

YOUR GUIDE TO

Healthy Pregnancy

12th edition



Your Guide to a Healthy Pregnancy

Dear Parents-to-Be,

Thank you for choosing Cleveland Clinic for your obstetrics care and allowing us to help bring your new little one(s) into the world! This is an exciting time for you, and we are here to assist in making your experience the best it can be.

Deciding to become a parent is one of the most important decisions you will make in your life. As babies don't come with instruction manuals, you rely on healthcare professionals for education and guidance. Our goal is to provide you with the best possible information to make knowledgeable decisions.

Our highly trained obstetricians, maternal-fetal medicine specialists, and certified nurse midwives deliver more than 13,000 babies a year at three hospital locations. We are excited to be a part of your team and hope that you will continue to rely on us for all your healthcare needs. For more information about our physicians and services, go to clevelandclinic.org/obstetrics.

For birthing patients who have experienced previous sexual violence or other trauma, Cleveland Clinic has developed its M-Power Program to provide trauma-informed care that puts your needs first. This compassionate, holistic approach ensures that you feel prepared for labor, delivery and the postpartum period.

Cleveland Clinic has partnered with the Ohio Department of Health to promote safe sleep, while proactively working to reduce the infant mortality rate. This includes the ABCs of safe sleep. Always place your baby alone on their back in their crib with only a firm mattress and a fitted sheet.

How you will feed your baby is a choice that all parents must face. Cleveland Clinic birthing hospitals support exclusive breast milk feeding for the first six months of life and are taking special steps to create the best possible environment for successful breastfeeding. We strive to renew our Baby Friendly Hospital

designation every five years. The Baby Friendly Hospital Initiative (www.babyfriendlyusa.org) is an international program of the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF).

Breastfeeding offers an unmatched beginning for babies and is recommended by the American Academy of Pediatrics (AAP) as the primary source of nutrition for the first year of life. Scientific studies have shown that breastfed babies are healthier, have reduced risk of sudden infant death syndrome (SIDS), and have fewer cases of childhood cancers and diabetes.

In addition to breastfeeding and birthing assistance, Cleveland Clinic can help you prepare for the big day through classes like "Baby Basics" and "Boot Camp for New Dads." We also offer lactation consultations, informative materials and support groups. Cleveland Clinic pediatricians and family medicine specialists offer assistance in well-baby care at our nearby family health center and hospitals. You can see a schedule of the many prenatal classes we offer at clevelandclinic.org/childbirthed. This book can be accessed at clevelandclinic.org/healthypregnancyguide.

For more information about making an informed decision about your baby's nutrition, we encourage you to speak to your healthcare provider.

Sincerely,

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TYPES OF REMEDY	SAFE MEDICATIONS TO TAKE DURING PREGNANCY
Allergy	Diphenhydramine (Benadryl®) Loratidine (Claritin®) Cetirizine (Zyrtec®)
Cold and flu	Diphenhydramine (Benadryl)* Dextromethorphan (Robitussin®)* Guaifenesin (Mucinex® [plain])* Vicks Vapor Rub® mentholated cream Mentholated or non-mentholated cough drops (Sugar-free cough drops for gestational diabetes should not contain blends of herbs or aspartame) pseudoephedrine ([Sudafed®] after 1st trimester) acetaminophen (Tylenol®)* Saline nasal drops or spray Warm salt water gargle *Note: Do not take the “SA” (sustained action) form of these drugs or the “multi-symptom” form of these drugs. Do not use Nyquil®, or a generic version, due to its high alcohol content.
Diarrhea	Loperamide ([Imodium®] after 1st trimester, for 24 hours only)
Constipation	Methylcellulose fiber (Citrucel®) Docusate (Colace®) Psyllium (Fiberall®, Metamucil®) Polycarbophil (FiberCon®) Polyethylene glycol (MiraLAX®)* *Occasional use only
First aid ointment	Bacitracin Neomycin/polymyxin B/bacitracin (Neosporin®)
Headache	Acetaminophen (Tylenol)
Heartburn	Aluminum hydroxide/magnesium carbonate (Gaviscon®)* Famotidine (Pepcid AC®) Aluminum hydroxide/magnesium hydroxide (Maalox®) Calcium carbonate/magnesium carbonate (Mylanta®) Calcium carbonate (Titalac®, Tums®) *Occasional use only
Hemorrhoids	Phenylephrine/mineral oil/petrolatum (Preparation H®) Witch hazel (Tucks® pads or ointment)

