

- Date you submitted the form
- Purpose of the form (maternity leave, post-op surgery, etc.)
- Contact phone number

We feel privileged that you have chosen us to provide your care. We will do our best to offer you the highest quality of care in a supportive atmosphere. If you have concerns or questions, please feel free to discuss them with us at any time.

Prenatal Appointments

You'll want to make and keep all appointments. They are important to your well-being and the well-being of your baby. Your care providers will check your health. They will talk about how your body is changing and how the baby is growing. Tell them how you are feeling and ask questions. If you cannot keep your appointment, please call as soon as possible to reschedule.

Ask your health care provider for the hours their office is open. Your health care provider will instruct you on how to contact their service after hours. Some care providers are in a group practice. You may talk with one provider and another provider may deliver your baby.

Your first visit

Your first or second visit with your care provider will usually take more time than other visits. You need a good start to make sure you and your baby have the best care possible.

You will be asked questions about your health and lifestyle, other pregnancies, and your family medical history. Tell your provider about heart, blood pressure, thyroid, STIs, diabetes, depression, seizures, eating disorders, sexual abuse, or other medical conditions. This first visit will include: a height and weight check, a physical exam, some basic blood and urine tests with a toxicology screen, and a Pap smear.

After your first visit

Checkups during your pregnancy help make sure you and your baby stay healthy. Your care provider will:

- Check your weight and blood pressure
- Measure the height of your uterus to see how baby is growing
- Listen to your baby's heartbeat
- Give special tests as needed to find out more about your or baby's health
- Ask you what you know about breastfeeding and what questions you may have
- Offer a Tdap vaccine at each pregnancy, flu vaccine during flu season, and give you information about vaccines during pregnancy
- Ask about kicks and movement and any contractions, leakage, or bleeding
- Explain "informed consent" papers you will need to sign for labor and delivery
- Talk about any concerns or questions you have



Prenatal visit schedule

At your first visit, you and your care provider can work out the timing of your visits, depending on your health. Your schedule may look something like this:

Up to 28 weeks of pregnancy Every 4 weeks

From 28 to 36 weeks Every 2 to 3 weeks

From 36 weeks to delivery at about 40 weeks Weekly

Your health care provider may wish to monitor you more closely with more frequent visits.

Your baby needs at least 39 weeks for brain development and newborn well-being. Scheduling early birth labor inductions or cesarean deliveries for non-medical purposes is discouraged.

Telehealth visits

You may use technology, such as a phone, tablet, or computer for some of your pregnancy or postpartum visits. If so, ask the office how the visit will work. Find out what you need to do during the visit: take temperature or blood pressure reading. Find a quiet place with a strong cell or internet connection. Write down symptoms or questions to discuss.

Common Tests During Pregnancy

Your health care providers may recommend some of these tests. They may look to further diagnostic tests if screening tests raise concerns. Genetic counseling is offered as needed. For details about medical conditions and other special tests, see “Prenatal Diagnostic Tests” on page 104.

Blood Tests. These tests see if you have anemia (low iron), low blood count, syphilis, HIV, or hepatitis B and C. Blood tests will also show your blood type, and whether you have antibodies (if you are Rh-negative). They also check your protection against these diseases that can harm baby: chickenpox (*varicella*) and rubella (also called *German measles*).

Blood Pressure. This reading looks for high blood pressure, which can result in problems during pregnancy.

Pap Smear. This test checks for cervical cancer and some other problems with your *cervix* (the opening to your uterus or womb).

Internal (also called Pelvic) Exam. This exam of your cervix, uterus, and pelvic bones shows how much room your baby has to pass through the birth canal.

Ultrasound. Sound waves produce a picture of your baby called a *sonogram*. An ultrasound shows the position, size and number of babies. Ultrasound may detect the sex of your baby but the primary purpose is to check baby’s health. See “Ultrasound” on page 105.

Urine Tests. A *urine culture* tests for bacteria, infection, and problems related to your bladder or kidneys. Some people have no signs or symptoms of infection. *Urinalysis* helps identify medical conditions like diabetes and preeclampsia. *Urine toxicology* drug screens all pregnant people and may be repeated with a referral to social work, if indicated.

STIs (Sexually Transmitted Infections). You will be tested for syphilis and chlamydia, as well as gonorrhea. If untreated, these infections can harm you and your baby, and could cause early labor.

Genetic Carrier Screening can show if a parent carries a gene for a certain disorder, such as *cystic fibrosis*. **Carrier screening is voluntary. Coverage by insurance varies.** If screening indicates an increased risk to the fetus, genetic counseling is available to discuss prenatal diagnostic testing options.

Expanded Genetic Carrier Screen is a blood test to determine if an individual is a carrier for any one of more than 100 diseases, including SMA and CF. Couples who both carry the gene for the same condition have a 1 in 4 chance of having a child with that condition and prenatal diagnosis is available.

SMA Carrier Test is a voluntary blood test to determine carrier status for Spinal Muscular Atrophy (a form of Muscular Dystrophy).

Cystic Fibrosis Carrier Test is a voluntary blood test for cystic fibrosis (CF).

Non-Invasive Prenatal Screen (10 weeks or later) is a blood test that analyzes small pieces of DNA from the placenta in the pregnant person's blood. This helps determine if there is a high risk for the fetus to have genetic abnormalities including Down Syndrome. Insurance coverage varies so you may want to check to see if this is a covered test.

Nuchal Translucency Screen (10 - 13 Weeks) uses ultrasound to measure fluid at the back of baby's neck in the first trimester of pregnancy. An increased thickness may indicate disorders, such as Down syndrome or certain heart defects.

Second Trimester Screen (15 - 18 Weeks). Sometimes called *multiple markers or quad screen*, this blood test includes an AFP or alpha-fetoprotein screen. Abnormal levels of AFP may indicate medical conditions such as spinal-cord defects or Down syndrome.

Diabetes Glucose Screen (24 - 28 Weeks). This blood test for diabetes is done at about 24 to 28 weeks of pregnancy or earlier if you are overweight or have had diabetes with a past pregnancy. It is given because some people have *gestational diabetes* that occurs only during their pregnancies. The test is called the one-hour glucose screening test. You will be given a small amount of a sugary drink before the test. Further testing may be needed if your blood sugar levels are high.

GBS Screen (36-38 Weeks). A swab from the vagina and rectum is checked for Group B Streptococcus at 36 weeks. This bacteria is normal in many people, but it may be passed from parent to baby during delivery. It can cause a serious infection in some infants. People who test positive to GBS are treated with antibiotics during labor to protect their baby.

HIV (AIDS) Testing. HIV (human immunodeficiency virus) is a threat to pregnant people. It's also a risk for their unborn children. Anyone who is pregnant should be tested for HIV with a simple blood test as early in pregnancy as possible. It may be necessary to test for HIV again in the third trimester to protect your baby. See "HIV During Pregnancy and Birth" on page 107.

Prenatal Diagnostic Tests including chorionic villus sampling and amniocentesis can detect many but not all birth defects. Some pregnant people prefer diagnostic tests as a first choice. These tests carry risks including a small risk of pregnancy loss. Both screening and diagnostic genetic tests are offered to anyone who is pregnant.

Over-the-Counter Medicines and Vaccines

Our health care providers have approved the over-the-counter medicines on this list. Take them according to instructions on the label. The asterisk (*) means there are other active ingredients present. Always ask your health care provider if you have any questions.

Type: Generic Name/Active Ingredients	Brand Name
Pain Relievers	
Acetaminophen	Tylenol®
Antacids	
Calcium carbonate	Tums®
Famotidine	Pepcid® (for ulcers)
Lansoprazole	Prevacid®
Mint Gum	
Omeprazole magnesium	Prilosec (for ulcers)
Simethicone	Maalox®/ Mylanta®
Antihistamines/Allergy relief	
Chlorpheniramine maleate	Chlor-trimeton
Diphenhydramine	Benadryl®
Fluticasone	Flonase®
Loratadine	Claritin®
Cetirizine hydrochloride	Zyrtec®
Cold/Flu	
Guaiifenesin	Mucinex® (but not the D or DM)
Zinc supplement	Cold-EEZE
Cough	
Dextromethorphan	Robitussin® DM (Not with diabetes) Vicks Formula 44®
Guaiifenesin*	Robitussin**/ Mucinex®
Decongestants	
Chlorpheniramine/Phenylephrine	Actifed
Oxymetazoline hydrochloride	Afrin Nasal Spray (Not with elevated blood pressure)
Pseudoephedrine	Sudafed® (Not with elevated blood pressure)
Saline Nasal Spray	

Type: Generic Name/Active Ingredients	Brand Name
---------------------------------------	------------

Sleep Aid

Acetaminophen

Tylenol PM®

Sore Throat

Ricola, Cepacol, or Halls lozenges

Hemorrhoids

Hydrocortisone

Anusol (Cream or suppositories)

Witch Hazel

Tucks®

Laxatives

Bisacodyl

Dulcolax® (Suppositories)

Docusate

Colace®

Magnesium hydroxide

Milk of Magnesia

Methylcellulose

Citrigel

Polyethylene glycol 335

Miralax®

Polycarbophil

Fibercon®

Psyllium

Metamucil/ Fiberall

Nausea

Ginger

Seasickness wrist bands

Vitamin B6 (Ask your nurse for instructions)

Doxylamine

Unisom

Yeast

Clotrimazole topical

Mycelex

Miconazole

Monistat 7-Day

Tioconazole

Vagistat

Vaccines

COVID-19. Get recommended vaccines and boosters. Check with your care provider for more information. Contact your care provider if you come in close contact with someone who has coronavirus or the flu.



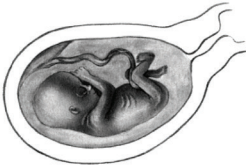
Flu (Influenza) vaccine is recommended for all people who are pregnant during the flu season. The CDC recommends the flu shot (not the nasal spray).

Tdap or tetanus, diphtheria, and acellular pertussis vaccine is recommended during each pregnancy.

Others in close contact. Those in close contact with baby should be up-to-date on Tdap and flu vaccines. The vaccines should be given at least 2 weeks before contact. This includes parents, siblings, grandparents, child-care providers, etc.

You and Baby: Month-by-Month FIRST Trimester Growth

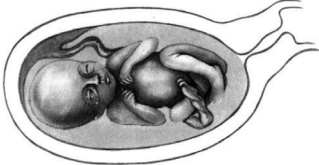





Month 1		Month 2			Month 3								
WEEKS	1	2	3	4	5	6	7	8	9	10	11	12	13
You	Your period stops and your breasts may be tender and bigger. You may also have “morning sickness,” which causes you to feel sick to your stomach and/or vomit. And because your body is producing more hormones, you may be moody – happy one minute, crying the next. You might have to urinate more often.												
Baby	The sperm and egg unite and eventually form the <i>embryo</i> . The placenta, which nourishes the baby, begins to develop now. Your diet is very important for your baby’s growth from now until the end of your pregnancy.												
You	You may still have morning sickness and feel very tired, so rest when you can. Breasts may still be sore and nipples protrude. You may have gained a pound or two, or lost weight if food is unappealing. You may also feel excited, happy, worried, and concerned all at the same time.												
Baby	Major organs and body systems begin to develop. The heart muscle starts to develop. There are signs of the brain and spinal cord. Sealed eyelids, nose, and ears are forming. So are tiny webbed hands and fingers and the beginnings of knees, ankles, and toes. The placenta, which nourishes the baby, develops now.												
You	You may still feel tired and have morning sickness, indigestion, or constipation. You could also have headaches and feel light-headed or dizzy. Your abdomen and breasts are getting bigger, and your clothes may begin to feel tight. It’s normal to have gained 3 or 4 pounds and to feel slightly warmer than usual.												
Baby	Baby is now called a <i>fetus</i> . Soft nails form on fingers and toes, and there are places for 20 teeth to grow. Bones, muscles, and internal organs, like intestines, are formed but not developed. At 12 weeks, your provider may use a Doppler device to hear the heartbeat and blood flow.												

 <p>Week 4 Size: Sesame Seed</p>	 <p>Week 8 Size: Single Raspberry</p>	 <p>Week 12 Size: Small Lime</p>
	<p>$\frac{1}{2}$ inch long weighs less than $\frac{1}{2}$ ounce</p>	<p>2 inches long, weighs just half an ounce</p>

Source: ACOG, Your Pregnancy and Childbirth, Seventh Edition, 2021.

SECOND Trimester Growth

Month 4	Month 5	Month 6
WEEKS 14 15 16	17 18 19 20 21	22 23 24 25 26
<p>You</p> <p>You're feeling and looking well by now. You're beginning to show and will gain 3 to 4 pounds this month. Your nipples and the skin around them will get darker. The placenta, which nourishes the baby, is developed now. From the end of this month on, you will begin to feel your baby's movements. Called <i>quickening</i>, these first movements may feel like fluttering butterfly wings.</p>	<p>You</p> <p>You are growing along with your baby and the skin on your belly and breast may feel tight as it stretches. You may notice a mask of pregnancy around your face and a <i>linea negra</i> (dark line) from your naval to pelvic hair. If you haven't already felt your baby moving around, this month you will. Expect to gain 3 or 4 pounds.</p>	<p>You</p> <p>You're beginning the period of your greatest weight gain. You may feel strong kicks by now. And you may feel discomfort down the side of your abdomen as the muscles in your uterus stretch. Feet and ankles may swell. Exercising usually will help you feel better.</p>
<p>Baby</p> <p>Your baby is almost fully formed now. They will be maturing and gaining weight for the rest of your pregnancy. Your baby listens, moves, kicks, swallows, and passes urine.</p>	<p>Baby</p> <p>Your baby is more active these days. They have a strong heartbeat, sleeps, and wakes up. Sex organs start to form and the digestive system is working. A tiny amount of hair dots your baby's head. Fingernails cover the tips of tiny fingers. They may start to suck his thumb. Fine, soft hair called <i>lanugo</i> covers the body.</p>	<p>Baby</p> <p>You now have a miniature person inside you. Your baby is still developing and would have trouble surviving if born now. Baby's brain is developing. Eyebrows are in place and eyes blink. Finger and toe prints start to form.</p>

	<p>Week 16 Size: Avocado</p> 
	<p>Week 20 Size: Banana</p> 
	<p>Week 24 Size: Ear of Corn</p> 

THIRD Trimester Growth

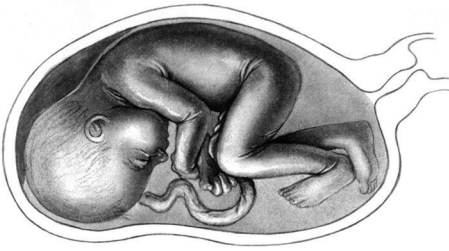
Month 7	Month 8	Month 9
WEEKS 27 28 29	30 31 32 33 34	35 36 37 38 39 40
<p>You</p> <p>Your growing baby continues to add stress (and 3 to 4 pounds) to your body. You may have some very normal aches and pains. You may even feel minor contractions. Don't be alarmed – this is normal. They are called <i>Braxton-Hicks</i> contractions. However, if you have more than four contractions in one hour, call your health care provider.</p>	<p>You</p> <p>You may gain another 3 to 5 pounds this month and feel stronger contractions. You may notice your stomach stretching in strange ways as the baby moves arms and legs. <i>Colostrum</i>, which is the fluid that appears before your breast milk, may leak from your breasts. Also, as the baby continues to grow, crowding all your organs, you may be short of breath and have aches and pains.</p>	<p>You</p> <p>Breathing is easier after your baby “drops” (moves lower, getting ready to be born). Colostrum may increase, and your ankles, feet, and legs may swell. Get as much rest as you can. Expect all kinds of feelings this month as you await baby’s arrival. You’ll know the baby is ready when you start having regular contractions every 15 to 20 minutes.</p>
<p>Baby</p> <p>Still busy growing, your baby is very active these days and exercises by stretching and kicking. They can make grasping motions and notices sounds. Eyes open and close and may respond to changes in light. Wrinkled, red skin is covered with a waxy coating called <i>vernix</i>.</p>	<p>Baby</p> <p>This month your baby doubles in weight. They’re too big to move a lot these days but you may feel a lot of kicking. Your baby can taste sweet and sour, and may hiccup. At 35 weeks baby’s skull is soft and flexible for delivery. But the brain weighs only two-thirds of what it will at 40 weeks. When your pregnancy is healthy, it is best if baby is born at 40 weeks.</p>	<p>Baby</p> <p>Gaining about 1/2 pound a week, your infant is curled up and getting into a head-down position to be born. The brain and nervous system continue to develop. The lungs mature and get ready for life outside the womb. Your baby will move into your pelvis just before birth, called <i>dropping</i>. Your baby could arrive between the 37th and 42nd week.</p>



Week 40 Size:
Small Pumpkin



20 inches long,
weighs 7½ pounds



Week 36 Size:
Romaine Lettuce



18 inches long,
weighs 5 pounds



Week 30 Size:
Cabbage



15 inches long,
weighs 2½ pounds

Preterm Labor: Coming Too Soon

PROM (Premature Rupture of Membranes)

One out of every 12 pregnant people will have premature rupture of membranes. The amniotic fluid that protects the fetus is released before labor begins. When this breaking of water occurs before the 37th week of pregnancy, it is called *preterm PROM*. Premature rupture of membranes needs prompt medical attention.

If you suspect your water has broken, contact your care provider right away or go to the hospital. You may be admitted to protect you and baby.

Preterm Labor

Preterm labor starts too early – before the 37th week of your pregnancy. Early labor can mean your baby is born before it is ready. Premature babies have more problems at birth and sometimes for the first years of life. Our goal is to stop preterm labor and, hopefully, prevent premature birth.

So if you have any of these symptoms, or if you think you're having early labor, contact your health care provider immediately for instructions or go to the hospital:

- Membranes rupture and your water breaks with a gush or trickle
- Change in the type of vaginal discharge (watery, mucus, bloody)
- Increase in the amount of discharge
- More pressure in the pelvis or lower belly
- Low, dull backache that doesn't go away
- Cramping with or without diarrhea
- Regular or frequent contractions or tightening, often painless

Risk Factors for preterm labor and birth. You are more at risk if you:

- Are underweight, smoke cigarettes, or use cocaine
- Are under age 17 or over 35
- Have more than one baby in your womb
- Have a shortened cervix or abnormal uterus
- Have an infection while pregnant
- Had a preterm labor or delivery before

Surgeries During Pregnancy

A care provider who is not your OB may suggest surgery or other invasive procedures during your pregnancy. Talk with your OB provider before the scheduled procedure. The surgeon may also consult with your OB. They can discuss ways to help ensure your and baby's well-being.

Warning Signs: Knowing When Something's Wrong

Problems can – and do – happen during pregnancy. Knowing the warning signs will help protect you and your baby. If you just don't feel right or are worried about something, call your health care provider for advice. If you see any of the following, call your care provider right away:

- Symptoms of labor before 37 weeks of pregnancy
- After 28 weeks, the baby should move at least 10 times in 2 hours.
If baby moves less than this or moves less often than what is normal for you, call your care provider.
- A contraction that's painful and does not go away
- Regular contractions or menstrual-like cramping, “balling up”
- Leaking of amniotic fluid from the vagina
- Bright red blood from your vagina (A small amount of spotting may be normal after vaginal exam or intercourse. Call your care provider if bleeding increases or if you're worried.)
- Blood in your urine or burning when you empty your bladder
- Palpitations or rapid beating of the heart
- Blood pressure of 140/90 or greater
- Dizziness, trouble walking, fainting
- Problems with your vision: blurring, seeing spots, flashes, etc.
- Really painful or frequent headaches that don't go away
- A lot of swelling or puffiness in your hands or face
- Severe swelling, redness, pain of leg or feet
- Severe or continued nausea or vomiting
- Chills or fever of 100.4°F (38°C) or higher
- Trouble breathing, overwhelming tiredness

Trauma

One in 12 people suffer physical trauma during pregnancy. It may be a fall, an accident, domestic violence, or sexual abuse. Serious injuries to you or your baby may or may not be obvious. See your care provider at once.

If you just don't feel right or are worried about something, call your health care provider for advice.



Care Notes

Section

Pregnancy Health

Feeling your best.....	34
Physical changes, Emotional changes	
Everyday DOs and DON'Ts.....	38
Smoking, Drugs, Alcohol	
Healthy eating.....	40
Balancing your plate, What to expect - or not, Food poisoning, Vitamins and nutrients, Weight gain	
Healthy exercise	44
Importance of exercise, Tips, Warning signs, Kegel exercises	
Relationships and family	46
Mixed emotions, Partners be patient, Coach, Sex during pregnancy, STIs, Violence and abuse	
Travel and activity	49

Feel Your Best: Physical and Emotional Changes

Pregnancy causes big changes in your body – changes that are a normal and natural part of having a baby. You'll feel different emotions, too. The chart below talks about these changes, when you can expect them, and what you can do to feel better.

Feeling When?	How You May Feel	What You Can Do to Feel Better
Physical Changes		
Abdominal pain		
Usually between 18 and 24 weeks	Dull aches, some tightening or pressure may be felt; report any pain to your care provider.	Not much you can do; bending toward the pain or drawing your legs up may help; get plenty of rest; but always consult your care provider about discomfort.
Backache		
Throughout, especially in later months	Your back hurts; certain movements may cause more pain.	Don't lift heavy items; exercise; wear low-heel (not flat) shoes; use a maternity belt; sleep on your side with a pillow between your knees. Try warm (not hot) or cool compress, or massage the area.
Bleeding gums, mouth		
From month four on	You may see blood when you brush your teeth.	Brush and floss every day; see your dentist early in pregnancy; try using a softer toothbrush.
Breast changes		
Various times throughout pregnancy	You see increased size, sensitivity, small amounts of clear, white, or yellow fluid.	These are normal changes during pregnancy, preparing your breasts for milk production. Around 16-20 weeks your breasts begin making <i>colostrum</i> , baby's first milk.
Breathing problems		
Last months	Because the baby is growing, you may feel short of breath.	Have good posture, slow your pace, and prop yourself with pillows to rest. Contact your care provider at once if you have an asthma attack.
Constipation		
Throughout; may get worse in last months	You may not have a bowel movement or have diarrhea; may cause cramps or bloated feeling.	Drink fluids (8 glasses a day; water is best); eat high-fiber foods (raw fruits, vegetables, whole grains); exercise like walking; DON'T take Ex-Lax. For laxatives, see page 22.

Feeling When?	How You May Feel	What You Can Do to Feel Better
Fatigue		
First and last three months	Very tired; you may not have as much energy as normal.	Get as much rest as you can; take naps and go to bed earlier. Exercise and a good diet help.
Hemorrhoids (swollen veins in the rectum)		
During or after pregnancy	You may have pain when you have a bowel movement; burning, itching, or pain around rectum.	See constipation notes; apply an ice pack or witch hazel pads; soak in a warm clean tub. Take your time during bowel movements; don't strain. Avoid sitting for long periods. Get up and move around.
Indigestion, heartburn		
Anytime	You may notice a burning feeling in your stomach that moves into your throat; or you may have gas.	Eat six small meals; drink lots of fluids between, not with meals; avoid spicy or greasy foods, fizzy drinks, citrus fruits and juices; eat slowly. Do not lie down right after meals. Try Tums or raising the head of the bed.
Leg cramps		
Last three months	You may feel pain, ache in leg, or charley horse.	Don't point your toes; stretch your legs before going to bed.
Morning sickness, nausea, vomiting		
First three months; can return late in pregnancy	Over 70 percent of pregnant people feel sick to their stomach or may vomit anytime during the day.	Eat several small meals a day; Avoid spicy or fatty foods and smells that bother you. Eat crackers first thing in the morning. Get fresh air. Drink fluids. Try ginger – ale, tea, or candies. If vomiting becomes excessive, contact your care provider.
Nosebleeds and nasal congestion		
From month four on	Stuffy or runny nose; it may bleed or you may see blood when you blow your nose.	Very common; saline nose drops may relieve stuffiness; blow your nose gently; if bleeding is heavy, apply pressure and call your care provider. A humidifier helps some people.

Feeling When?	How You May Feel	What You Can Do to Feel Better
---------------	------------------	--------------------------------

Numbness, tingling

Last months	You may have carpal tunnel in hands, fingers. Pain, tingling, numbness in hip or thigh, legs, or feet.	Wear a wrist splint for carpal tunnel. Other symptoms may go away after baby is born. Call your care provider for pain with numbness in feet or leg weakness.
-------------	--	---

Skin changes

Later months	Your face has blotches and color changes; a dark line on your abdomen; stretch marks.	Protect yourself from the sun. These changes are normal and will go away or fade after you have the baby. For itchy skin, stay hydrated and apply moisturizer.
--------------	---	--

Sleep problems

Last weeks	You can't get comfortable enough to sleep.	Take a warm bath or drink warm milk before bed; try relaxation. Exercise daily. Limit daytime naps. Sleep on your side, left is best but avoid sleeping flat on your back. Use pillows for support with one under your belly, another between your legs.
------------	--	--

Swelling ankles, feet, and legs

Lasts about four months; can be worse in summer	Your ankles, feet, and legs swell, your shoes may feel tight.	Keep your feet propped up or raised as much as you can; pillows are good for this; sleep on your side; don't wear clothes that bind your legs; exercise. Talk to your care provider if your hands or face swell.
---	---	--

Urinating frequently

First and last part of your pregnancy	You need to go to the bathroom often.	Empty your bladder frequently. If urinating burns, talk to your health care provider. Avoid caffeine drinks (coffee, tea, colas), but drink 6-8 glasses of fluids each day.
---------------------------------------	---------------------------------------	---

Vaginal discharge

Throughout	You may see white discharge that can be quite thick.	Loose-fitting clothes are more comfortable; so is underwear with cotton panels; DON'T use tampons or douche when pregnant; if discharge changes color or begins to itch, burn, or smell bad, tell your care provider. Light spotting at 37 to 40 weeks could be a sign that labor is starting.
------------	--	--

Feeling When?	How You May Feel	What You Can Do to Feel Better
---------------	------------------	--------------------------------

Emotional Changes

Anxious, scared, stressed

Throughout	You may feel afraid of what's happening to your baby; scared about labor and delivery; worried about your future.	Learn as much as you can about your pregnancy, as this helps the fear go away; get regular medical care; talk to someone who will listen and offer helpful support and guidance about your future. See more on "Mixed Emotions" on page 46
------------	---	--

Distracted, forgetful

Second half of pregnancy	You can't remember common things.	Don't worry about it; this is very normal.
--------------------------	-----------------------------------	--

Dreams

Throughout	You feel frightened, confused.	You may have strange daydreams or nightmares during your pregnancy. They are a common and normal way for your mind to deal with your fears and worries.
------------	--------------------------------	---

Moody

Throughout	You seem very happy one minute, in tears the next.	Be gentle with yourself. Your hormones are very active right now, and that's what causes mood swings.
------------	--	---



Everyday DOs and DON'Ts

Some DOs

- DO eat a variety of healthy foods each day. Eat at least three meals at regular times during the day or six small meals throughout the day.
- DO take a prenatal vitamin.
- DO drink 6 to 8 glasses of water or other healthful liquids each day. Avoid caffeine or get no more than 200 mg a day (one 12-ounce cup of coffee).
- DO exercise regularly – ask your health care provider about this. See “Healthy Exercise” on page 44.
- DO wear your seat belt every time you ride in a car, van, or truck. Place the shoulder belt between your breasts. Place the lap belt under your belly.
- DO brush and floss your teeth at least once a day and see your dentist regularly.
- DO read the label for directions and warnings before you use any paint, cleaner, bug spray, or other chemicals.
- DO keep all of your health care appointments. Tell other health providers that you are pregnant before getting any X-rays or medicines.
- DO check with your health care provider or lactation consultant about any medicines that you are taking and their safety during breastfeeding.
- DO protect against COVID, flu, and other infections with vaccines and boosters, masking, distancing, and handwashing. Avoid crowds and indoor spaces that do not have fresh air from outdoors.



Some DON'Ts

- DON'T use saunas or hot tubs. The high heat can hurt your baby.
- DON'T clean your cat's pan or change its kitty litter. If you must change it, wear disposable gloves and wash your hands thoroughly with soap and warm water. Always wear gloves when gardening. Avoid contact with mice, rats, hamsters, guinea pigs, stray cats, or kittens. Their feces can cause *toxoplasmosis*.
- DON'T have unprotected sex, and don't have sex with more than one partner. Use a condom to protect you and your baby from sexually transmitted infections (STIs). See page 48 for more on STIs.

Smoking, Drugs, Alcohol

Remember one thing every day of your pregnancy. Whatever you consume – anything you eat, drink, or inhale – your baby consumes too. So you will want to quit tobacco, alcohol, and drugs. If you can't quit, cut back.

Smoking and Tobacco. Smoking increases risks of complications like stillbirth, low birth weight, and SIDS death. Vaping or e-cigarettes and smokeless tobacco are not safe. Second-hand smoke is harmful. Make your home, your car, and even your clothes smoke-free during pregnancy and after baby arrives. It helps reduce the risk of SIDS. Go to Smokefree.gov, call 1-800-QUIT-NOW, or 1-866-66-START.

Marijuana in any form should not be used during pregnancy. Ask your care provider for a safe alternative if you take medical marijuana.

Alcohol means beer, wine, or hard liquor. It's best to stop drinking alcohol. It reaches your baby quickly and is much more harmful than for an adult. Drinking alcohol can cause serious problems for your baby: physical, mental, behavioral, and learning disabilities that last a lifetime.

Drugs. Check with your care provider before taking any medicines - even over-the-counter medicine (pain relievers, laxatives, cold or allergy remedies), herbs, or vitamins. Illegal drugs (cocaine, heroin, meth or misuse of prescription drugs like opioids) can hurt you and harm your baby. Your baby may be born addicted, deformed, or with long-term medical and behavioral problems, and learning disabilities.

If you cannot stop smoking, drinking alcohol, or doing drugs, get help! Ask your care providers for help. They can recommend programs to help you kick the habit, so you can be healthy for yourself and your baby.

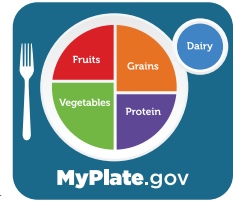
- Alcoholics Anonymousaa.org
- Narcotics Anonymous na.org
- Substance Abuse Treatment Facility Locator800-662-4357
..... or samhsa.gov

Healthy Eating

One of the best things a parent can do for themselves and their baby is to eat well. Along with a prenatal vitamin (see below), the right food will help give your baby a terrific start. If you need help getting food, ask your care provider and social worker about WIC. You may qualify for this special program for parents and children. See page 11.

The USDA can give you your own plan to healthy eating and exercise. The website MyPlate.gov gives you the kinds and amounts of food to eat each day.

Pregnant people of healthy weight need no extra calories the first trimester; about 340 extra calories a day the second trimester; and 450 the third trimester. For example, half a sandwich and a glass of skim milk is about 300 calories. Think healthy: snacks like nuts, yogurt, and fresh fruit can make it easy.



The chart shows how much of each food group to eat for a 2,000 calorie diet. Healthy pregnant people should eat or drink about 300 more calories daily.

Food Group	2,000 Calories	2,300 Calories	Serving Sizes
Grains	6-8 servings	8-10 servings	1 slice bread; 1 cup dry cereal, 1 tortilla (6" diameter) ½ cup cooked rice, cereal, or pasta Make half your grains whole grains.
Vegetables	4-5	5	1 cup raw leafy vegetable ½ cup cut-up raw or cooked vegetable , ½ cup vegetable juice
Fruits	4-5	5	1 medium whole fruit ¼ cup dried fruit ½ cup fresh, frozen, or canned fruit ½ cup of 100% fruit juice
Dairy	2-3	3	1 cup of milk or yogurt; 1½ oz of cheese
Protein	6 or less	6 or less	1 oz of cooked lean meat, poultry, or fish (a 2-3 oz serving the size of a deck of cards) 1 egg ½ cup of cooked dried beans or peas 1 tablespoon of peanut butter 1½ ounce of nuts or seeds

Take a prenatal vitamin: Look for one that contains 27 mg of iron and at least 400 mcg of folic acid (or 667 mcg dietary folate equivalents (DFE)).

Make half your grains whole: Look to see that grains such as wheat, rice, oats, or corn are listed as “whole” ingredients.

Vary your vegetables: Eat more dark green, red, and orange veggies.

Focus on fruits: Eat a variety of fruits rather than fruit juice.

Get calcium-rich foods: Use low-fat or fat-free dairy products.

Go lean with protein: Choose small portions of lean meats, poultry, and fish: baked, broiled, or grilled. Vary choices with more fish, beans, nuts, seeds.

Limit fats, salt, and sugars: Eat foods and beverages with little salt (sodium) and minimal added sugars or sweeteners. Most fats and oils should come from plant sources, such as olive or vegetable oil.

What to Eat – or Not

Making the right choice

Eat well and make healthy choices.

- Drink lots of liquids, especially water. Try to have 6 to 8 glasses daily.
- Choose baked, broiled, or grilled foods, instead of fried foods.
- Choose low-calorie salad dressings.
- Choose lean or low-fat meat and poultry.
- Choose water or low-fat (1%) dairy products.



It's OK to try:

- Canned or shelf-stable pâtés, meat spreads, and smoked seafood able to be stored without refrigeration on the shelf. DO refrigerate items after opening.
- Pasteurized milk or foods that contain pasteurized milk.
- Cooked fish with low mercury levels like shrimp, pollock, salmon, catfish, cod, and light tuna. Limit to 8 to 12 ounces a week (2 to 3 average meals).

Stay away from:

- Hot dogs and luncheon meats – unless heated until steaming hot.
- Refrigerated pâtés or meat spreads made in the store, like ham/chicken/egg/tuna or seafood salads.
- Refrigerated smoked seafood – unless it's in a cooked dish.
- Raw (unpasteurized) milk or foods that contain unpasteurized milk like soft cheeses. Also avoid raw or undercooked eggs.
- Avoid all raw and under-cooked fish like sushi. Also stay away from those with high levels of mercury like shark, swordfish, or king mackerel or tilefish.

Food Poisoning

Pregnant people can experience serious problems from food poisoning or a food-borne illness. Vomiting or diarrhea is common with food poisoning. It may even feel like the flu. If you suspect a foodborne illness, contact your care provider as soon as possible.

You help protect yourself and your baby when you:

- Keep foods separate and rinse all raw produce under running water before eating, cutting, or cooking.
- Wash your hands, kitchen counters, cutting boards, and knives after handling uncooked food.
- Cook all foods, especially meat, poultry, seafood, and eggs to the safe internal temperature.

Vitamins and Nutrients

The amount of vitamins and minerals you need daily increases when you are pregnant. **Folic acid** helps reduce the risk of birth defects to baby's brain and spine. You need 600 micrograms daily with 400 from a prenatal vitamin. Iron makes extra blood you need for baby. Calcium builds baby's bones and teeth. These are good sources of healthy nutrients you need:

- **Folic acid:** leafy greens, fruits, beans, enriched cereals and grains
- **Iron:** meat, poultry, fish, eggs, dried beans, fortified cereals
- **Calcium:** yogurt, milk, cheese, dark leafy greens, broccoli

Learn more at the *USDA FoodData Central* website: fdc.nal.usda.gov.

Weight Gain

Your BMI, body shape, and amount of weight gain help determine your baby's weight and amount of body fat. Baby's weight and body fat can affect your child's health in the future. For a pregnant person who gains 30 pounds, the weight is usually distributed this way:

Changes	Weight (lbs)
Baby's weight	7.5
Breast increase	2
Blood increase	4
Fat, protein, other nutrients	7
Body fluid	4
Uterus	2
Placenta	1.5
Amniotic fluid	2
Total	30

About Your Weight

Eating the right foods will help you make sure you do not gain too little or too much weight.

Weight gain sometimes makes pregnant people feel unhappy or uncomfortable. A steady weight gain is important to your baby's health. While the average newborn weighs about 7 pounds, you must gain more than that to support baby's development. Besides, many lose the extra weight they have gained within six weeks to six months after their baby is born.

Remember: you're not getting fat. You're helping your unborn child have a healthy start in life.

- Expect to gain only 3 or 4 pounds during the first three months of your pregnancy. You may even lose weight due to nausea.
- From your fourth month on, you may gain up to a pound a week.
- The Institute of Medicine has established recommendations for weight gain during pregnancy. Your health care provider will talk to you about weight gain during pregnancy. Here are general recommendations based on your prepregnancy Body Mass Index or BMI:
 - People of normal weight should gain 25 to 35 pounds
 - Those underweight should gain more than normal weight people
 - Those overweight or obese should gain less than normal weight
- Do not try to lose weight while you're pregnant, no matter how heavy you are. This could hurt your baby. Talk with your provider about an appropriate meal plan.
- People who are overweight and obese face increased risk for high blood pressure (see "Hypertension (High Blood Pressure) and Preeclampsia" on page 108) and gestational diabetes (see "Diabetes in Pregnancy" on page 106). Talk with your care provider about an appropriate meal plan.



Healthy Exercise

The Importance of Exercise

If you are healthy and your pregnancy is normal, it is usually safe to continue regular physical activity with your care provider's permission. Regular exercise will make you look better during pregnancy. It makes you feel better, too. It lessens fatigue, relieves stress, boosts your mood, and helps with backaches, constipation, and sleep. It reduces your risk of gestational diabetes, preeclampsia, and cesarean delivery. Exercise helps with weight gain - during pregnancy and after baby is born. **Check with your care provider about any exercise program.**

Do yourself a favor by getting moderate exercise on most if not all days a week. Aim for 30 minutes or more a day, at one time or in 10-minute sessions. Moderate exercise means you break a sweat but can still talk normally. Examples are brisk walks, swimming and water workouts, stationary bicycling, prenatal yoga, or modified Pilates (but not hot yoga or hot Pilates). Experienced runners or racquet-sports players can talk to their provider about continuing the activity.