TYPES OF REMEDY	SAFE MEDICATIONS TO TAKE DURING PREGNANCY
Insect repellent	N,N-diethyl-meta-toluamide (DEET®)
Nausea and vomiting	<p>Doxylamine (Unisom SleepTab)</p> <p>Vitamin B6 25mg three times per day in combination with doxylamine 12.5mg at bedtime to prevent nausea.</p> <p>Ginger extract 125-250mg every six hours.</p>
Rashes	<p>Diphenhydramine cream (Benadryl)</p> <p>Hydrocortisone cream or ointment</p> <p>Oatmeal bath (Aveeno®)</p>
Sleep	Diphenhydramine (Unisom SleepGels®, Benadryl)
Yeast infection	Miconazole (Monistat® 7-Day)

*Please note: No drug can be considered 100% safe to use during pregnancy.

1. Mother Care

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Prenatal Care: Your First Visit

Why is prenatal care important?

Regular appointments with your healthcare provider throughout your pregnancy are important to ensure the health of you and your baby. In addition to medical care, prenatal care includes education on pregnancy and childbirth, plus counseling and support.

Frequent visits with your healthcare provider allow you to follow the progress of your baby's development. Visits also give you the opportunity to ask questions. Most healthcare providers welcome your partner at each visit, as well as interested family members.

What happens on my first medical visit?

The first visit is designed to determine your general health and give your healthcare provider clues to the risk factors that might affect your pregnancy. It will typically be longer than future visits. The purpose of the initial visit is to:

- Determine your due date.
- Find out your health history.
- Explore the medical history of family members.
- Determine if you have any pregnancy risk factors based on your age, health, and/or personal and family history.

You will be asked about previous pregnancies and surgeries, medical conditions, and exposure to any contagious diseases. Also, notify your healthcare provider about any medications (prescription or over-the-counter) you have taken or are currently taking. We ask some very personal questions, but be assured that any information you give is strictly confidential.

Physical exam

A thorough physical exam is also part of the first visit. You are weighed, and your blood pressure, heart, lungs and breasts are checked. The first visit also includes a pelvic exam by your healthcare provider.

Pelvic exam

During the pelvic exam, a bimanual internal exam (with two fingers inside the vagina and one hand on the abdomen) will be performed to determine the size of your uterus and pelvis. Your healthcare provider might listen for the baby's heartbeat with a special instrument called a doppler, which uses ultrasound (high frequency sound waves). A doppler usually cannot detect a baby's heartbeat before the 10th to 12th week of pregnancy.

Lab tests

Many lab tests are ordered in your first trimester, including:

- Complete blood count (CBC) screens for blood problems, such as anemia (low iron).
- Hepatitis C.
- RPR screens for syphilis (a sexually transmitted disease).
- Rubella: Tests for immunity (protection) against German measles.
- HBSAG: Tests for hepatitis B (a liver infection).
- Urinalysis: Tests for kidney infection and bladder infection.
- HIV: Screens for antibodies in your blood.
- Cystic Fibrosis: Screens for the presence of the CF gene.

- Type and screen: Determines your blood type and Rh factor (an antigen or protein on the surface of blood cells that causes an immune system response).
- Sickle cell screen.
- Gonorrhea and chlamydia testing.
- SMA: Screens for a gene mutation that causes spinal muscular atrophy.

How is my expected date of delivery determined?

Normally, your due date is 280 days (40 weeks or about 10 months) from the first day of your last period. However, if your periods are not regular or are not 28 days in cycle, your due date might be different from the “280-day rule.” Your healthcare provider might order an ultrasound to determine your due date.