Joints, balance, and breathing change during pregnancy. Use common sense for certain activities that put you at risk for falls or getting hit. Avoid racquet or contact sports, horseback riding, scuba diving, gymnastics, or water and downhill skiing. Altitudes over 6000 feet may carry risks for altitude sickness unless you live there. Do not do vigorous exercise in hot, humid weather or during an illness with fever. Your temperature should not exceed 100° Fahrenheit.

Walking is a good choice during pregnancy. It's also a good way to begin getting back in shape after your baby's born. Raining or too cold? Walk inside a mall.



Exercise during pregnancy may be unsafe for those with some medical conditions, including certain heart and lung diseases, carrying multiples (twins, triplets or more), preterm labor or PROM, preeclampsia or high blood pressure, or severe anemia. Talk with your care provider.

Easy Exercise Tips

- Be aware that your center of gravity shifts as your pregnancy progresses – making you more likely to fall.
- Always warm up your muscles for at least five minutes before starting your exercise, like slow walking. Strenuous activities should not last more than 15 minutes. Afterwards cool down for 10 minutes by walking and doing simple stretches.
- Support your body with the right shoes and a well-fitted sports bra, and maybe a belly support belt later in pregnancy.
- Drink lots of water before, during, and after your exercise. It's important that you take in enough fluids.
- Avoid standing still or lying flat on your back as much as possible. Both positions make it harder to pump blood back to your heart and to the placenta, which nourishes your baby. Don't do deep knee bends, full sit-ups, double leg lifts, or straight-leg toe touches.
- Upper body strength training now will help you lift babies, car seats, and strollers in the coming weeks.
- Avoid jumping and jarring your body. Remember that your joints are looser now, so you should be extra careful not to strain yourself.

Exercise Warning Signs

Listen to your body while exercising. If you have any of these warning signs, stop exercising and call your care provider:

- Chest pain
- Shortness of breath before exercise
- Trouble walking or feeling weak
- Decreased fetal movement
- Dizziness or feeling faint (get up slowly from sitting or lying)
- Vaginal bleeding or fluid gushing or leaking
- Calf pain or swelling
- Regular contractions
- Fast or uneven heartbeat
- Headache

Talk to your health care provider before you begin any personal fitness or exercise program.

Kegel Exercises

Kegel exercises help return muscle tone to an area stretched during childbirth. These exercises may also help improve bladder control. Breathe normally. Try to squeeze the muscles as if holding urine. (Do not squeeze your stomach, thigh, or buttock muscles.) Hold 3 seconds, then relax. Tighten and relax 10 times in a row. Do this three times a day. Each week add 1 second to your hold until you can do 10-second holds, 10 times in a row. You can do Kegels anytime - at work, in the car, or watching TV.

Healthy Relationships and Family Support

Being pregnant and having a baby is wonderful. However, it may be stressful for one or both parents.

Mixed Emotions

Often pregnant people are afraid of all the changes taking place in their bodies and worry if their baby will be healthy and normal. Many partners have mixed emotions too. Both of you need support, and you can do a lot to help each other. You can reach out to your own parents, brothers and sisters, other relatives, and friends.

Depression, Anxiety. These mood disorders are common medical conditions that affect more than 1 in 10 or even as many as 1 in 5 pregnant people. They can happen any time during pregnancy or the first year after baby's birth. Those who have experienced depression may have a relapse during pregnancy. If you are so depressed or anxious you can't function normally, seek help. Here are symptoms to watch for. You feel:

- Severely depressed or anxious, or for more than two weeks
- Angry, sad, hopeless, or crying often
- Uninterested in activities you used to enjoy
- Very tired, having no energy. Not up to daily tasks. Cannot take care of yourself (dressing, showering, fixing your hair)
- It is hard to think, focus, remember, or decide
- Like you're having panic attacks (fast breathing, pounding heart, a sense of doom)
- Tired but you can't sleep or you want to sleep all the time.
- Hungry all the time or you never want to eat.
- Extreme worry or no interest in the rest of the family

If you need help, talk to your care provider at once or contact your local helpline. Early treatment is important to you, your baby, and your family.

Partners, Be Patient

Partners should be aware that a parent-to-be can be very sensitive, thanks to hormonal changes. Mood swings can be intense and startling. Just remember that the pregnant person needs your support, even if they don't always show it.

Many people experience pregnancy without a partner. They find it to be a joyful and special time to share with family and friends. No matter whom you choose as your support person, our staff looks forward to assisting you both. You can find help through religious and social groups and community services.

You and your baby deserve the best start possible. Don't be afraid to ask for support when you need it.

Coach

Not every partner wants to be involved in delivery, and that's just fine. Those who do want to be involved find they can help by being the pregnant person's coach through prenatal classes and delivery. Other family members or a friend can also be coaches.

Having Sex During Pregnancy

If you are having a normal pregnancy, you can generally have sex until shortly before the baby is born. Couples are sometimes afraid that sex can hurt the baby. This is usually not true. Your care provider may advise you to limit or avoid sex under certain conditions.

Let comfort be your guide. You may be more comfortable using different positions, like on your sides or partner-on-bottom positions. Each of your feelings about sex may change during pregnancy. Now may also be a good time to explore new ways of expressing your love for each other.

Starting birth control right after the birth helps prevent unintended pregnancy. Ideally, pregnancies should be spaced at least 18 months apart to allow your body time to heal and restore nutrients. Talk to your care provider. See "Preventing an Unplanned Pregnancy" on page 116.

Sexually Transmitted Infections (STIs or STDs)

STIs are common infections that are passed by sex with someone who is infected. Some of the most common are chlamydia, gonorrhea, herpes, syphilis, genital warts, and trichomoniasis.

If you think you have an STI, tell your health care provider immediately. Signs may include pain, itching, burning, change in amount or consistency of discharge from your vagina or foul odor. You may have no signs at all. If there is a chance you or your partner has an STD, use condoms throughout your pregnancy to protect you and your baby from disease.

You should treat STIs right away. These infections can harm you and your baby, and can cause preterm labor.

All girls and women age 9 to 26 should get an HPV vaccine, and some women up to age 45. Discuss an HPV vaccine with your care provider after pregnancy. It helps prevent cervical cancer and genital warts.

Domestic Abuse and Violence

Domestic violence is one of America's most widespread health problems. Most adult victims are women. They can be of any race, education, religion, social or economic background. Abuse is the cause of about 1 in 5 emergency room visits by women. Husbands or boyfriends kill over one-third of female murder victims. Abuse includes:

- Battery and physical assault: being beaten, choked, or attacked with a weapon
- Sexual assault: forced sex (including oral sex) or abuse of the genital area
- Psychological abuse: being forced to perform degrading acts, being threatened, seeing much-loved possessions or pets destroyed, or severe forms of control (such as isolating people from their family or friends, depriving them of money, food, sleep, etc.)
- Verbal abuse: degrading or threatening language

Abuse has a cycle. First an argument starts. Then it turns violent. Then the abuser apologizes and promises not to do it again or blames the victim. Abusers often have a family background of violence. They may be excessively jealous and refuse to take responsibility for their behavior. Alcohol or drugs are usually only the excuse for abuse, not the real cause. Abusers seldom stop hitting when they stop drinking or taking drugs.

Abuse and pregnancy

Abuse may start or get worse during pregnancy. Blows are often to the belly or breast. Other people feel safe only when they are carrying a child, but the violence often resumes after baby arrives. Either way, both parent and baby are at risk. If you are in an abusive relationship or are afraid of your partner, reach out for help and safety.

Find resources listed in Important Phone Numbers on the “Front Cover”.

Remember, you and your children have the right to live safe from violence and fear.



Travel and Activity

Most expectant people, depending on a few key factors, can remain active and work through their pregnancies. Keep in mind that you will likely experience fatigue and back pain near the end of your pregnancy. Try to ease your routine. Discuss any concerns with your care provider.

For all travel, check the [cdc.gov/travel](https://www.cdc.gov/travel) website for travel notices for pregnant people. These include COVID-19, Zika or malaria outbreak areas and other risks. Talk with your provider in advance about travel plans, especially if you have complications. When traveling, wear loose-fitting clothes and comfortable shoes. Walk around every hour or so to help leg circulation.

Car travel. Make each day's car trips as brief as possible so you won't get too tired: less than 6 hours if possible. Wear your seat belt every time you ride in a car, van, or truck.

- Wear a 3-point restraint: a lap belt and a shoulder strap.
- Keep distance from the steering wheel, 10 inches if you can. Tilt the steering wheel away from the belly. Move your seat back if you safely can.
- Keep the air bag turned on for safety.
- Buckle the belt below your belly, on the hip bones. The shoulder strap goes between your breasts and to the side of, never across, your belly.

If you are in an accident, get treatment right away, even if you think you are not hurt.



Air travel is safe for most pregnant people, but not recommended for those with pregnancy complications. Always check with your airline for rules. Complete domestic flights before you reach 36 weeks, and earlier for international travel. Try to reserve an aisle seat in front of the wing if you can. Frequent fliers and aircrew should check with their health care provider.

Care away from home

The best time to travel may be between 14 and 28 weeks of pregnancy. Discuss travel plans with your care provider. Seek emergency medical services if you experience **warning signs**: vaginal bleeding; contractions; water breaks; severe vomiting or diarrhea; preeclampsia (headache, spots or changes in eyesight, swelling of face or hands); or sudden swelling, redness or pain in your leg. The [cdc.gov/travel](https://www.cdc.gov/travel) website has advice on food safety. Take special precautions with food and water if traveling abroad. Avoid altitude sickness. If you need a doctor, visit physician referral websites for the International Assoc. for Medical Assistance to Travelers ([iamat.org](https://www.iamat.org)).

Section

Decisions Before You Deliver

Choosing a pediatric care provider	52
Cord blood storage or donation	53
Circumcision for baby boys	53
Pain relief during labor and birth	54
Deciding how to feed baby	56
Birth certificate and social security number page	58
Before delivery checklist	58
Labor and delivery: visitors, videos, photos	59
Car safety seat	60
What to bring to the hospital.....	62

Choosing A Pediatric Provider for Baby

Start thinking early about a pediatric provider for your child - perhaps around week 20 of pregnancy. A pediatric doctor or nurse practitioner has special training in the care of children. A family medicine practitioner is specially trained to care for children as well as the rest of the family.

Do you need help finding a care provider who is accepting new patients? Contact our provider referral service (hopkinsmedicine.org/profiles). You may have a get-acquainted visit before choosing who will care for baby. Ask questions like:

- Does the provider accept your type of medical insurance?
- Is the provider on staff at the facility where you plan to deliver?
- What hospital and emergency department does the provider use? Are they part of your medical coverage?
- Are location and office hours convenient to you and your schedule?
- Do you feel comfortable

asking the provider questions? Many providers will meet with you during your pregnancy to discuss your concerns and answer questions. Some may do this at no cost to you.



Planning Your Birth Experience

Childbirth Education

Talk with your care provider about childbirth classes like Lamaze, Bradley, or Reed. They teach you to use tools like support, relaxation, paced breathing, and touch to cope with childbirth pain. The classes help you relax and be more comfortable during labor. Some use these techniques along with pain medication. For information about our classes, see page 8.

Childbirth Partner

A support person can help you stay calm and focused from the start of labor until baby is born. Plan to attend classes together so you can practice together before delivery. It's a wonderful way to involve your spouse/partner. Or choose a close friend or relative. Doula labor assistants may also provide emotional support to you and your labor partner. They do not have medical training and do not replace your OB providers. See page 9.

Cord Blood Storage or Donation

Cord blood is left in the umbilical cord and placenta after birth. Its stem cells can be used to treat some diseases. You should plan a few months in advance with your care provider to collect the cord blood.

Private cord blood banking is for possible use by a family member. There's a collection charge as well as an annual storage fee for this private service. Arrange for equipment to be sent to your OB provider.

Public cord blood donation is like a blood bank donation. Donors are screened before delivery like donors to regular blood banks. For those who meet the standards, cord blood is collected and stored for use by anyone who needs it. Public banks do not charge to collect or store cord blood.

Talk with your care provider at least 2 months in advance of your due date. Also visit parentsguidecordblood.org.

If you wish to collect cord blood, you should plan a few months in advance with the care provider.

The Circumcision Decision

Circumcision is an optional surgery for baby boys. It removes the foreskin covering the tip of the penis. It is performed only if the baby is healthy. This is usually done before a new baby leaves the hospital. You should make the decision about circumcision before your baby is born.

The Academy of Pediatrics studied circumcision on baby boys. They say there may be more health benefits than risks for families who choose it. They also found that the benefits were not great enough to recommend it for all newborn boys. Parents also consider religious, ethical, and cultural practices. They should make their decision with consults from their care provider.

Circumcision may lower your son's chances of getting a urinary tract infection in the first year of life. It may lower the risk of STIs (sexually transmitted infections) later in life. But circumcision is a surgery. All surgeries have risks. Your son may have complications such as bleeding, local infection, or scarring. On rare occasions, the foreskin may be cut too short or too long or the circumcision may not heal as it should.

Pain Relief During Labor

Only you and your care provider can decide what medications (if any) to use during your labor. Choosing medical pain relief is not a sign of success or failure in childbirth. It's just a personal choice for your comfort. Talk with your care provider and ask questions. Remember, all medications have possible side effects. Prolonged use of pain medications may make it harder for breastfeeding to get off to a good start. Consider using non-medication pain relief while in labor.

Non-Medication Methods

Medication is one way to stop or control pain, but some laboring people use natural childbirth — without medications. Labor support or doulas help with natural childbirth.

Using **touch** to help ease pain and discomfort:

- Acupressure (press certain points of the body)
- Effleurage (touch lightly)
- Massage (gentle stroke)
- Counter pressure (Using hands to push at or above the lower back.)

Other pain relief techniques:

- Hot or cold compresses
- Warm showers
- Aroma therapy
- Positioning like squatting, kneeling, or sitting
- Music that may be soft during early labor, with a steady beat later
- See “Breathing and Relaxation” on page 68.

Medications During Labor & Delivery

Some of the most commonly used pain control methods and medications are listed below. These can be used in combination with natural childbirth methods.

Medication (When Given)	How Given	Possible Effect on Parent and Baby
Analgesics (Examples: Demerol, Morphine, Numbatal)		
During labor	In an IV	<ul style="list-style-type: none"> • Increases relaxation and rest between contractions • Decreases awareness of pain • May cause nausea, drowsiness, or trouble concentrating • May cause baby to be sleepy

Medication (When Given)	How Given	Possible Effect on Parent and Baby
Anti-nausea drugs (Examples: Phenergan® or Compazine®)		
During labor	In an IV; may be given with analgesic	<ul style="list-style-type: none"> • Reduces nausea and vomiting • May cause sleepiness or dry mouth.
Local/Pudendal		
Just before delivery	Injection into lower area of vagina/perineum (the area between your rectal and vaginal opening)	<ul style="list-style-type: none"> • Parent is awake • Numbs site of episiotomy (a small incision in the perineum, made to give more room for the baby to be born) • Decreases feeling of birth canal stretching • May sting when being given • Rarely affects baby
Epidural or Spinal Anesthesia		
During labor; also used for cesarean births	By injection into area around lower spine	<ul style="list-style-type: none"> • Parent is awake, best used when parent is in active labor • May lower parent's blood pressure • Numbs lower part of the body so parent is less aware of contraction. May decrease urge to bear down • Parent may lose ability to move legs for a while, may not be able to urinate for several hours, and may have spinal headache • Effects on baby are being studied
General Anesthetic		
Used for cesarean birth sometimes	Inhaled through a mask, or injected through an IV	<ul style="list-style-type: none"> • Parent is asleep • May cause vomiting • May affect infant breathing

Deciding How to Feed Your Baby

About Breastfeeding

How you will feed your baby is an important decision. Human milk is the best possible food for any infant. Breast milk is all your baby needs for food during the first six months of life. Breast milk needs no preparation and is ready any time. People who breastfeed are healthier. They feel strong, confident, and sleep better.

Breastfeeding reduces baby's risks for:

- Asthma and allergies
- Overweight and obesity
- Diarrhea, digestive disease
- SIDS (Sudden Infant Death Syndrome)
- Cold, flu, pneumonia
- Ear and throat infections
- Diabetes (Type 1 and 2)
- Leukemia cancer

Breastfeeding reduces parent's risks for:

- Postpartum bleeding
- Breast and ovarian cancer
- Type 2 diabetes
- Anemia
- Osteoporosis
- Postpartum depression

The World Health Organization and UNICEF support breastfeeding as the sole source of nutrition for infants. The American Academy of Pediatrics recommends:

“Exclusive breastfeeding” - giving baby only breast milk - for about the first six months.

Your breast milk has everything your baby needs. Only give formula if recommended by your pediatric care provider.

Rooming-In

Our hospital practices *rooming-in*. This means your baby will remain in your room at all times (unless a medical necessity requires that the baby go to the nursery). Normal baby care will be done in your room because:

- Parent and other family members learn feeding cues
- Enables feeding on demand and baby will breastfeed longer
- Baby learns to recognize parent and calms more quickly
- Parents and babies' stress levels are lower and they sleep better
- Parent learns how to care for baby and her milk increases

Skin-to-skin Contact

At Johns Hopkins we encourage skin-to-skin contact immediately after birth until the first breastfeeding and as much as possible in the first days after the baby is born. These are some of the reasons we encourage skin-to-skin:

- Keeps baby warm
- Gives breastfeeding a good start
- Calms parent and baby
- Helps baby sleep better, cry less, and grow
- Regulates baby's heart beat, breathing, and blood sugar.

When the baby is born the first skin-to-skin time will last as long as you would like and at least until the first breastfeeding. Continue baby's close contact with you or your partner the first few weeks of life when you are awake. See "When You Need Help" on page 14.

Skin-to-skin contact at birth gives breastfeeding the best start and helps baby bond, grow and be happy.



After you deliver, the nurses will help you tell when the baby is ready to feed (feeding cues) and show you correct positioning that is comfortable for you. Good positioning and LATCH make breastfeeding easier. Here's why:

- Ensures baby gets enough breast milk
- Ensures you have enough milk for your baby
- Prevents sore nipples and engorgement
- Makes baby happy

For more breastfeeding information. A lactation consultant, your care provider, or your local WIC office may help. Find more at "Breastfeeding Support" on page 57. See Important Phone Numbers on the "Front Cover" for LaLeche League contacts and our support.

The chapter on "Baby's Homecoming & Breastfeeding" on page 79 discusses breastfeeding basics that will help you feel more confident when you come home with your baby.

Birth Certificate and Social Security Number

While in the hospital, you will be asked to fill out information for your baby's birth certificate. Make sure you spell all names correctly. Please have this information ready:

- Your baby's name
- Birthing parent's maiden name, date and place of birth, and Social Security number
- Father's full name, date and place of birth, and Social Security number
- For unmarried couples, an "affidavit of parentage" must be completed for the name of the baby's father to be included on the birth certificate. See "Paternity" on page 112.
- Birth certificate information should be completed before parent's discharge or baby's 5th day of life.

Before Delivery Checklist

A little planning goes a long way. Plan for your stay before you go to the hospital. You'll need some supplies at home, too, to care for your new baby. The list below should help.

- Complete paperwork for maternity leave and disability.
- Register for your hospital stay and know the number to call.
- Plan your hospital trip. Take into account the time of day, traffic, and weather. If a ride to the hospital is a problem, make arrangements long before you go into labor. If you plan to be driven, keep your car full of gas near your delivery date.
- Be sure you understand what you should do when labor begins.
 - Ask your care provider when to call.
 - Ask how you reach your care provider after office hours.
- Have your bag packed and ready to go. See "What to Bring to the Hospital" on page 62.
- Arrange child care for siblings while you are in the hospital.
- Do you have pets that will need attention?
- Know your plans about family planning and spacing your children following delivery. See birth control on "Preventing an Unplanned Pregnancy" on page 116.
- Decide on the baby's name for the birth certificate and for the Social Security number.
- Prepare a few meals ahead that freeze well to use when you come home from the hospital.

- ❑ Choose your baby's care provider during your third trimester so that they can examine the baby during the hospital stay.
- ❑ Plan for a ride home from the hospital as early as 10 a.m. the day of discharge.
- ❑ Get your baby's car seat for the ride home from the hospital. Take time to place the car seat in the car and for adjusting it for baby's first ride home. This can take some extra time at first to understand how it should be positioned. Be sure to note how to properly position it inside your vehicle and how to remove the seat from the base.

Labor and Delivery: Videos, Photos

Our visitor guidelines change at times due to COVID. Please ask for current visiting guidelines when you are admitted.

We want you to know our visitor guidelines before you come to deliver your baby. They are for your safety, comfort, and care. Please review them with your family and support person(s) before delivery. Parents can visit their newborn 24 hours a day. Generally, parents can stay with their healthy newborn in parent's room. See more on page 8.

Remember, too, that while you are in labor and after the baby is born, you will be very busy. So will your care team, who will make sure you and your baby get all the medical attention you need. You may not have the time or energy for many visitors. You might ask some of them to visit after you return home.

Prepare your children in advance for their visit with you after the baby arrives. Consider registering them for a sibling preparation class. Children cannot stay overnight with you while you are in the hospital.

Photos and Videos

Your family may want to capture memories of the joyous occasion. Take family pictures when it does not interfere with medical care. Once your newborn is stable and in parent's arms, you'll probably have more time for photos.

Talk to your provider about taking pictures of the delivery. Do this when you are admitted to Labor & Delivery. Health care providers should not be photographed or videoed unless they give permission to be. That includes physicians, midwives, anesthesiologists, neonatologists, and nurses. You may not video or photograph medical or surgical procedures, including the delivery. In fact, videoing any procedure or staff member is prohibited. In an emergency, all picture taking will stop. Visitors may be asked to step back or leave to give the care team the room they need to care for parent and baby.

Car Safety Seat

You must have a car seat already secured in your car before your baby can leave the hospital. Use a car safety seat every time your baby is in the car. This includes when you leave the hospital. This is not only good safety – it's the law. Every state requires that all children be properly restrained in a federally-approved child safety seat.

For your child's safety:

- Infants must ride in a federally-approved rear-facing car seat.
- Seats must be correctly installed in the back seat of personal cars, rental cars, taxis, or any other car.
- Your child must ride in a car seat for as long as possible, until they reach the maximum height and weight for the seat.

All car seats need to be in the middle of the back seat. NEVER put an infant in the front seat of a car with a passenger air bag. Due to injuries with air bags, all children under age 13 should always ride in the back seat.

An infant-only seat is for use up to 35 pounds. It may make it easier to keep your baby rear-facing. If you are planning to use the same car seat from birth to 40 pounds, the best choice is a convertible seat with a 5-point harness.

Remember: A car seat that is not used right can't protect your baby. Check to see that it is installed properly.

Ask your public health department, police or fire department if they offer inspections by a certified safety technician.

Seats face the rear of the car until the child reaches the maximum height and weight for the seat. ALWAYS place car seat in the rear seat of cars with passenger air bags.



Used Car Seat Safety Checklist

- ❑ To the best of the parent's knowledge, the seat has not been in a crash.
- ❑ The seat should not be more than 6 years old. Car seats have expiration dates. Check the model number of the manufacturer's website.
- ❑ The seat is appropriate for your child based on weight AND height.
- ❑ All parts are in good repair. The harness straps are intact and not frayed, the frame is crack/dent free, the seat has all its parts, and the instructions are still with the seat.
- ❑ No labels or other identifying information are missing from the seat.
- ❑ Only products that come with the seat or are sold by the manufacturer for use with the specific seat should be used.

To find out more:

- The National Highway Traffic Safety Administration at 1-888-327-4236 or visit [nhtsa.gov/equipment/car-seats](https://www.nhtsa.gov/equipment/car-seats)
- For more support on car seat safety, see "Car Safety Seats" on page 11.
- Some fire departments check the installation of infant car seats.



What to Bring to the Hospital

Several weeks before your due date, pack a bag that will be ready to go to the hospital when you are. Put it in a handy place where you and your partner can find it. Make a list of last minute items to pull on your way out the door. You cannot bring cigarettes, alcohol, or illegal drugs.

Here are some items you may want to include:

- Health insurance card, photo ID, and hospital registration form
- Nightgown (2 or 3) or pajamas that button down the front
- Robe, slippers, socks
- Underwear – 2 or 3 regular or nursing bras, panties
- Toiletries (shampoo/comb/hair elastics, toothpaste/brush)
- Glasses - you may not be able to wear contact lenses
- Cord blood banking kit, if you chose to store or donate stem cells
- Coins for vending machines
- Your personal phone and charger. (Ask staff about phone policies.)
- Camera with memory card, fresh batteries or charger. Ask your nurses and care provider about the use of camera and video.
- Loose-fitting clothes to wear home
- Receiving blanket and clothes for baby to wear home
- Federally-approved car safety seat to take your infant home

You may also want to pack a “goody bag” for labor. Here are some items you will want to include:

- Pillows
- Lip balm such as Chapstick®
- Lotion or oil for massage
- Snack for coach
- Pad and pencil
- Digital player with favorite music, ear phones
- Childbirth class folder
- Focal point object
- Tennis balls in sock
- This care guide



Bring only what you need for your hospital stay. Please leave valuables like jewelry, large sums of money, and laptop computers at home. We cannot be responsible for personal property.

Section

Labor and Baby's Birth

Signs that labor is near	64
About labor	65
True vs. false labor, Knowing when you're in labor	
Coming to the hospital	67
Admission, Care team	
Breathing and relaxation	68
Stages of labor	69
Assisted delivery	74
Cesarean birth	75
Vaginal birth after cesarean	
Your care at birth	76
For vaginal, VBAC, C-section	
Baby's medical care at birth	77
Infant security	

Signs That Labor Is Near

Your due date is just a best guess of when your baby will be born. You may feel everything listed below, some of it, or none of it. Each labor is different.

- **Lightening.** The baby drops or settles into the pelvis. It can be a few weeks or a few hours before labor begins. This may cause an increase in pelvic pressure and a frequent need to urinate.
- **Loss of mucus plug (bloody show).** You may notice a mucus-like discharge from the vagina that's clear, pink, or with streaks of blood. It can happen after a vaginal exam or in the last days before birth.
- **Rupture of membranes (water breaks).** The amniotic sac releases the fluid that surrounds the fetus. The water may come as a slow trickle of fluid from your vagina, or you may have a sudden gush. If this happens, don't take a bath. Call your care provider.
- **Contractions.** During labor your uterus gets tight and then relaxes. Contractions may feel like menstrual cramps. They help the baby move through the birth canal.

Other signs that labor may be near.

- **Nesting.** You may feel an increase in energy and want to do more to prepare for the baby.
- **Low backache.** May come and go, or pressure may be constant.
- **Bowel movement change.** Either diarrhea or constipation.
- **Effacement** (thinning of the cervix). Some thinning and opening of the cervix is common in the last weeks of pregnancy. This is noticed on exam by your care provider.



About Labor

Labor is the work done by your uterus. It results in the birth of your baby. No two deliveries are exactly alike, but labor lasts an average of 12 to 20 hours for the first birth. If this is not your first birth, it may take less time.

Knowing When It's TRUE Labor

As you get closer to your delivery date, you may feel minor contractions that can be painful. These are called *Braxton-Hicks* contractions. These “practice” contractions are perfectly normal but they are not necessarily a sign that true labor has started. You probably are not in true labor yet, if:

- Your contractions do not come closer together or get stronger.
- You have no other signs of labor.

Time how long each contraction is. Check the length of time from the start of one to the start of the next.

Contact your health care provider if your contractions occur 4 or more times in a hour or if you are leaking fluid.

True Labor	False Labor
Contractions progress in a steady pattern: they become longer, stronger, and grow closer together, lasting 60 to 90 seconds.	Contractions are irregular or stay the same. They stay weak, or a strong contraction is followed by a weaker one. These Braxton-Hicks contractions do not get closer.
Contractions don't go away when you walk or rest and you cannot sleep through them.	Labor may stop or become irregular with rest or change in activity like walking.
Pain moves from the back to the front.	Pain usually is felt in the front.
The cervix continues to dilate and efface (open and get thinner).	The cervix doesn't change.

Food During Labor

Ask about eating during labor. General guidelines for people with a healthy pregnancy are -

- Small amounts of clear liquids during labor are permitted.
- Solid food is not recommended in case an emergency procedure with anesthesia is needed.
- People with planned cesareans should not eat for 6 to 8 hours before surgery. Ask about clear liquids before surgery.

Knowing When You Are in Labor and What to Do

Sometimes it's hard to tell if true labor has begun. These guidelines should help you decide.

- For **EVERYONE**, call your care provider and come to the hospital if:
 - The bag of water has broken or is leaking even a small amount.
 - You see bleeding from your vagina. You do not need to come in if you have spotting of only pink or bloody mucus discharge.
 - You have constant, severe pain (Call your care provider right away.)
 - **If you are in doubt, call your health care provider.**
- If this is your **FIRST** baby, come to the hospital when:
 - Labor pains (contractions) happen every 5 minutes or closer.
- If this is your **SECOND** (or third or more) baby, come to the hospital when:
 - Labor pains are regular and happen every 6 to 10 minutes and are not relieved by rest.



Before you leave for the hospital, call your health care provider to let them know you are coming.

Your care provider's
phone number _____

Coming to the Hospital

Your Trip to the Hospital

The safest way to travel to the hospital is to wear your seat belt and allow someone else to drive. There is usually no need to speed. See “Metro Area and Campus Maps” on page 6.

Admission – What to Expect

If you are in true labor, you will be admitted for the delivery of your baby. When you enter the labor area, here’s what generally happens:

- You will be asked to change into a hospital gown.
- You may be examined to determine how close you are to delivery.
- Soon after you are admitted, your care team may place an IV (intravenous) in your arm or wrist. This IV will be used throughout labor, delivery, and recovery. Through it you will get fluids, medications (if needed), or blood (only if necessary).
- An electronic fetal monitoring device may be used at intervals or throughout labor to monitor your baby. This equipment records the unborn baby’s heart rate and movements. It also shows contractions of the uterus.
- If you are in active labor, you generally may not eat or drink. In some cases your care provider may allow clear liquids or ice chips.

Your Care Team

Your care provider will check your progress often during your labor. A team of nurses who specialize in labor and delivery will be at your side. They will monitor your heart rate, blood pressure, labor progress, and the baby’s well-being.

This team helps families during labor and delivery. They help meet the family’s physical and emotional needs. They guide and support you and your family through each step of this special time.

Breathing and Relaxation

Help Your Body Work with Breathing and Relaxation

You can help decrease the pain you may feel when you relax (as much as possible) and breathe well during your contractions. Relaxing and breathing also help provide more oxygen for you and your baby.

Visualized relaxation

This exercise is sometimes called “finding your special place.” Use it as a way to focus or concentrate. It’s an exercise you can do by yourself. And it may help anytime the day’s events seem overwhelming, especially at bedtime.

To start, think of a place you have been where you felt safe, comfortable, and happy. Some people choose the beach. Others choose the mountains. Others may think back to their childhood home. Choose what works for you.

Picture it in your mind. Try to remember the smells, sounds, feelings on your skin, and any tastes you might have had. For example, if you choose the beach, you might hear the surf, feel the sand between your toes, the sun on your back, and taste the salt air.

Slow your breathing to even, comfortable breaths.

As you breathe in, think of strength and energy filling your body.

As you breathe out, feel your muscles let go of tension. Let the tension flow out of your body as water would drip off your fingers and toes. Continue to picture and feel your special place until you feel just as safe, comfortable, and happy as you did when you were really in that place.



Breathing

There is no right or wrong way to breathe during labor. You are doing the right thing as long as you feel comfortable with whatever breathing pattern you use. You should practice breathing in advance. It will help you to respond to a contraction by breathing and relaxing, instead of tensing up. Tension prevents your muscles from getting enough oxygen. It makes them hurt more when they work for long periods of time.

You should breathe at a comfortable rate which does not make you feel short of breath.

Let the air in and out however it feels best (through your nose or mouth – either is fine).

Try to keep your breaths even.

Begin and end each contraction with a cleansing breath. A cleansing breath is a signal to everyone that a contraction has started and you are in a “work” mode. It also reminds you to relax and let the contraction do its work. Take a deep breath in through your nose and exhale out through your mouth while relaxing your whole body.

Some people find that using effleurage is soothing. Effleurage is a light massage on your stomach or arms that you can do at the same rate as your slowest breathing. As you change the speed of your breathing, don't speed up the effleurage; keep it slow and light.

Attend childbirth preparation classes. They help you learn how to cope with labor by using different breathing patterns.

Stages of Labor & Back Labor

Delivering a baby is hard work. Try to relax and breathe well during contractions to reduce the pain you may feel. The notes on the next few pages show what you can expect at each stage of labor. They also describe how your birth partner can help you through each step of the journey. During your stay, we want to work with you to ensure your medical care and safety. See “Labor and Delivery: Videos, Photos” on page 59.

Back Labor

Labor that is felt as continuous back pain is called *back labor*. It occurs in about 1 in 5 labors. Baby may be in a position that puts more pressure on the parent's lower back. Frequent position changes can help. Try those that move the baby's weight off your back, like leaning forward or kneeling. Warm or cold compresses and firm counter-pressure to the lower back may ease discomfort.

Stage 1: Early Labor

Physical Change

The first stage begins when the cervix starts to open so the baby can move into the birth canal. It ends when the cervix is 4 to 6 centimeters dilated. This usually takes about 6 to 12 hours for first-time parents but can last up to 20 hours.

What to Expect

True labor contractions may start as mild cramps. They may last less than a minute and come 15 to 20 minutes apart. As time passes, the contractions come stronger and faster (5 minutes apart) and last for 60 to 90 seconds. Your cervix begins to thin and dilates to 3 or 4 centimeters.

How Your Labor Partner Can Help:

At home

- Time the contractions. Time from the beginning of one to the beginning of the next.
- Find ways for you to relax and be comfortable at home. Change positions often. Go for a walk together or practice relaxation. Watch TV, listen to music, play games, or read a book to pass time. Help you get rest or sleep if you can. You will wake up as your contractions get stronger.
- Give you clear liquids to drink.
- Help you take a warm shower so you will be more comfortable.
- Help decide when to call your care provider.
- Help when contractions are too strong to walk or talk through. Now's the time to start the breathing and relaxation techniques.
- Reassure you – your emotions will probably range from happiness that the baby is coming to fear about delivery or the baby's health. Be as positive and supportive as possible.



Stage 1: Active Labor

Physical Change

By now you should be in the hospital or at least on your way. Your contractions become stronger and faster, lasting about 45 seconds. Your cervix will thin even more and open wider, from 6 to 10 centimeters. The active and transition phases last an average of four to eight hours.

What to Expect

You may:

- Bleed a little and your water may break.
- Have a backache as the baby moves lower in the birth canal.
- Feel tired and may be thirsty because you're breathing hard.
- Use pain management techniques you learned in class: relaxation, breathing, or massage. Ask for pain relief if you want it.

How Your Labor Partner Can Help:

- Offer words of encouragement
- Focus on one contraction at a time. Each one is making the birth closer.
- Remind you to urinate often. Baby has more room to move down when the bladder is empty.
- Try to make you more comfortable with:
 - Cool washcloths on lips, forehead, or back of neck
 - Back or body massage
 - Warm cloths or ice packs to lower back
 - Frequent position changes
 - Lip moisturizer
- Expect your mood will become more serious, and you will focus more on yourself and what's happening to your body. You will also depend more on your support person.



Transition to Stage 2

Physical Change

This is the shortest and toughest phase. Contractions are very strong and closer together, and last about 60 to 90 seconds. Tell your care team as soon as you feel the need to push and they will check your cervix. Pushing before you are fully dilated can cause swelling that may make delivery more difficult. Use breathing to help you resist the urge to push until the cervix is completely dilated.

What to Expect

You may:

- Have leg cramps
- Be hot and sweaty
- Tremble
- Feel short of breath
- Feel sick to your stomach
- Feel like you have to have a bowel movement and want to push

How Your Labor Partner Can Help:

- Be as encouraging and loving as possible. Remind you that soon it will be time to push and the baby will be born. Tell you, “You’re almost there.”
- Again, tell you to take one contraction at a time.
- For leg cramps, massage your calf, straighten the lower leg, and push toes toward your knee.
- Massage your back.
- Encourage you to puff-blow when you feel the urge to push. Don’t push yet!
- Assist you in maintaining control.



Stage 2: Pushing and Delivery

Physical Change

The second stage begins when the cervix is fully dilated and effaced. The second stage ends with the birth of your baby. It can last from minutes to 2 to 3 hours.

What to Expect

When the cervix is completely dilated (10 centimeters), it is time to push with the contractions. Contractions are usually 2 to 5 minutes apart and last 60 to 90 seconds.

As the baby moves down, you will feel pressure on the lower back and buttocks (like you were having a bowel movement). You may also feel stretching and pulling as the baby reaches the opening of your vagina and then is born.

As the birth gets closer, you will feel excited. Some people feel a renewed sense of energy and strength.

To protect from severe muscle tearing or to ease difficult delivery, your health care provider may recommend a small cut in the perineum (the area between your rectal and vaginal openings). The area is numb first. This procedure is called an *episiotomy*.

How Your Labor Partner Can Help:

- Help you find a position that works, or help you change positions if labor has stalled.
- Once your care provider says so, encourage you to push during contractions.
- Calm you so you can rest between contractions
- Find a mirror you can use to watch your baby's head crown, then enter your world.

Stage 3: Delivery of the Placenta

Physical Change

The last stage begins after the baby is born and ends when the placenta is delivered. This can last 30 minutes or more.