A full-term pregnancy lasts 37 to 42 weeks, so your actual date of delivery can be different from your estimated date of delivery (EDD or EDC). A very small number of babies are actually born on their due dates.

How often should I see my healthcare provider during pregnancy?

The schedule of your prenatal care visits will depend on any special circumstances or risk factors you might have. Generally, it is recommended to have follow-up visits as follows:

- Every four weeks until 28 weeks.
- Every two to three weeks from 28 to 36 weeks.
- Weekly from 36 weeks until delivery.

During these visits, be sure to ask questions. It might help to bring a list of questions with you.

What is monitored at subsequent visits?

During prenatal care visits, your weight and blood pressure will be checked, and a urine sample will be tested for sugar and protein. Your uterus will be measured to follow the growth of the fetus. The fetus’ heartbeat will also be checked (usually beginning in the 10th to 12th week of pregnancy).

Additional tests might be required, depending on your individual condition or special needs.

During the last month, your office visits will include discussions about labor and delivery. Your office visits may include an internal examination to check your cervix (the lower end of your uterus) for thinning (called effacement) and opening (called dilation).

Prenatal Vitamins

What are prenatal vitamins?

Prenatal vitamins are specially formulated multivitamins that mothers-to-be are advised to take for their own health as well as for the health of their babies. These vitamins make up for any nutritional deficiencies in your diet during your pregnancy. While the supplements contain numerous vitamins and minerals, folic acid, iron and calcium content are especially important. The American College of Obstetricians and Gynecologists (ACOG) recommends pregnant and lactating women should aim for an average daily intake of at least 200 mg docosahexaenoic acid (DHA) a day in addition to their prenatal vitamins. Prenatal vitamins, as well as DHA, can be purchased over-the-counter or with a prescription.

Why do pregnant women need high levels of folic acid, iron and calcium?

Taking folic acid can reduce your risk of having a baby with a serious birth defect of the brain and spinal cord, called the neural tube. A baby with spina bifida, the most common neural tube defect, is born with a spine that is not completely developed. The exposed nerves are damaged, leaving the child with varying degrees of paralysis, incontinence, and sometimes mental retardation. Some women are at an increased risk for having a baby with an open neural tube defect. These women include, but are not limited to, those with a family history of spina bifida and those taking anti-epileptic medicines. ACOG recommends additional folic acid for women at an increased risk for having a baby with a neural tube defect. Your doctor can discuss this with you and, in some cases, refer you for genetic counseling.

Neural tube defects develop in the first 28 days after conception. Because about half of all pregnancies are unplanned, the U.S. Public Health Service recommends that all women of childbearing age get 400 micrograms of folic acid each day. There are natural sources of folic acid: green leafy vegetables, nuts, beans and citrus fruits. It is also found in many fortified breakfast cereals and some vitamin supplements.

Taking calcium during pregnancy can prevent a new mother from losing her own bone density as the fetus uses the mineral for bone growth. Taking iron helps both the mother and baby's blood carry oxygen.

While a daily vitamin supplement is no substitute for a healthy diet, most pregnant and lactating women need supplements to make sure they get adequate levels of these minerals.

Medicine Guidelines During Pregnancy

Although some medicines are considered safe during pregnancy, the effects of other medicines on your unborn baby are unknown. Certain medicines can be most harmful to a developing baby when taken during the first three months of pregnancy, often before a woman even knows she is pregnant.

Illegal Drugs/Alcohol

Street drugs are not good for your health, but they are even worse for your unborn baby's health, since drugs are passed to your baby while you are pregnant. Illegal drugs such as angel dust, cocaine, crack, heroin, LSD, marijuana and speed increase the chance that your baby is born with many possible problems. When a pregnant woman drinks alcohol or uses drugs during her pregnancy, so does her baby. These substances can pass through the placenta and to the baby through the umbilical cord. Alcohol, tobacco and drugs can lead to premature birth, birth defects, low birth weight, placental abruption, fetal alcohol spectrum disorders, miscarriage, stillbirth and developmental/behavior problems. According to the March of Dimes, there is no amount of alcohol or marijuana that is proven to be safe during pregnancy. You may know some women who drank regularly during pregnancy and had seemingly healthy babies. You may know some women who had very little alcohol during pregnancy and had babies with serious health conditions. Every pregnancy is different and drinking alcohol may hurt one baby more than another. Due to their small liver, babies cannot break down the alcohol as well as you can.