What to Expect

Shortly after the baby comes, you will feel cramping again as your uterus pushes out the placenta or *afterbirth*. After the placenta is delivered, your health care provider will check you. For example, you may need a few stitches. These stitches dissolve and do not have to be removed.

Congratulations – your labor is over. It is time to relax and enjoy your baby with skin-to-skin contact. The close contact will last as long as you like and at least until the first breastfeeding. It's a precious time for your new family.

Assisted Delivery

Your baby needs at least 39 weeks for brain development and newborn well-being. For elective inductions, the scheduled date and time is tentative, depending on available resources on the unit. Scheduling early birth labor inductions or cesarean deliveries for non-medical purposes is discouraged.

Inducing (Starting) Labor

Sometimes your care provider will want to start labor before your body starts on its own. There can be many reasons for this decision.

You may be asked to come to the hospital the night before labor is induced. Your care team will start an IV. You will be put on a monitor. That way your provider can watch your baby's heartbeat and your contractions. If necessary, your care provider will place medicine near your cervix during a vaginal exam. You might feel some contractions after having it inserted and you might get several doses. The medication "softens" the cervix so it responds better to the oxytocin (the medicine used to induce labor).

Oxytocin (Pitocin®)

If you do not need cervical softening, you will be admitted the morning of or the evening before your induction. Oxytocin is given through an IV. It induces, or starts, contractions. You may feel contractions after only a few minutes. It could take several hours. Because these contractions are induced, they may be strong and uncomfortable. Don't hesitate to ask your provider for something for the pain.

Rupture of Membranes

Labor sometimes goes slowly. Your contractions may be weak or ineffective. One method used to speed up labor is to break the bag of waters (rupture membranes).

Vacuum and Forceps

Sometimes the pushing phase takes too long or the baby's condition indicates the need for a more rapid delivery. Your health care provider may need to use forceps or vacuum instruments to assist you. Assisted vaginal deliveries occur in about 3 percent of vaginal deliveries in the U.S.

Cesarean Birth

In cesarean birth, the baby is born through a surgical cut. The doctor makes a cut through the abdomen into the uterus, or womb. There are two types of cesarean birth: planned or scheduled ahead of time, and unplanned. If cesarean birth is planned, hospital staff will review procedures with you before your admission.

One in three people in the U.S. give birth by cesarean delivery. This can be life-saving for the fetus, the parent, or both in certain cases. For most normal pregnancies, the risks for parent and newborn are higher for cesarean surgery than for vaginal delivery. There are even greater risks later when repeated in future pregnancies.

When a Cesarean is needed

When are cesarean births necessary? Here are some examples:

- The baby is too large for the parent's pelvis.
- The baby is in a position that will not allow them to be born.
- The parent may have a medical condition that makes immediate delivery necessary.
- The baby may show signs of distress like an abnormal heart rate.
- There's a problem with the placenta or with the umbilical cord so baby does not get enough oxygen.

The type of anesthesia used will depend on the reason for cesarean birth. You could have an epidural, spinal, or general anesthesia. With general anesthesia, you will be asleep. Your labor support partner will not be in the delivery room. With an epidural or spinal anesthetic, one support person may be permitted to stay with you.

The baby is usually born within 5 to 10 minutes after surgery begins. The total surgery takes only about an hour. You and your support person will be given time to touch, feel, and hold the baby.

After your cesarean

You will receive fluids as well as medicine through your IV line at first. Most patients receive IV pain medication that they control called PCA or Patient-Controlled Analgesia. A nurse will help you get out of bed the first time and walk a short distance. Within 24 hours, you should be able to walk, eat and drink on your own.



Vaginal Birth After Cesarean (VBAC)

In the past, after a person had a cesarean delivery, their babies always had to be delivered that way. Today, obstetric experts encourage considering VBAC (vaginal birth after cesarean delivery). The decision depends on individual circumstances that you discuss with your OB provider.

People who are good candidates undergo *trial of labor after cesarean* or TOLAC. This is an attempt to deliver vaginally.

- About 60 to 80 percent succeed in a vaginal birth. Abdominal surgery is avoided. Recovery is shorter. Risk of infection and blood loss is lower. Fewer surgical scars are helpful in future pregnancies.
- There are risks of complications during TOLAC which could make a cesarean delivery necessary. VBAC should take place in a hospital that can manage serious situations.

If you had a previous cesarean delivery, talk with your health care provider. You will want to discuss your personal risk factors early in pregnancy. Note: VBAC is less likely for people who are older, have high body mass index or high birth weight, or had cervix problems with a previous delivery. VBAC should not be tried for those at high risk of rupture of the uterus.

Your Care at Birth - Vaginal, VBAC, C-section

Staff will check on you often after delivery. They will check your –

- Perineum (abdominal dressing, if cesarean delivery)
- Vaginal bleeding
- Blood pressure and pulse
- Temperature
- Breathing

You will be encouraged to get up and move about. It may be within a couple of hours after a vaginal delivery or 6 to 8 hours after a cesarean section. Please ask for staff assistance when you get out of bed the first time. The effects of an epidural or PCA may increase the risk of falling.

Empty your bladder as soon as you can after delivery. If there were no complications, your provider may permit you to have a regular diet and shower when you feel like it.

For vaginal delivery, sitting on an ice pack the first 24 hours may relieve pain. Then change to a warm, moist towel or a warm sitz bath. Medications (pills and cream) also help.

Your hospital stay is usually 1 to 2 days for a vaginal delivery or 2 to 3 days after a cesarean birth. You may stay longer if you have complications.

Rest as much as you can while in the hospital. The staff will help you learn how to care for yourself and your baby.

Plan ahead for your trip home from the hospital. Be sure to have a federally-approved child safety seat for baby.

Reminders for You

- Call for assistance when getting up for the first time after delivery.
- Request pain medicine when needed.
- Use your call light if you or your baby need help.
- If you feel drowsy or sleepy when holding your baby, place your baby in a bassinet or crib. Falling asleep in a chair or in bed while holding a baby can cause baby to suffocate or fall.
- Wear a supportive bra after delivery. It will help keep your breasts from becoming too uncomfortable.
- Give yourself time to heal before doing any strenuous activity. Wait a few weeks before putting anything in your vagina (sex, tampons).

Baby's Medical Care At Birth

In the birthing or delivery room. For single, healthy babies, the umbilical cord may remain attached for a few minutes. This short delay in clamping the cord allows your body to deliver extra iron your baby needs. It also improves baby's blood circulation and gives preterm babies a better start. The nurse will place baby on your chest and cover both of you with a blanket. Skin-to-skin time provides many benefits to you and your baby.

Skin-to-skin keeps baby warm, promotes bonding, calms parent and baby, regulates baby's heartbeat and breathing, and helps give a good start to breastfeeding. In fact, this is the ideal time to start breastfeeding.

Later, baby is checked by the staff. Your baby will be given a bath when he can better regulate his own temperature, usually after several hours.

- All newborns are a little low on vitamin K. Your baby will be given an injection of this vitamin to prevent bleeding.
- Your baby could get an eye infection passing through the birth canal. Erythromycin eye ointment is placed on your baby's eyes to prevent infection.
- Before baby is discharged, hospitals are required by state law to
 - Test the hearing of all newborns
 - Screen for congenital heart disease
 - Do a blood test that may detect over 30 genetic diseases, inherited medical conditions, and metabolic disorders.
 - Give the first hepatitis B vaccine within 12 hours after birth to help prevent serious liver disease.
- Parents of a baby boy may decide to have him circumcised during the hospital stay.

Our hospital's care plan is for you and your baby to be together during your hospital stay. **"Rooming-in"** 24 hours a day helps a new parent and baby in many ways. When you, your partner, and baby stay together, you learn baby's needs and feeding cues. You learn how to handle and comfort baby. Baby learns to recognize their parents. You and baby sleep better. Baby calms more quickly and breastfeeds longer – so parent's milk increases earlier. Stress levels are lower and baby is healthier.



A provider who specializes in baby care will examine your baby during your hospital stay. Your baby should see the pediatric care provider again when baby is 3 to 5 days old, unless you are told to come sooner.

Identification and Infant Security

The safety and protection of your baby are of utmost importance to our staff. Various measures have been put into place to help prevent unauthorized access to your baby. Our staff will explain this system to you when you arrive on the unit.

A note about identity theft: Protect your child's identity. The rate of identity theft for children is higher than that of adults. This affects over 140,000 children every year. To protect your child's credit, you can request a credit [freeze](#) from one of these major credit companies.

- Experian: [experian.com](https://www.experian.com) 1-888-397-3742
- Equifax: [equifax.com](https://www.equifax.com) 1-888-298-0045
- Transunion: [transunion.com](https://www.transunion.com) 1-888-909-8872

Learn more at the Federal Trade Commission site: [consumer.ftc.gov](https://www.consumer.ftc.gov)

Section

Baby's Homecoming & Breastfeeding

Welcome home, baby!	80
Sleep Basics	80
Sleep Safety and SIDs	
Benefits of breastfeeding	82
Exclusive breastfeeding for about the first six months	
Beginning breastfeeding, Feeding cues	83
Waking a sleepy baby to breastfeed	
Latch	84
Taking baby off your breast, Preventing sore nipples	
Breastfeeding positions	86
Cradle hold, Cross-cradle hold, Laid-back or biological nurturing, Lying down	
How long to nurse and how often	88
Feeding guidelines, Baby's stomach capacity, Feeding diary	
Breastfeeding at home	91
What to notice when feeding, What you will feel, Spitting up, Burping baby, Monitoring baby's weight gain, Pacifiers, Breastfeeding and birth control	
Breastfeeding suggestions	93
Breastfeeding tips, Vitamin D, Feedings after 6 months	
Expressing breast milk	97
Hand expressing, Pumping, Storing, Freezing, Storage guidelines, Defrosting and warming	

Welcome Home, Baby!

We want to help make homecoming day easier for you and baby. Start preparing your home the last months of pregnancy. Set up safe sleep areas and plan baby-friendly feeding for day and night. Learning about basics now can help you feel more confident with daily routines in your new life.

Sleep Basics

When babies go home from the hospital, everyone wants to see them. Limit your visitors and keep the baby out of large crowds for a few weeks. Let visitors see your baby, but limit touching to avoid germs and infections.

Both you and your baby need this time to rest. Make sure your baby –

- Has a safe place to sleep by using a crib or bassinet.
- Is put to sleep in a safe position.
- See safe sleep resources on page 14.

PUT INFANTS TO SLEEP ON THEIR BACKS



For more on safe sleep for your baby, visit the NIH “Safe to Sleep” website at safetosleep.nichd.nih.gov

Sleep Safety and SIDS

SIDS (Sudden Infant Death Syndrome) or crib death, is a leading cause of infant death from one month to one year of age. To reduce the risk of SIDS:

- Breastfeed your baby. Aside from safe sleep practices, breastfeeding is the greatest way to protect your baby from SIDS. Formula feeding and smoking in the home are the greatest risk factors.
- Always put your baby on their back when resting, sleeping, or leaving the infant alone.
- A close but separate bed is best for sleep. You may use a crib or bassinet in your room. Breastfeeding or comforting baby in bed may be safe, but do not fall asleep with baby next to you. Newborns that share your bed may fall to the floor, or be smothered by other people, blankets, pillows, or loose bedding.
- Cribs, bassinets, and playpens should meet current safety standards. They should be sturdy, and the slats no more than 2-3/8 inches apart. Make sure any paint is lead-free. Sides that move are not safe.
- The sleep surface should be firm. A firm crib mattress covered with a tight-fitted sheet is good. Mattresses should fit snugly (no more than two fingers between it and the crib).
- The crib should be empty. Keep soft objects and loose bedding out of the crib. Sleep sacks and wearable blankets are better than blankets. Remove pillows, stuffed animals, comforters and bumper pads.
- Some sleep products have been found unsafe, like sleep positioners and inclined sleepers. They are sometimes called nests, docks, pods, loungers, rockers, or nappers.
- Products that claim to reduce SIDS (like baby monitors) have not been proven reliable.
- Do not allow cords or strings near the crib or around baby's neck (pacifier strings, bibs, mobiles, window shade cords, etc.).
- The room should be comfortable (about 70°F or 21°C). Baby should be lightly clothed for sleep. Place baby's head to one side for a week, then switch.
- Encourage "tummy time" when baby is awake and you are nearby. It helps develop strong muscles.
- Protect your baby from smoke. *Second-hand smoke* is breathed when around a person smoking cigarettes or cigars. *Third-hand smoke* is the nicotine residue in carpets, upholstery, bedding and vehicles. Both may be harmful to non-smokers, especially infants and small children.
- After breastfeeding is well established at 4 to 6 weeks, offer baby a pacifier at nap and bedtime for baby's first year. Don't force it. If the pacifier falls out, that's OK.

Benefits of Breastfeeding

Breastfeeding provides the best food for babies during the first year of life. Breast milk provides just the right balance of nutrients and is easier to digest. Your breastmilk changes to meet baby's changing nutrition needs as they grow. It will help protect your baby against:

- Asthma and allergies
- Overweight and obesity
- Diarrhea, Celiac, Crohn's disease
- SIDS (Sudden Infant Death Syndrome)
- Cold, flu, pneumonia
- Ear, throat, lung infections
- Diabetes (Type 1 and 2)
- Leukemia cancer

Breastfeeding is the best way to reduce the risk of SIDS (Sudden Infant Death Syndrome). Breastfeeding is supported by UNICEF as the sole source of nutrition for infants.

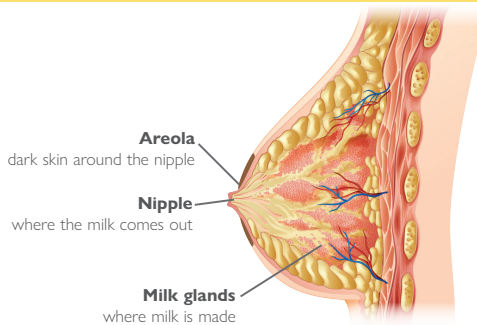
The American Academy of Pediatrics recommends:

- **Exclusive breastfeeding (only breast milk) for about the first six months.**
- Starting some solid foods at about six months.
- Continue breastfeeding to at least 12 months - then for as long as you and your baby desire.

For parents, breastfeeding uses more calories and makes it easier to lose post-pregnancy weight. It helps the uterus return to its normal size. Breastfeeding lowers the risks of:

- Breast and ovarian cancer
- Postpartum bleeding
- Postpartum depression
- Type 2 diabetes
- Osteoporosis
- High blood pressure

It saves time and money - \$1,700 or more per year. Baby is healthier so less worry and time away from work. No formula to mix and warm in the middle of the night, or bottles to wash and pack in a diaper bag. It can calm your mood and create a special bond with your baby.



Beginning Breastfeeding in the Hospital

If you and your baby are healthy, then your baby will be placed skin-to-skin on your chest after delivery. This is the Golden Hour and a perfect time for you to get to know your baby. Breastfeeding is started within the first half hour after birth when possible.

Breastfeeding is a learning process – for both you and your baby. Your breasts already have early milk known as *colostrum*. Your baby can start getting all the benefits of your rich early milk right after birth. After about 40 to 72 hours, your breast milk “comes in” with large amounts.

You should take as many chances as possible to breastfeed around the clock in the hospital. It will make you feel more comfortable and confident. The nursing staff will help you breastfeed your baby. If you need assistance with breastfeeding while in the hospital, ask for lactation support. For support after you go home, contact “Breastfeeding Support” on page 83.

Encourage your baby to breastfeed whenever baby shows feeding cues, which will be about 8 to 12 times in 24 hours. Milk is made in response to baby nursing. The more baby feeds, the more milk you make. **More feeding means more milk.** Watch for these early cues.

Feeding Cues

Babies behaviors may be confusing. Here are tips to know when your baby is ready to nurse in the first few days of life.

Early infant hunger cues:

- Waking and alert, looking around, becoming active
- Smacking or licking lips
- Opening and closing mouth
- Bending arms, closing fists, and bringing fingers to mouth
- Sucking on lips, tongue, hands, toes, toys, or clothing

Active infant hunger cues:

- Rooting around on the chest of whoever is carrying them
- Trying to position for nursing, by lying back or pulling on your clothes
- Fidgeting or squirming around a lot

Feed your baby before he starts **crying**, which is a late sign of hunger.

Feeding baby when they first give feeding cues helps them be content, cry less, and sleep more. It prevents sore nipples and engorgement. Frequent nursing helps you have the right amount of milk for baby.

Waking a Sleepy Baby to Breastfeed

Baby may be sleepy the first few days of life. If it has been more than 4 hours since the last feeding, try these tips to wake baby to feed.

- Dress down your baby – change the diaper if needed.
- Put baby skin-to-skin next to your breast and cover with a blanket.
- Roll infant gently side to side.
- Rub baby's back, legs, feet, or stomach in a gentle, circular motion.
- Sit your baby up; rub his back and feet.
- Burp him before nursing.
- Express drops of milk to your nipple for baby to smell and taste.
- If baby does not want to nurse, you may express breast milk to feed by spoon or cup. Aim for baby to feed about 8 to 12 times in 24 hours.

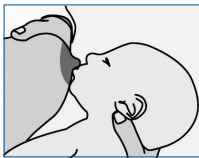


Latch

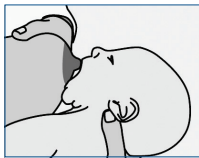
When awake, your baby will move their head back and forth, looking and feeling for the breast with their mouth and lips. The steps below can help you get your baby to “latch” on to the breast to start eating. A good latch helps baby get enough breast milk and prevents sore nipples.

As soon as the baby opens their mouth wide, bring baby onto your breast with the nipple on top of baby's tongue. Baby's mouth should cover at least 1 inch of the areola. Milk is stored behind the areola. If the baby only sucks on the nipple, they will not get milk, and your nipple will become sore. Be patient. This may take several tries.

USDHHS, Office of Women's Health



Tickle the baby's lips to encourage him or her to open wide.



Pull your baby close so that the chin and lower jaw move into your breast first.



Watch the lower lip and aim it as far from the base of the nipple as possible, so the baby takes a large mouthful of breast.

The tip of the baby's nose and chin should be touching your breast. You don't have to press down on the top of the breast. Lifting the breast from underneath or holding the baby's buttocks in closer to you will open the airway. Be sure you can see baby's nostrils, so they can breathe.

Breastfeeding should feel like a pull and tug at the breast. It should not be painful. If it hurts you, baby is getting less milk than he could.

If the latch is not right or is painful, break the suction by inserting a clean finger between your breast and baby's gum. You'll hear a soft pop. Then you can pull your nipple from baby's mouth.

Taking Your Baby Off Your Breast

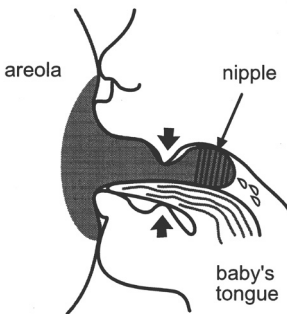
It is important to release the suction of the baby's mouth before you stop the feeding. Sometimes babies will let go of your breast on their own. If yours doesn't, gently place one of your clean fingers into the corner of baby's mouth, between the gums. You should hear a soft pop and feel baby let go. If you forget and just pull them off the breast, your nipples may become sore.

Preventing Sore Nipples

The most current studies tell us that how a baby's mouth is placed on the nipple and areola determines if nipples hurt.

Your nipples may feel tender and strange as you begin to breastfeed. Some breastfeeding people feel initial discomfort at the very beginning of a latch that goes away after a few moments. This should go away after the first week or so. If your nipples continue to hurt as the baby nurses, break the suction and reposition the infant to latch correctly.

Sore nipples are usually caused by your baby's mouth or body being in the wrong position. Check your baby's body position. Make sure your baby is up at breast level, their body is facing your breast, and your breast is correctly supported. Then check your baby's mouth position. Make sure your baby's mouth is wide open, the nipple is on top of baby's tongue, and lips are not tucked in.



After feeding, express a couple of drops of breast milk on each nipple and let it air dry. Nipple tenderness usually disappears within one to two weeks.

For sore nipples, you may use comfort gel pads around the areola. A barrier ointment such as coconut oil or vegetable shortening may help and is safe for baby. Blistering, cracking, bleeding, and/or pain that continues during or between feedings is NOT normal. Check with a breastfeeding or lactation specialist listed in the front of the book if you have any of these problems. She is available for questions after discharge. The resource section of the La Leche League website (LLL.org) also offers helpful information. If you need help with breastfeeding while you are in the hospital, please ask your nurse.

Breastfeeding Positions

Breastfeeding While Sitting Positions

Place a pillow on your lap and put the baby on top of it. This will bring your baby up to the level of your breasts and will make it easier to nurse. The baby's nose, tummy, and knees should be facing directly into your chest. Be sure the baby doesn't have to turn their head to the side in order to latch on to your breast.

Cradle Hold. Place a pillow or two in your lap to support your baby at breast level. Place your baby's head in the bend of your arm and hold baby's bottom in your hand. Turn his body so his tummy is next to yours and he faces your breast.



Cradle Hold

Cross-Cradle Hold. This hold gives you better control over the baby's head to bring him into the breast.

Position baby tummy-to-tummy as in the cradle hold, but hold them with the opposite arm so that your hand supports baby's back and the lower back of their head. Support your breast with your free hand. After baby has latched on, you may wish to switch your arms back to the cradle hold.

Football Hold. If you have had a cesarean, this may be the hold you'll want to use until you heal. This hold is often used to breastfeed twins at the same time.

Put a pillow or two at your side to support your baby and arm. With baby's body tucked against your side, support your baby's neck and the lower back of their head with your hand. Baby's feet and bottom should be pointed to the back of the bed or chair.

Your baby's nose should be just in front of your nipple. If baby is too low, or if their head needs to bend to reach your nipple, use as many pillows as necessary to raise baby's body to a comfortable height.

Use your free hand to support your breast. Remember to bring your baby TOWARD your breast. Don't lean over to put your nipple in his mouth.



Football Hold

Laid-Back or Biological Nurturing

Lean back on a couch or bed about half-way between sitting up straight and lying flat. Support your back and head with pillows or blankets.

Place baby flat against your chest, between your breasts and allow baby to move themselves toward your breast using their whole body. Baby will quickly move to and latch onto your breast with little help from you. You may find nursing in this position to be most comfortable and satisfying.



Laid-Back Position

Side-Lying Position

Lie on your side with one pillow supporting your back and one between your knees supporting your top leg.

Place the baby on their side with baby's tummy touching your tummy.

Baby's nose should be just in front of your nipple. If baby has to reach for your nipple, lay them on a firm pillow to bring them up to breast level. Use your free hand to support your breast. Bring the baby onto the breast with baby's mouth wide open.

This position is easiest if you had a cesarean delivery. It works well if you are still sore from the delivery or for night feedings.



Side-Lying Position

How Long to Nurse and How Often

How Often. For the first several days, your baby should nurse whenever he shows feeding cues or about 8 to 12 times in 24 hours. Don't go longer than 3 to 4 hours between feedings, and more often during growth spurts. Alternate the breast you start with at each feeding. A safety pin on your bra strap or elastic band on your wrist can help you keep track.

Dramatic changes are happening your first week of breastfeeding, so be patient. Your milk production and baby's feeding needs are adjusting. Here's an idea of the volume of milk at each feeding:

- 1 teaspoon each feeding the first couple of days
- 1 ounce the fourth or fifth day
- 2 to 6 ounces at one month

How long. Baby is getting colostrum or milk as long as you can hear that your baby swallows after every few sucks. Feedings may be longer at first. Baby can stay at the breast until they stop swallowing, fall asleep, or let go. If your baby is sucking and swallowing, there is no need to interrupt the feeding. Let baby finish on that breast. When baby finishes with the first breast, try to burp. Then see if baby wants to nurse on the second breast.

If baby does not want the other breast, start with it at the next feeding. Babies do not have to nurse both breasts at the same feeding. When full, you babies may close their eyes and relax their arms and legs.

Getting enough. By 2 weeks, newborns will usually gain back the weight they lost during the first few days. Checking your baby's diapers will help you decide if they are getting enough to eat. The first month, baby should wet at least 6 diapers per day and have at least 3 small bowel movements daily. A breastfed baby's stool is mustard-yellow, and soft. (After about a month, bowel movements may be less often, and there may even be a day or more between them.)

You can be confident that your baby is feeding well if he has:

- At least 6 wet diapers per day (24 hours).
- At least 3 bowel movements per day (24 hours).
- 8 to 10 good feedings in 24 hours.
- Babies relax their arms and legs and close their eyes when full.

Babies vary their feedings throughout the day. They may cluster closer together or space them farther apart at other times. Baby may suddenly need to feed more often right before a growth spurt. If you follow your baby's feeding cues and allow baby to nurse as long and as often as baby desires, you should make all the milk baby needs to keep them happy.

If baby says they're hungry, they are right! Babies feed when they need to and stop when they are done. They don't know how to tell time and they don't know how to count (breasts).

Feeding Guidelines for Baby's First Six Months		
Age of baby	How often to feed	Feedings in 24 hours
1 to 3 days	When baby shows feeding cues or about every 2 to 3 hours	Usually about 8 to 12
3 to 7 days	When baby shows feeding cues About every 2 to 3 hours day About every 3 to 4 hours night	Usually about 8 to 12
7 to 30 days	When baby shows feeding cues About every 2 to 3 hours day About every 3 to 5 hours night	Usually about 8 to 10
1 to 2 months	When baby shows feeding cues About every 2 to 3 hours day About every 3 to 5 hours night	Usually about 7 to 10
3 to 4 months	When baby shows feeding cues About every 3 to 4 hours day About every 4 to 8 hours night	Usually about 6 to 9
4 to 6 months	Varies	Varies

Baby's Stomach Capacity

Your breasts are making enough milk. On day one, baby's stomach is the size of a cherry. (Approximate actual size according to Ameda and LLI.)



day one
cherry
5-7 ml



one week
walnut
22-27 ml



one month
apricot
60-81 ml

Breastfeeding Diary

Here are the signs that your baby is getting enough:

1. Wet and stool diapers every day during the first week of life
2. Number of wet diapers will increase as your milk supply increases
 - 6 to 8 wet diapers a day by 5 to 7 days of age
 - 2 to 3 stool diapers a day during the first month of life
 - 8 to 12 nursings in 24 hours by 5 to 7 days of age
3. Swallowing heard throughout the nursing
4. Good feedings with frequent swallows heard at each nursing by 5 to 7 days of age. Nurse one breast until the breast is soft and swallowing is not heard, then offer second breast. Occasionally the baby may take only one breast at a nursing.
5. By 2 weeks of age your baby will usually gain back the weight which is normally lost during the first few days of life. In other words, at the 2- or 3-week checkup, your baby will weigh about the same as at birth.

Birth Weight _____ Discharge Weight _____

You may also use this information to answer questions your baby's health care provider may ask you at the 2-week checkup.

	# Feedings	Swallowing (Yes/No)	# Wet Diapers	# Stool Diapers		# Feedings	Swallowing (Yes/No)	# Wet Diapers	# Stool Diapers
DAY 1					DAY 8				
DAY 2					DAY 9				
DAY 3					DAY 10				
DAY 4					DAY 11				
DAY 5					DAY 12				
DAY 6					DAY 13				
DAY 7					DAY 14				

Breastfeeding at Home

Your breasts usually begin to feel full on the third or fourth day after delivery and that lasts two or three days. Some find their breasts become hard and full. This is called *breast engorgement*. If you are experiencing breastfeeding problems, these tips may help:

- Continue to eat a well-balanced diet and drink enough fluids to satisfy your thirst. Keep a snack or drink nearby when you nurse.
- Don't expect to put your baby on a schedule. Most babies will develop their own "pattern" within 6 to 8 weeks. Remember, the more the baby nurses, the more milk your body will produce to feed them. Your baby may nurse more often during growth spurts, usually at 2 to 3 weeks, 6 weeks, and 3 months.
- Your baby doesn't need water, glucose water, or formula unless your baby's care provider says so. Breast milk is all your baby needs for about 6 months after birth.
- All babies need 400IU of vitamin D each day to prevent rickets. Breastfed babies need a supplement starting the first few days.

If you need assistance or support with the care of your breasts or with breastfeeding after you go home, these services can help:

- [womenshealth.gov/breastfeeding](https://www.womenshealth.gov/breastfeeding)
- [ILCA.org](https://www.ilca.org) (International Lactation Consultants)
- [LLLI.org](https://www.llli.org) (La Leche League)
- See more "Breastfeeding Support" on page 91.

You also can call your care provider, WIC clinic, or the La Leche League Help Line listed on the "Front Cover" of this guide.

What to Notice When Feeding

When your baby is nursing, you should not hear any smacking or "kissing" sounds.

Newborns often pause when they are learning to breastfeed. You may need to remind your baby to suck. Use one of your fingers under the breast to apply some gentle pressure under your baby's jaw or under the chin when the baby stops sucking.

Watch how your baby sucks. When first latching on, baby sucks strongly, quickly, and continuously. When the milk starts to flow, baby sucks more slowly and becomes more purposeful and rhythmic. When baby is satisfied, sucking becomes lighter and irregular. Babies often close their eyes during feedings, so don't assume shut eyes are a sign to end the feeding.

What You Will Feel While Breastfeeding

Many breastfeeding people have uterine contractions during feeding. These are known as *afterbirth pains*. These help the uterus quickly return to its pre-pregnant size. If this is your first baby, the contractions may not be noticeable or painful. Some say they notice them more after their second or third delivery.

Many people feel a tingling, full sensation in the breasts as milk “lets down” and begins to flow. You may not feel this during the first few days with the colostrum.

Many get thirsty while breastfeeding a baby. Be sure to drink plenty of fluids and have a glass of water nearby.

With a new baby you will be tired, and nursing may make you feel sleepy. You may need extra rest to recover from the birth and to maintain your milk supply. Take naps when your baby naps.

You might “leak” some milk. This can happen when your breasts are full. Wear breast pads (no plastic backing) inside the bra. Try putting pressure on your breasts by simply crossing your arms to help stop the flow.

Breasts also may leak during intercourse and foreplay. It can be helpful to nurse before having intercourse.

Signs that nursing may not be going well

- Baby does not wake to nurse or falls asleep very soon after going to breast
- Baby cannot stay latched onto the breast
- Pain throughout the feeding
- Clicking, popping, or slurping noises during feeding
- Few wet or poopy diapers

If you are concerned about the way the baby feeds or your milk supply, contact the Lactation Consultant or the Peer Counselors at WIC for help.

Spitting Up

Spitting up small amounts (about 2 tablespoons) is common during early infancy. Jostling or active play after feeding may cause it to increase. Spitting up may be prevented by holding your baby upright or placing baby in an upright position in an infant seat or stroller after feeding. If lying down after feeding, place your baby on the side to prevent choking. Prop a rolled-up blanket behind baby's back to keep them on the side position. (But remember: put baby *back to sleep*. See “Sleep Basics” on page 80). If your baby's spitting up concerns you, contact your care provider.

Burping Your Baby

Burping allows your baby to get rid of air swallowed while feeding. Young babies will fuss when they swallow air, which only makes them swallow more air and feel worse. So burp your baby frequently, even if baby seems comfortable. Breastfed infants may not always burp.

Breast-fed babies can be burped when you switch breasts. Finally, you should burp your baby at the end of each feeding.

Try to burp baby for one to two minutes each time. If baby hasn't burped by the end of the second minute, baby may not need to, so continue feeding or lay baby down. Holding the baby for some time after a feeding is calming and may help a burp to come up if there is one.



Lap burp



Burping sitting up



Shoulder burp

Monitoring Baby's Weight Gain

Newborns lose a little weight the first days but should be back to their birth weight after 10 to 14 days. Your care provider will monitor baby's weight to be sure they're gaining enough. If not, you'll need to wake them up to feed. Your provider will tell you how often. Tell your doctor if your breastfed baby often sleeps more than 4 hours at a time the first month.

While establishing your milk supply, try to nurse on both breasts at each feeding. But sometimes nursing on one breast per feeding is best if:

- You have extra milk. Nursing on one side at a time may help bring milk production in line with baby's needs.
- Your baby is a poor feeder. Nursing on one side means baby's more likely to get the rich hindmilk. Always try the other breast after baby finishes the first one. If they will not nurse on both sides, express the milk in your second breast and save it.

If your breasts become uncomfortably full and begin to hurt, wake your baby to feed. This will synchronize your milk production to your baby's needs and keep you from getting an infection.

Pacifiers

In the first weeks, it's good for babies to suckle the breast for comfort rather than a pacifier. You can use a clean pinky finger to comfort baby for pain relief like when baby gets a shot. Using a pacifier in the first few weeks can make breastfeeding harder. It can lead to fewer feeds, less milk, delayed weight gain, and difficulty with latching.

After 4 to 6 weeks of age when breastfeeding is well established, the Academy of Pediatrics recommends pacifiers. They say this is to reduce the risk of SIDS or Sudden Infant Death Syndrome. Use a pacifier at nap time and bedtime for baby's first year. If baby doesn't want to take the pacifier, don't force it.

If you choose to use a pacifier, there are different types and sizes. The pacifier shield should be wider than your baby's mouth to prevent it from being swallowed. Select a 1-piece model that is dish-washer safe. Buy some extras to replace ones that are lost or worn.

Inspect pacifiers often for signs of wear and replace them as needed. Wash the pacifier often in warm, soapy water. Rinse well in cool water. For safety reasons, never fasten the pacifier around your baby's neck. Do not use any kind of cord.

We support a Baby Friendly setting for you and your baby. We do not give or suggest pacifiers during the hospital stay. We encourage you to wait until breastfeeding is well established. Using a pacifier earlier can cause your baby to feed less often. That leads to problems.

- For baby: greater early weight loss and nipple confusion
- For you: less milk made by you, sore nipples, or engorgement

Breastfeeding and Birth Control

Breastfeeding is NOT a reliable form of birth control. It's true that many breastfeeding people don't have a period until their baby is weaned. But many others start to menstruate while nursing. And you may ovulate before your period starts again.

Breastfeeding Tips

Offer the breast at the earliest signs of feeding cues. Make feedings calm, quiet, leisurely. Avoid noises, bright lights, and distractions during feedings. Feeding is a special time to touch and talk to your infant.

- Wash your hands and nails with soap and water before breastfeeding.
- Breastfeed exclusively to keep up your milk supply and help baby learn to feed. Wait until breastfeeding is well established (usually about 4 weeks) before giving your baby a pacifier or expressed milk from bottles.
- Feeding your baby only breast milk helps you make all the milk that baby needs. It also helps to ensure that baby gets all the milk baby needs.
- Using formula can make it harder to breastfeed. When you use formula instead of breast milk you make less milk, baby doesn't nurse when baby needs to, and is more likely to be sick more often.
- Feed when baby shows feeding cues. It helps your body know how much milk to make - and helps baby be happy.
- Try to find a quiet place to breastfeed. Listen to soothing music.
- Sip a healthy drink (low-fat milk, juice, water) during feedings to help you relax.
- Massaging your breasts may help the milk to flow more easily and help you to make more and the baby to take more milk. Moist heat, like a warm cloth or a warm shower, can also help, when practical.
- Nurse frequently, whenever baby shows feeding cues, to prevent engorgement.
- Your partner or support person can help you to a comfortable position and get baby positioned to feed. They can change diapers, help with a sleepy baby, manage visitors, and watch parent's fatigue level.
- Express a small amount of milk before nursing to soften the areola.
- If the baby is having difficulty latching on due to engorgement, apply moist heat and massage the breast.
- If your breasts are still uncomfortable after nursing, apply an ice pack to them for 10 to 15 minutes.
- After breastfeeding, allow your nipples to air dry or gently pat nipples dry. Use only cotton bra pads. Change them as soon as they get wet.
- Keep a record of your baby's feedings, urine, and stool diapers until his

first checkup appointment. See “Breastfeeding Diary” on page 90.

- Beginning the first 2 months, health experts say that all infants need extra **vitamin D** to prevent rickets. This includes exclusively breastfed babies. Ask your baby's care provider for advice.
- Consult your baby's health care provider or a pharmacist before taking any medicine – prescription or over-the-counter. Do you have questions about medicines? The Lactation Consultant can help answer questions about medicines and your milk. Ask your care provider to help you find the best medicine for you to continue breastfeeding.
- Contact your health care provider if you have mild symptoms that don't go away within 24 hours.
- Also contact if you have severe symptoms that come on suddenly, including:
 - Fever, breast pain, bleeding nipples, pus or blood in milk, rash, lumps, or redness of the breast.

At 6 months or after

Your breast milk has all of the nutrition your baby needs for the first 6 months of life. Baby begins taking solid foods at about 6 months. As baby nurses less frequently, your milk supply will naturally decrease.

- Breastfeeding should continue without decrease when solid foods are started at 6 months or as instructed by your baby's health care provider.
- Solid foods should be given with a spoon or cup, not in a bottle when started.
- Foods should be clean, safe, and available locally.
- Use a puree method to mash food for baby.
- Avoid fruit juice for baby's first year. After that, limit to 4 ounces of juice per day with a meal or snack.
- Continue breastfeeding at least one year, as ample time is needed for your baby to learn to eat solids.

Expressing Breast Milk

You are sometimes unable to nurse for a short while. You may be at work or school or away from your baby for a few hours or even days. You can express or pump your breast milk as many times as baby would feed and keep it for use later. You may find hand expression easier and faster after you learn how to do it.

Before beginning to express your milk in any way, it helps to “warm up” your breasts. Take a few moments to massage your breasts all over with both hands using stroking and circles to comfort. To stimulate the let-down reflex, try to relax and think about or look at a picture of your baby. Add warm, moist heat if it is practical. There is no need for pain during milk expression no matter the method. As with many things, practice makes perfect so keep working until you get the hang of it.