Heroin is a street drug made from poppy plant seeds and is usually injected with a needle, but it can be smoked or snorted. Using heroin during pregnancy can be dangerous, but don't stop taking it without getting treatment from your healthcare provider first.

Quitting suddenly can cause severe problems. There are drugs that help you gradually reduce your dependence on heroin such as methadone or buprenorphine.

Let your healthcare provider (e.g. physician, pharmacist) know if you have ever used illegal drugs or if you have an addiction to any drugs so he or she can minimize the risk to your baby. They are there to offer treatment and support. You may also call 1.800.662.4357 (National Drug and Alcohol Treatment Referral Service) for more information.

Prescription medicine guidelines

If you were taking prescription medicines before you became pregnant, please ask your healthcare provider about the safety of continuing these medicines as soon as you find out that you are pregnant.

Your healthcare provider will weigh the benefit to you and the risk to your baby when making recommendations about a particular medicine. With some medicines, the risk of not taking them might be more serious than the potential risk associated with taking them.

For example, if you have a urinary tract infection (UTI), your healthcare provider might prescribe an antibiotic. If the urinary tract infection is not treated, it could cause long-term problems for both the mother and her baby. If you are prescribed any new medicine, please inform your healthcare provider that you are pregnant. Be sure to discuss the risks and benefits of the newly prescribed medicine with your healthcare provider.

Good Nutrition During Pregnancy for You and Your Baby

You are now eating for you and your baby. While there are two of you now, you only need to increase your calorie intake by 200 to 300 calories. This guide will help you choose a variety of healthy foods for you and your baby to get all the nutrients you need.

What foods should I eat?

You will need an additional 200 to 300 extra calories from nutrient-dense foods such as lean meats, low fat dairy, fruits, vegetables and whole grain products. It will be important to carefully consider the foods you consume during your pregnancy. This is a time to eat more foods that are nutrient-dense, and fewer sweets and treats. Eat a variety of foods. Use the website www.choosemyplate.gov as a guide to choose the amounts of foods in each food group.

Daily guidelines for eating healthy during pregnancy

- **Calcium:** The body needs calcium to build strong bones and teeth. Calcium also allows the blood to clot normally, nerves to function properly, and the heart to beat normally. The American College of Obstetricians and Gynecologists (ACOG) recommends 1,000 milligrams per day for pregnant and lactating (breastfeeding) women. Women 19 years or younger need 1,300 milligrams a day. Eat or drink four servings of dairy products or foods rich in calcium. Dairy products are the best source of calcium. Other sources of calcium are dark, leafy greens, fortified cereal, breads, fish, fortified orange juices, almonds, and sesame seeds.
- **Folic acid:** Folic acid is used to make the extra blood your body needs during pregnancy. ACOG and the March of Dimes recommend 400 micrograms per day for pregnant women. This amount is included in your prenatal vitamins. The March of Dimes suggest that 70 percent of all neural tube defects can be avoided with appropriate folic acid intake. Some women are at an increased risk for having a baby with an open neural tube defect (including, but not limited to, women with a family history of spina bifida, women on anti-epileptic medication, etc.) ACOG recommends additional folic acid for women at an increased risk for neural tube defect. Your doctor can discuss this with you and, in some instances, refer you for genetic counseling to discuss further. Foods rich in folic acid include lentils, kidney beans, green leafy vegetables (spinach, romaine lettuce, kale and broccoli), citrus fruits, nuts and beans. Folic acid is also added as a supplement to certain foods such as fortified breads, cereal, pasta, rice and flours.
- **Iron:** Iron is an important part of red blood cells, which carry oxygen through the body. Iron will help you build resistance to stress and disease, as well as help you avoid tiredness, weakness, irritability and depression. ACOG recommends you receive 27 total milligrams of iron a day between food and your prenatal vitamin. Good sources include whole grain products, lean beef and pork, dried fruit and beans, sardines, and green leafy vegetables.
- **Vitamin A:** ACOG recommends you receive 770 micrograms of vitamin A daily. Foods rich in vitamin A are leafy green vegetables, deep yellow or orange vegetables such as carrots or sweet potatoes, milk and liver.