Hand Expression

For a video of a parent learning to hand express, and using hands while pumping, see

- Hand Expression Video
med.stanford.edu/newborns/professional-education/breastfeeding/hand-expressing-milk.html

Here are the steps to hand express breast milk:

1. Wash your hands before pumping and make sure the pumping area and equipment are clean.
2. Place your fingers and thumb either at the edge of your areola or 1 inch or so beyond the edge in a ‘C’ hold. As you learn to remove your milk you will discover your “sweet spots” – where the milk comes out the easiest.
3. Push inward towards your chest.
4. Compress your fingers and thumb together through the breast. Avoid sliding down towards the nipple.
5. Release the pressure, reposition your hand to go all around the areola, and start over again.
6. Go back and forth from one breast to the other.
7. At first, if you are hand expressing during the first 48 hours after delivery, you may only see drops but as your milk production comes in you will start to see sprays of milk.
8. Express your milk into a spoon, or as the volume increases, into a small bowl or into the breast shield and bottle of your pump.
9. It may take 20 to 30 minutes to manually pump both breasts at first, but it's often much shorter after some practice.

Pumping

There are several kinds of pumps:

- Manual pumps
- Hand-held battery-operated pumps
- Small plug-in pumps
- Stronger electric pumps (often rented) which will pump both breasts at once

Manual pumps can be bought at breastfeeding supply stores, some department stores, or check with your local WIC office. Commonly used manual or hand pumps are the cylinder type or the trigger type. The bulb type, which looks like an old-style bicycle horn, is not recommended. It is usually hard to clean and not effective.

Battery or electric pumps are sold at breastfeeding supply stores as well as in many department stores. These can be a single or double breast pump.

A **hospital grade electric breast pump** is stronger and available as a rental. Your Lactation Specialist can give you a list of rental sources. Rental cost may be covered by insurance.

You can get more information on BPA and infant feeding supplies from the U.S. Food and Drug Administrations. Visit their website at fda.gov and search for BPA.



Manual Pump



Hand-held Electric Pump



Double Electric Pump

Storing Expressed Milk

After pumping, follow these steps to store your breast milk:

Step 1. Carefully pour expressed milk into a clean container. Store in small amounts (2 to 4 ounces) to avoid waste. Use only these types of containers to store breast milk.

- Glass or hard BPA-free plastic baby bottle with tight fitting lid to maintain an airtight seal.
- Sterile storage bags made for freezing human milk. Disposable bottle liners should not be used to store breast milk.

Step 2. Label the storage container with the date so you can use the oldest milk first. Add baby's name if it will be delivered to a care provider.

Step 3. Chill the milk at once. Store in the back of the refrigerator, not in the door. If freezing the milk, see below.

Step 4. At feeding, swirl stored breast milk to blend. Breast milk can look clear, bluish, yellowish, or brownish. When stored, it tends to separate in the container. Cream rises to the top. Lighter colored milk settles below. Gently swirl the container to mix the cream back into the rest of the milk. Shaking the milk can cause a breakdown of some of the milk's valuable components.



REMEMBER: Breast milk is safest when stored for the shortest time possible.

When Freezing

Freeze the milk in small amounts – 2 to 4 ounce servings. This reduces waste if the baby does not finish all of it. Allow a 1-inch space at the top of the container for the milk to expand as it freezes. Wait to tighten bottle caps or lids until it is completely frozen. Store near the back of the freezer where it's coldest, not in the freezer door. Always use the oldest milk first.

Breast Milk Storage Guidelines

Guidelines for CDC and the Academy of Breastfeeding Medicine	
Countertop	up to 4 hours
Refrigerator	up to 3 or 4 days
Freezer	within 6 months is best up to 12 months is acceptable
Thawed and refrigerated milk	1-2 hours countertop up to 24 hours in refrigerator do not refreeze human milk

Defrosting and Warming

Breast milk can be fed cold, at room temperature, or warmed.

To defrost frozen breast milk, thaw it in the refrigerator if you have time. You can also hold the closed container under cool and then warm running water. Or place it in a bowl of warm water with the opening above the water line. Swirl the milk in the container, check temperature on your wrist, then serve.

DO NOT defrost or warm milk in a pan on the stove or in the microwave. It breaks down the protein in the milk and may create hot spots in the milk that can hurt your baby.

Remember: Thawed milk must be refrigerated until used, and it must be used within 24 hours. **DO NOT** refreeze unused milk. Discard any milk left in the bottle after a feeding within an hour.



Section If Your Care Provider Says ...

Glossary	102
Prenatal tests	104
3-Hour Glucose, Amniocentesis, Biophysical profile, Chorionic villus sampling (CVS), Kick counts, Non stress test, ultrasound	
Medical condition during pregnancy	106
Anemia, Diabetes, HIV, Hypertension (PIH) and preeclampsia, Rh factor,	
Breech presentation	109
Expecting twins or more	110

Glossary of Terms

AMNIOTIC FLUID: Fluid found in the membrane sac, or bag of waters, which surrounds the baby in the uterus. It acts as a cushion and warms the baby during pregnancy.

AMNIOTOMY: Artificial rupturing of the amniotic sac surrounding baby.

AUGMENTATION OF LABOR: Increasing the strength of labor contractions after labor has begun by giving oxytocin through an IV.

BACK LABOR: Labor felt in the lower back, buttocks, and thighs. Often caused by the position of the baby or the anatomy of the parent. Can be painful. Try position changes, counterpressure, or massage for relief.

BIRTH CANAL: The passageway from the cervix through the vagina.

BRAXTON-HICKS CONTRACTIONS: Intermittent uterine contractions present throughout pregnancy. They can become stronger or more frequent in the last months as the uterus is preparing itself for labor. The cervix does not efface (thin) or dilate (open) with these contractions.

BREECH: Delivery of the baby with the buttocks or feet first.

CERVIX: Lower end of the uterus. It effaces (thins) and dilates (opens) in response to labor contractions.

CESAREAN BIRTH: Surgical delivery of the baby through the abdominal and uterine walls.

CONTRACTIONS: The rhythmical tightening and relaxation of the uterine muscles. During “true” labor, contractions cause the cervix to efface and dilate and help push the baby down and out.

CROWNING: When the presenting part of the baby (usually the crown of the head) is visible at the vaginal opening just before birth.

DILATION: The gradual opening of the cervix to allow the baby to move into the vagina. It is measured from 0 to 10 centimeters.

EFFACEMENT: Gradual thinning and shortening of the cervix. Effacement is measured in percentages, from 0% to 100%.

EFFLEURAGE: Light massage over the abdomen during labor for relaxation.

ENGAGEMENT: When the presenting part of the baby has descended into the opening of the parent’s pelvic bone.

EPISIOTOMY: A surgical incision made into the perineum before delivery that enlarges the vaginal opening for delivery of the baby.

FETAL MONITOR: A machine used to detect and record uterine contractions and the baby’s heart rate.

FORCEPS: Two tong-shaped metal guides which are placed inside the birth canal, one along each side of the baby's head. Forceps help the baby through the birth canal when the parent has difficulty pushing baby out.

FUNDUS: The upper, rounded portion of the uterus.

INDUCTION: The use of medications and/or rupture of membranes to start uterine contractions.

INTRAVENOUS INFUSION (IV): Needle and tubing inserted into a vein in order to give medication or fluids.

LABOR: Rhythmical series of contractions which increase in strength, frequency, and duration and cause the cervix to dilate and efface.

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

MEMBRANE: Membranous sac or bag which contains amniotic fluid. Also known as amniotic sac or bag of waters.

MUCOUS PLUG: A thick plug which blocks the cervical canal during pregnancy. It protects the uterus from bacteria present in the vagina. Sometimes called bloody show because it may have streaks of blood mixed with the mucus.

PELVIS: The basin-shaped ring of bones made up of the hip bones, pubic bones, and sacrum. The baby passes through this ring during birth.

PERINEUM: Skin and muscle surrounding the vagina and rectum.

PLACENTA: The organ attached to the wall of the uterus and connected to the baby by the umbilical cord. The placenta gives the baby nutrition and processes its wastes. Pushed out after labor, it is called *afterbirth*.

POSTPARTUM: After delivery. The period between childbirth and return of the uterus to normal size—approximately six weeks.

STATION: A measurement that indicates the location of the presenting part of the baby in relation to the bony ischial spines of the parent's pelvis.

UMBILICAL CORD: Composed of two arteries and one vein, this cord connects the baby to the placenta. Surrounded by a jelly-like material called Wharton's Jelly.

UTERUS: The muscular reproductive organ in which the baby grows and develops during pregnancy. It contracts during labor to move the baby through the birth canal for delivery. Also called womb.

VACUUM EXTRACTION: Gentle suction through a soft rubber cap on the baby's head which helps the doctor deliver the baby when the parent is having difficulty pushing the baby out. Used instead of forceps.

VBAC: Abbreviation for "Vaginal Birth After Cesarean" delivery.

Prenatal Diagnostic Tests

3-Hour Glucose Tolerance Test for Diabetes

This follow-up test should be done within a week of an abnormal glucose screen. Allow at least 3 hours for the test. Fast for 8 hours or more before the test: do not eat or drink anything but water. To start the test, we draw a blood sample and give you a sweet liquid to drink. Do not eat or drink anything else during the test. Your blood will be drawn every hour for 3 hours to measure your glucose. If the findings indicate, we will refer you to a nutritionist to help you manage diabetes.

Risks and Side Effects. There is little risk involved with having your blood drawn. The soda-like liquid makes some feel queasy.

Amniocentesis

Amniocentesis tests the amniotic fluid that surrounds your baby in the womb. This amniotic fluid contains fetal cells. The test is used to detect Down syndrome or specific genetic disorders. It is usually done between the 15th and 20th weeks of your pregnancy.

Risks and Side Effects. Occasional side effects may include: cramping, leaking amniotic fluid, or bleeding from the vagina. It is rare that a fetus is injured by amniocentesis. If you have concerns, talk with your care provider.

Biophysical Profile

The biophysical profile test may be used if the non-stress test does not give the information needed. It measures five aspects of your baby's well-being. The biophysical profile is done with an ultrasound exam. Your abdomen is covered with a gel to allow the ultrasound wand to glide smoothly over your skin. The test should not hurt. You simply feel gentle pressure as the device moves across your stomach. Test results measure fetal heart rate, fetal breathing, fetal movements, muscle tone, and amniotic fluid volume.

Risks and Side Effects. This test has no known side effects or risks.

Chorionic Villus Sampling

Chorionic villus sampling (CVS) tests a small amount of tissue from the placenta in your womb. The placenta is tissue that develops on the wall of your uterus during pregnancy. It is used to nourish your baby. The test looks for birth defects or inherited disorders. It may be used as follow up to “Nuchal Translucency Screen” on page 21. One advantage of CVS is that it can be done early in the pregnancy. It's generally done between 10 and 13 weeks. Your care provider will discuss the risks and benefits of this test.

Risks and Side Effects. It is rare that the baby is injured by this test. Occasional side effects may include cramping, bleeding from the vagina, and infection. Miscarriage is rare.

Fetal Movement Counts (Kick Counts)

One way to count your baby's movement is to make sure you can feel the baby move or kick 10 times within 2 hours once each day.

Preparing for This Test. This test may be done at home. Please contact your health care provider for any concerns about your baby's movements. If there are too few movements your provider may want you to come to the hospital or office.



Non-Stress Test

One of the most common tests to determine the well-being of your baby is called a *non-stress test*. It allows your care provider to evaluate the baby's heart rate. When the baby moves, their heart rate should increase just like yours does when you walk or run. The increase in heart rate indicates the baby is receiving enough oxygen and nutrients from the placenta.

You are placed in a comfortable position. Often this is on your left side so your baby receives more oxygen. Once you are in the proper position, the external fetal monitor is applied. The test is complete when two sufficient increases in the baby's heart rate are noted. Expect the test to take about 30 minutes. If you eat 30 minutes before the test begins, the baby will usually respond more quickly.

Risks and Side Effects. There are no known risks or side effects to the non-stress test. However, sometimes the test does not give us the information that we need. Further testing may be done to determine baby's well-being.

Ultrasound

A standard ultrasound is recommended for all pregnant people between 18 and 22 weeks to check baby's development and identify major physical defects. You lie on a table with your stomach uncovered from your lower ribs to the hips. A liquid gel on your stomach is used to make the ultrasound wand glide across your skin. In early pregnancy, the ultrasound may be done vaginally. An ultrasound shows the position, size, and number of babies. It also helps estimate when your baby is due to be born and checks for some kinds of problems.

During your ultrasound appointment you may have 2 adult guests. Additional guests will not be able to join you during the ultrasound procedure. Young children must be supervised by an adult other than yourself.

Preparing for This Test. When you come for an ultrasound exam, wear clothes that will let you expose your stomach easily.

Medical Conditions During Pregnancy

Anemia (Iron Deficiency)

Red blood cells carry oxygen from your lungs to all parts of your body and to your baby. You need iron to produce red blood cells. But during pregnancy your body may not absorb iron well. Plus you need extra iron to support your developing baby.

A simple test will tell your care provider if you are *anemic*, or lacking the iron you need. Your care provider may prescribe special iron tablets for you to take. You can help prevent anemia during pregnancy by eating iron-rich foods like:

- Whole-grain, enriched bread or cereal
- Liver, red meat, egg yolks, shellfish
- Raisins, apricots, dried prunes, prune juice
- Green leafy vegetables like spinach
- Peas and beans

You should also eat foods rich in vitamin C, because vitamin C helps your body absorb iron. Good vitamin C foods are citrus fruits (oranges, lemons, grapefruit), strawberries, broccoli, tomatoes.



Diabetes in Pregnancy

Diabetes is caused by a problem with the hormone called *insulin*. The pancreas either stops producing insulin or does not produce enough. Insulin is important because it helps the body use glucose. This sugar is our main source of fuel. Too little insulin means the body's cells do not get enough fuel and blood glucose (blood sugar) is elevated in the parent and baby.

Some people have diabetes before they get pregnant. Others develop diabetes during pregnancy. This condition is called *gestational diabetes*. If you are pregnant and have diabetes (either kind), it is important for the health of you and your baby to control your blood sugar. Uncontrolled diabetes may lead to:

- High blood pressure with pregnancy
- A large baby and a difficult delivery
- Stillbirth

Treatment of Gestational Diabetes. Your care provider may suggest:

- More prenatal visits
- Monitoring your own blood glucose several times a day through a finger stick
- Eating a special diet and discussing your diet with a nutritionist
- Prescribing insulin or oral medication, if needed
- More frequent blood tests
- Tests to determine baby's well-being (non-stress test, ultrasound, biophysical profile)



HIV During Pregnancy and Birth

HIV is a serious viral infection. In some cases people have no symptoms for years. HIV infection can't be cured, but with good medical care and proper treatment, it can be managed.

You can lower the risk of transmitting the HIV virus to your baby. To do this you need good medical care, including frequent prenatal care visits and medicine. Your health care provider may talk to you about:

- How a person is infected. The virus is transmitted through blood, semen, vaginal secretions, and breast milk. It is NOT transmitted through casual contact like kissing, hugging, or sharing household items.
- Safer sex – always use a condom and spermicide.
- Precautions with blood and body fluids.
- Support groups.
- Medication. You will be given medication to take by mouth during your pregnancy. When you are in labor, you may be given medication through an IV. You can also expect your baby to take the medication by mouth (in a liquid) soon after birth. This medication has been found to reduce the chance that the baby will become HIV-positive.

Hypertension (High Blood Pressure) and Preeclampsia

High blood pressure (140/90 or greater) that first occurs during pregnancy is called *gestational hypertension*. It usually happens after the 20th week. It is the most common sign of *preeclampsia*, a serious condition that affects both parent and baby. It can damage the pregnant person's kidneys, liver, brain, heart, eyes, and other organs. Preeclampsia may require early delivery of the baby.

Signs of Preeclampsia. You should call your health care provider immediately if you have:

- A sudden weight gain of more than 2 pounds per week
- Swelling of the face, hands, or fingers
- Headaches
- Blurred vision or you see spots
- Breathing difficulty
- Shoulder or upper abdomen pain
- Nausea or vomiting after 20 weeks

If left untreated, both parent and baby can be seriously affected, so it's important to follow your care provider's instructions.

Treatment of Preeclampsia. Your care provider may talk to you about:

- Frequent prenatal visits
- Signs and symptoms that the condition is worsening
- Frequent blood work
- Tests to determine baby's well-being (non-stress test, ultrasound, biophysical profile)
- Being less active, bed rest, lying on your left side
- Medication to reduce your blood pressure, if severely high



Rh Factor

A blood sample, usually taken during your first prenatal visit, determines your Rh status. The Rh factor is a problem only when the parent has Rh-negative blood and the baby has Rh-positive blood.

If the condition is not treated, the parent's body will produce antibodies to fight these foreign cells. If they get pregnant again and the next baby is Rh-positive, the antibodies in the parent's blood react. They may attack and destroy the baby's red blood cells. This can cause serious problems for the baby.

Treatment of Rh Factor Problems. If your blood is Rh-negative, you will receive an Rh immunoglobulin (Rhlg) vaccine. It is given at 28 weeks of pregnancy and again after delivery.

Breech Presentation

Babies that are born feet or buttocks first are born breech. This occurs in about 3 to 4 percent of all full-term births.

Some care providers may attempt to turn the baby from the outside before labor starts. This is called an *external cephalic version or ECV*. If this is not successful, a planned cesarean birth is the usual delivery for a breech presentation.

Expecting Twins or More

During Pregnancy. Twins create a somewhat higher medical risk for the parent and babies. Triplets or higher multiples are at much higher risk of poor outcomes. Conditions like gestational diabetes and hypertension and preeclampsia are more likely. One or all infants may have low birth weights. The most significant and common complication of multiples is preterm birth. Babies born too soon and too small.

People expecting multiples will often see their care providers more often and have more tests.

- Prenatal testing in the first trimester helps detect multiples.
- Consider prenatal genetic testing of each fetus. Discuss possible risks, benefits, and results with your care provider.

Those expecting twins will need to eat more. Those of average weight may need an extra 600 calories a day. For triplets, talk with your care provider.

Replace strenuous exercise with low impact activities like swimming, prenatal yoga, and walking. Aim for 30 minutes a day.

The Delivery. Your care provider may discuss delivery of twins at about 38 completed weeks of pregnancy; 35 weeks for triplets. The babies' positions and the time labor starts determine how they are delivered. Twins can often be delivered safely vaginally. Cesareans are more likely than with single babies. On rare occasions, one baby may be born vaginally and the other by cesarean. If you're expecting multiples, read as much as you can about twin pregnancy and parenting multiples.



Section

Special Help

Paternity	112
Adoption	114
Family planning	116
Birth control options	



Paternity

Paternity means father of the baby. It is important for a child to have a legal father. When two people are married, the partner is the legal father of any children born during the marriage. If a child's parents are not married, it is important to take steps to make sure the child has a legal father – even if the birthing person and partner are living together.