- **Daily recommendations:** Include two to three servings of vegetables, two servings of fruits, at least three servings of whole grain bread, cereals, pasta, and two to three servings of lean protein (e.g. meat, fish and poultry).
- **Vitamin D:** Vitamin D works with calcium to help the baby's bones and teeth develop. It also is essential for healthy skin and eyesight. All women, including those who are pregnant, need 600 international units of vitamin D a day. Good sources are milk fortified with vitamin D and fatty fish such as salmon. Exposure to sunlight also converts a chemical in the skin to vitamin D.
- **DHA:** The American College of Obstetricians and Gynecologists (ACOG), recommends pregnant and lactating women should aim for an average daily intake of at least 200 milligram docosahexaenoic acid (DHA) a day in addition to your prenatal vitamins. Prenatal vitamins, as well as DHA, can be purchased over-the-counter or with prescription.
- **Protein:** Protein is an important nutrient needed for growth and development. Protein is needed for energy and to build and repair different parts of your body, especially brain, muscle and blood. A pregnant woman needs additional protein for her baby's growth. Each person needs different amounts of protein depending on their size. A woman weighing 150 pounds needs 75 grams of protein every day. (To estimate, use your pre-pregnant weight and divide by two). Choose a variety of protein-rich foods, which include seafood, lean meat and poultry, eggs, beans and peas, soy products, and unsalted nuts and seeds. Use labels on packaged food to determine how many grams of protein each food provides.
- **Avoid alcohol:** Alcohol has been linked with premature delivery and low birth weight babies, as well as fetal alcohol syndrome.
- **Caffeine:** It is recommended to limit your caffeine intake to < 200 milligrams per day. An 8-ounce cup of coffee has about 100 milligrams of caffeine. An 8-ounce cup of tea has about 25-50 milligrams of caffeine. Try to minimize intake of caffeinated soda.
- **Eat salty foods in moderation:** Salt causes your body to retain water and could lead to an elevation in your blood pressure.
- **Do not diet:** Even if you are overweight, your pregnancy is not an acceptable time to lose weight. You or your baby could be missing essential nutrients for good growth.

Are there foods that are harmful to eat during pregnancy?

There are specific foods that you will want to avoid during your pregnancy. Hormonal changes during pregnancy can have a negative effect on your immune system and put you at greater risk for contracting a food-borne illness. The Centers for Disease Control and Prevention (CDC) has found that contracting the food-borne illness listeria during pregnancy can cause premature delivery, miscarriage and even fetal death. Pregnant women are 10 times more likely to contract listeria.

- You can decrease your chances of contracting listeria by using caution consuming hot dogs, deli meats (e.g., bologna), or fermented or dry sausages unless they are heated to an internal temperature of 165°F or until steaming hot just before serving.
- Avoid getting fluid from hot dog and lunch meat packages on other foods, utensils and food preparation surfaces, and wash hands after handling hot dogs, luncheon meats and deli meats.

- Do not eat soft cheese such as feta, queso blanco, queso fresco, brie, Camembert, blue-veined, or panela (queso panela) unless it is labeled as made with pasteurized milk. Make sure the label says, “MADE WITH PASTEURIZED MILK.”
- Pay attention to labels. Do not eat refrigerated pâté or meat spreads from a deli or meat counter or from the refrigerated section of a store. Foods that do not need refrigeration, like canned or shelf-stable pâté and meat spreads, are safe to eat. Refrigerate after opening.
- Other foods that are more likely to cause foodborne illnesses include sushi, rare or undercooked meats and poultry (chicken), beef, raw eggs, Caesar dressing and mayonnaise. For more information on listeria, go to the CDC, www.cdc.gov/listeria/prevention.html.