Why Establish Paternity

Having a legal father is important to children for many reasons. All children have the right to know who both their parents are. They should know about any special medical conditions in their family. And they have a right to be supported financially by both parents.

With a legal father, a child may get medical insurance. This could be through the father's job, union, or military service. If a child's legal father dies, the child can qualify for benefits including:

- Social Security
- Pensions
- Inheritance rights
- Veterans benefits
- Life insurance

Legal paternity is necessary for a child to claim these benefits or to get monthly child support.

When legal paternity is determined, a child can carry the father's last name. It also allows the father joint-custody rights.

How to Establish Legal Paternity

If the person you name as the father of your child AGREES, determining paternity is easy. The father will be asked to sign an official form stating he is the father. This form, called Affidavit of Paternity, is used by a judge or a hearing officer to establish paternity legally. It should be signed by the father of the baby before the birth certificate is completed in the hospital.

If the person you name as the father of your child DENIES being the father, blood/genetic tests can be done. The tests also can be done if you are unsure who the father is. The easiest way to obtain blood is to collect cord blood at the time of birth. These blood tests are performed by an outside agency for a fee that is not covered by insurance. The father will usually agree to sign the paternity form when results of blood tests show he is the biological father of a child. If a person continues to believe he is not the father, he is entitled to a court hearing.

At the hearing, a judge listens to both sides, looks at the test results, and decides whether or not the person is the child's father.

Your area child support enforcement agency provides child support services. These services often are free or for a small fee. They include:

- Locating the father
- Establishing paternity
- Obtaining a support order
- Collecting child support payments

The county juvenile court also provides information about establishing paternity. You can hire a private attorney if you prefer.

What Happens after Paternity Has Been Established

Under the law, your child is entitled to support from the legal father. His monthly payment is based on both parents' income. This money helps pay for necessary living expenses until the child turns 18 (or older, depending on state law). A parent should seek child support no matter what the father's current situation is – even if he is unemployed or in school. It will make it easier to get that support when the father gets a job.

Parents can get the Affidavit of Parentage form at the hospital, free of charge. Signing it there will save a trip to the courthouse.



A child should know about family medical conditions.

Adoption

Adoption is a legal process. It also has social and emotional aspects. In adoption, children become permanent legal members of another family. There is no one right answer to this decision. Learning what adoption is and how it works can help people make the choice that's right for them. The ChildWelfare.gov website has up-to-date facts and resources. Our hospital social worker can also help.

How Adoption Works

After the baby is born, the social worker will meet with the person giving birth to talk about the adoption plan. The social worker will review options and answer questions. When the person giving birth decides to go ahead with the adoption plan, the type of adoption is decided. The lawyer or agency prepares papers to sign for the adoption.

The adoptive or pre-adoptive parents are the ones who take the baby home from the hospital. The adoptive parents must file legal papers asking the court to let them adopt the baby. A judge has to approve the adoption. That is when the adoption is final and the birthing person's rights to the baby are ended.

Types of Adoption

With an *open adoption*, the birthing person(s) and the adoptive parents meet. They exchange names. *Closed adoption* means the birthing person and adoptive parents do not meet. They do not know each others' names. In a *semi-open adoption*, the agency provides information about the baby to the birthing person and adoptive parents but identities are usually hidden.

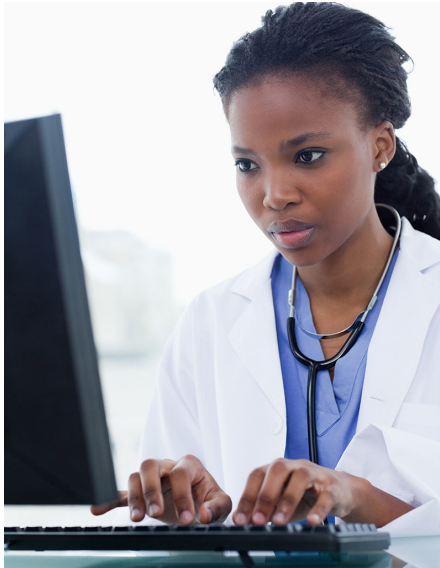
The birthing person may choose to have an independent or an agency adoption. An *independent or private adoption* is arranged by the birthing person. Lawyers or special agencies handle these adoptions. Even with an independent adoption, the court and the state agency responsible for adoptions must approve the new parents and the home setting before the adoption is final.

An *agency adoption* is coordinated through the state or a licensed adoption agency. These agencies select their list of adoptive parents very carefully. One advantage of an agency adoption is that the agency often provides other services the birthing person may need, such as counseling.

Laws regulating agency and private or independent adoptions vary from state to state.

Baby's Health Record

Your baby's health record needs to include the birthing persons' health information. Your baby's health providers will need these details. It will go in the baby's formal medical record. It is best to have the family medical history of both birthing persons if available. The health-related behaviors and information of birthing persons can affect baby's health. These behaviors may include alcohol or drug use, sexual practices, or inherited conditions.



Preventing an Unplanned Pregnancy

The chart below lists some birth control methods. Talk to your care provider to find the best birth control option for you. Remember: whatever method you choose, the only way to help prevent sexually transmitted diseases (STIs) is to use a condom also. If you are breastfeeding, condoms or copper IUDs are good choices. Progestin-only pills, implants, IUDs, or injections are good hormonal choices.

Birth Control Method	* Effectiveness
Advantages	Disadvantages
Abstinence	100%
<ul style="list-style-type: none"> • Most effective way to prevent pregnancy and sexually transmitted infections (STIs) • A good choice the first 4 to 6 weeks after delivery 	<ul style="list-style-type: none"> • You and your partner choose not to have sex • No other side effects
Sterilization (permanent)	99% or greater
<ul style="list-style-type: none"> • Surgery to prevent a person from getting pregnant (tubal ligation) or a male from fathering a child (vasectomy) • The most effective form of permanent birth control • Talk with your care provider. Half who choose to have it done schedule it soon after delivery (postpartum) of their last child. 	<ul style="list-style-type: none"> • Post surgical complications possible • Difficult and often impossible to reverse • Your insurance may require you to sign a consent form 30 days before the procedure and may not cover costs of a reversal • No protection from STIs • Talk with your care provider well before delivery. Check that the hospital offers the procedure.
IUD Intrauterine Device (3 - 10 years)	99% or greater
<ul style="list-style-type: none"> • A small device containing copper or hormones is inserted into the uterus. Prevents egg from being fertilized. • The device lasts 3 to 10 years • Reversible • No need to remember daily 	<ul style="list-style-type: none"> • The device is inserted by your OB or other care provider (possibly within minutes of vaginal or cesarean birth) • May cause changes in menstrual bleeding • No protection from STIs
Implant (3 years)	99% or greater
<ul style="list-style-type: none"> • Continuous birth control for up to 3 years • Reversible. • No need to remember daily 	<ul style="list-style-type: none"> • Minor office surgical procedure • Side effects may include irregular menstrual bleeding • No protection from STIs

Birth Control Method Advantages	Disadvantages	* Effectiveness
Shot/Injection (3 months)		94%
<ul style="list-style-type: none"> • Birth control shot of a hormone that prevents pregnancy for up to 3 months • No need to remember daily 	<ul style="list-style-type: none"> • Must visit care provider every 3 months for injection • Side effects such as weight change, irregular menstrual bleeding • No protection from STIs 	
Vaginal Ring (monthly)		91%
<ul style="list-style-type: none"> • Soft flexible ring inserted in vagina by user each month changes ovulation • Reversible 	<ul style="list-style-type: none"> • Risks and side effects similar to birth control pills • No protection from STIs 	
Patch (weekly)		91%
<ul style="list-style-type: none"> • The small adhesive patch is applied by the user to the skin of the abdomen, upper arm, buttock, or lower torso each week • Reversible 	<ul style="list-style-type: none"> • Risks and side effects similar to birth control pills • Minor skin irritation at application site is possible • Less effective in people over 198 pounds • No protection from STIs 	
“The Pill” (daily)		91%
<ul style="list-style-type: none"> • Continuous birth control protection when taken correctly • Reversible • Decreases menstrual flow and cramping • Mini-pill (progesterone only) especially suitable for breastfeeding parents 	<ul style="list-style-type: none"> • Must remember to take daily • Increases risk of blood clots, heart attack, stroke, especially in smokers over 35 • Temporary side effects may include nausea, breast tenderness, headache, depression, missed periods • No protection from STIs 	
Sponge with Spermicide		83 to 77%
<ul style="list-style-type: none"> • Placed deep in vagina, sponge blocks entrance to uterus • Protects for up to 24 hours after inserting 	<ul style="list-style-type: none"> • Must leave sponge in for at least 6 but no more than 30 hours after sex • Requires planning • No protection from STI 	

Birth Control Method Advantages	Disadvantages * Effectiveness
<p>Condoms and Spermicide (foams, gels, creams, film)</p> <ul style="list-style-type: none"> • Male latex condoms are best method for STI protection including HIV/AIDS • Available over-the-counter • Can use with spermicide and other birth control methods 	<p style="text-align: right;">82% (male condom) 79% (female condom) 72% (spermicide alone)</p> <ul style="list-style-type: none"> • May cause an allergic reaction to latex • Condom should be used only once, apply new for repeated sex • Female condom may not protect against sexually transmitted diseases: should not be used with male condom • Requires planning
<p>Diaphragm or Cervical Cap with spermicide</p> <ul style="list-style-type: none"> • Insert 1 to 2 hours before sex • Your health care provider will prescribe and fit you, and refit you 6 weeks after childbirth • No need to remember daily 	<p style="text-align: right;">82% (diaphragm) 77% to 83% (cervical cap) For people who have had a baby (60%)</p> <ul style="list-style-type: none"> • May cause latex or spermicide allergy, urinary infection • Must use properly, with spermicide • Must wait 6 weeks after delivery to use • Requires planning • Does not protect from STIs
<p>Emergency Contraception</p> <ul style="list-style-type: none"> • Take pill within 72 hours of unprotected sex (most effective if within 24 hours, less up to 120 hours) • Some pill(s) may be available over the counter in some locations 	<p style="text-align: right;">87% (Levonorgestrel) 66% to 75% (Ulipristal Acetate)</p> <ul style="list-style-type: none"> • Care provider must prescribe some, approved for use up to 5 days after sex • Nausea, cramps, fatigue for few days • Does not replace regular birth control
<p>Natural Family Planning/ Periodic Abstinence</p> <ul style="list-style-type: none"> • Avoid sex during most fertile times of menstrual cycle • Requires no other intervention 	<p style="text-align: right;">75%</p> <ul style="list-style-type: none"> • Careful planning and body awareness: no sex for up to half of menstrual cycle • Not for those with irregular cycles or who recently had a baby • No protection from (STIs)

NOTE: Effective rates are for “typical” use. The method was not always used correctly or with every act of intercourse, or was used correctly but failed anyway.

Care Notes

Index

- Abuse and Violence 48
- Activity 50
- Admission 67
- Adoption 114
- Affidavit of Parentage 113
- AIDS/HIV
 - Testing 21
 - What If HIV 107
- Alcohol 39
- Alpha Feto-Protein 21
- Amniocentesis 104
- Anemia 106
- Anxious, scared 37
- Assisted Delivery 74
- Baby's
 - Arrival 123
 - Care At Birth 77
 - Care Provider 52
 - Weight Gain 93
- Backache 34
- Back Labor 69
- Biophysical Profile 105
- Birth Certificate 58
- Birth Control 94, 116–118
- Bleeding, Warning Signs 31
- Blood Pressure 20
- Blood Tests 20
- Bloody Show 64
- Braxton-Hicks 65
- Breast Changes 34, 91
- Breastfeeding 82–99
 - At Home 91
 - Begin in Hospital 83
 - Benefits 82
 - Birth Control 94
 - Decision 56
 - Defrosting, Warming 100
 - Diary 90
 - Expressing Milk 97
 - How Long, Often 88
 - Latch 84
 - Positions 86
 - Prevent Sore Nipples 85
 - Pumping 98
 - Storing Breastmilk 99
 - Tips 95
 - Waking a Sleepy Baby 84
 - What to Notice 91
- Breastfeeding Positions
 - Cradle Hold 86
 - Cross-Cradle Hold 86
 - Football Hold 86
 - Laid-Back, Biologic 87
 - Nurture 87
 - Side-Lying Position 87
- Breastfeeding Warm Line 14
- Breast Milk Storage 100
- Breathing Problems 34
- Breathing, Relaxation 68
- Breech Presentation 109
- Burping Baby 93
- Care at Birth
 - Baby's Medical Care 77
 - Your Medical Care 76
- Car Safety Seat 14, 60
- Car Safety Seats 10
- Cats, Kitty Litter 39
- Cesarean Birth 75
- Checklist
 - Before Delivery 58
 - Packing for Hospital 62
 - Used Car Safety Seat 61
- Childbirth Education 52
- Childbirth Partner 52
- Child Care 11
- Circumcision Decision 53
- Contractions 64
- Cord Blood 53
- COVID-19 5, 23, 50
- Cystic Fibrosis 21
- Delivery
 - Cesarean Birth 75
 - Vaginal 69
 - VBAC 76
- Depression 11, 46
- Diabetes
 - 3-Hour Glucose Tolerance 104
 - Glucose Screen 21
 - In Pregnancy 106
- Domestic Abuse 48–49
- DOs and DON'Ts 38–39
- Doula Guideline 9
- Drugs 39
- Eating Healthy 40–42
- Emotions 34, 37, 46
- Epidural 55
- Exercise and Fitness 44–45
- Expressing Breast Milk 97
- Family Planning 116–118
- Family Support 46
- Family Violence 48–49
- Fatigue 35
- Feeding Baby
 - 6 Months or After 96
 - Breastfeeding 82–99
 - Deciding How 56
- Feeding Cues 83
- Feel Your Best
 - Emotional Changes 34
 - Physical Changes 34
- Fever 31
- Flu (Influenza) Vaccine 23
- Folic Acid 42
- Food Poisoning 42
- Food Stamps 11
- Forceps 74
- GBS Screen 21
- Genetic Carrier Screen 20
- Gestational Diabetes 106
- Gums, Bleeding 34
- Health Insurance 16
- Hemorrhoids 35
- High Blood Pressure 108
- HIV (AIDS) 21, 107
- Hospital
 - Admission 67
 - Care Team 67

Security 78
 Hot Tubs, Saunas 39
 Housing 11–12
 HPV Vaccine 48
 Hypertension 108
 Identity Theft 78
 Indigestion 35
 Induce (Start) Labor 74
 Infant Car Safety Seat 60
 Infant ID, Security 78
 Johns Hopkins Hospital
 Phone Numbers ii
 Kegel Exercises 46
 Kick Counts 105
 Labor
 Back Labor 69
 Breathing, Relaxation 68
 Inducing (Starting) 74
 Pain Options 54–56
 Signs Labor Is Near 64
 True Labor 65
 Videos, Photos in L&D 59
 What to Do 66
 Legal Aid 11–12
 Leg cramps 35
 Lightening 64
 Maps
 Campus Map 7
 Your Care Map 13
 MCHIP Children’s
 Health Insurance Program 10
 Medical Assistance 10–11
 Medical Conditions 106–112
 Medical Leave 16
 Medicines
 Over-the-Counter 22
 Pain Relief for Labor 54
 Month-by-Month 24–30
 Moods, Emotions 37
 Nausea 35
 Nesting 64
 Non-Stress Test 105
 Nosebleeds 35
 Numbness, Tingling 36
 Nutrition 40
 OTC Medicines 22
 Oxytocin (Pitocin) 74
 Pacifiers 94
 Pack for Hospital 62
 Pain Relief Medicines 54
 Parking 7
 Pelvic Exam 20
 Phone Numbers ii
 Photos, Videos 59
 Pitocin 74
 Preeclampsia 108
 Pregnancy Centers 10
 Prenatal Care 16–19
 Prenatal Appointments 17
 Tests, Diagnose 104–106
 Tests, Screening 20
 Visit Schedule 19
 Preterm Labor, Birth 30
 Prevent Pregnancy 116–118
 PROM 30
 Pump Breast Milk 98
 Rh Factor 109
 Rupture Membranes 64, 74
 Sex During Pregnancy 47
 Signs Labor Is Near 64
 Skin Changes 36
 Skin-to-Skin 57, 73, 77
 Sleep Problems 36
 Sleep Safety, Baby 80
 Smoking 39
 Social Security Number 58
 Spitting Up 92
 STI, STD 48
 Storing Expressed Milk 99
 Swelling 36
 Tdap Vaccine 23
 Telehealth 20
 Temp Cash Assist 10–11
 To-Do Checklist 58–61
 Travel 50
 Trimester Growth 24–29
 Twins or More 110
 Ultrasound 20
 Urine Tests 20
 Vaccines 23
 COVID-19 5, 23
 Flu (Influenza) 23
 Tdap 23
 Vacuum in Delivery 74
 Vaginal Discharge 36
 VBAC 76
 Videotapes and Photos 59
 Visitor Guidelines for
 Labor & Delivery 9
 Visualized Relaxation 68
 Vitamins, Nutrients 42
 Vitamin B6 23
 Vitamin C 106
 Vitamin D 96
 Waking a Sleepy Baby 84
 Warning Signs 31, 45
 Water Breaks 64
 Weblinks Support 12
 Weight Gain 41
 When You Are In Labor 7
 WIC Food Program 11
 Your Care at Birth 76



Thank you again for choosing

Johns Hopkins Medicine.

We hope to help you with medical care in the future, should you need us.



JOHNS HOPKINS
M E D I C I N E

The information contained in this guide is general. It is not intended to replace the advice and recommendations of your health care provider. If you have questions or special concerns, please consult your care provider.

© 2023 Johns Hopkins Medicine. All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the copyright owner. Unauthorized use or reproduction is a violation of federal law and international treaties.

Baby Arrives

name

first

middle

last

arrived on

day

date

time

weight

length

pounds

ounces

inches

under the care of

health care provider's name

At Johns Hopkins Medicine

special memories

Your Guide to a Healthy Pregnancy

Journey to a Healthy Baby

Prenatal Care

Pregnancy Health

Decisions Before You Deliver

Labor and Baby's Birth

If Your Provider Says ...

Special Help



JOHNS HOPKINS

M E D I C I N E

**THE JOHNS HOPKINS
HOSPITAL**

600 North Wolfe Street
Baltimore, Maryland 21287
410-955-5000

The Johns Hopkins Outpatient Center

601 N Caroline Street, 6th Floor
Baltimore, MD 21287
(410) 957-0400

Johns Hopkins at Greenspring Station

10753 Falls Rd. – Pavilion 2, Suite 245
Lutherville, MD 21093
(443) 997-0400

East Baltimore Medical Center

1000 E Eager Street
Baltimore, MD 21202
(410) 522-9800

Johns Hopkins at Remington

2700 Remington Ave, Ste. 2000
Baltimore, MD 21211
(667) 312-2400

JOURNEY TO A HEALTHY BABY | Book 1: YOUR GUIDE TO A HEALTHY PREGNANCY

THE JOHNS HOPKINS HOSPITAL