Another food of concern for pregnant women is fish. Although fish is a low-fat, healthful protein choice, certain fish have elevated levels of methyl mercury or polychlorinated biphenyls (PCBs), a pollutant in the environment. Consuming fish with high levels of methyl mercury during pregnancy has been associated with brain damage and developmental delay for babies.

- Eating 2-3 servings a week of a variety of fish lower in mercury is safe and recommended for pregnant women.
- The March of Dimes recommends pregnant women avoid all raw and seared fish. Raw fish includes sushi and sashimi, undercooked fin fish, and under-cooked shellfish (such as under-cooked oysters, clams, mussels and scallops).
- Avoid shark, swordfish, king mackerel and tile fish even when cooked as they have higher levels of mercury.

- The March of Dimes cautions against eating fish that may contain higher levels of PCBs. Fish in this category include blue fish, bass, freshwater salmon, pike, trout and walleye.

For more information on safe fish, visit the CDC or the March of Dimes websites.

How much weight should I gain?

Gaining the right amount of weight during pregnancy by eating a balanced diet is a good sign that your baby is getting all of the nutrients he or she needs and is growing at a healthy rate.

Weight gain should be slow and gradual. In general, you should gain about two to four pounds during your first three months of pregnancy and one pound a week for the remainder of the pregnancy. A woman of normal weight before pregnancy can expect to gain 15 to 35 pounds during the pregnancy. You may need to gain more or less depending on whether you are underweight or overweight when you get pregnant. Recommendations also differ if you are carrying more than one baby.

Where does all the weight go?

- Baby: 6 to 8 pounds.
- Placenta: 2 to 3 pounds.
- Blood supply: 3 to 4 pounds.
- Amniotic fluid: 2 to 3 pounds.
- Breast tissue: 0 to 3 pounds.
- Fat stores for delivery and breastfeeding (remainder of weight).
- Uterus increase: 2 to 5 pounds.

Total: 15 to 35 pounds.

What if I am gaining too much weight?

Try to get your weight back on track. Don't consider losing weight or stopping weight gain altogether. You should try to slow your weight

gain to recommended amounts, depending on your trimester. During the first trimester, you should gain two to four pounds total; during the second and third trimester, you should gain one pound per week. Consider trying these diet changes to gain weight more slowly:

- Eat the appropriate portion size and avoid second helpings.
- Choose low-fat dairy products.
- Exercise. Consider walking or swimming on most if not all days.
- Use low-fat cooking methods.
- Limit sweets and high-calorie snacks.
- Limit sweet and sugary drinks.

What if I am not gaining enough weight?

Every woman is different and not everyone will gain at the same rate. You should talk to your doctor if you are concerned that you are not gaining enough. Weight gain can be hindered by nausea and morning sickness. (See suggestions for when you are not feeling well.) Excessive vomiting can be a symptom of hyperemesis gravidarum, which you should discuss with your doctor.

Consider trying these diet changes to gain weight within appropriate ranges:

- Eat more frequently. Try eating five to six times per day.
- Choose nutrient and calorically dense foods such as dried fruit, nuts, crackers with peanut butter, and ice cream.
- Add a little extra cheese, honey, margarine, or sugar to the foods you are eating.

What can I eat if I am not feeling well?

Pregnancy symptoms vary. Some women may have difficulty with morning sickness, diarrhea or constipation. Here are a few suggestions on how to deal with these symptoms. You

may also see the “Medicine Guidelines During Pregnancy” section of this book for safe over-the-counter medicine that may assist with symptoms.

Morning sickness: For morning sickness, try eating crackers, cereal or pretzels before you get out of bed. Eat small meals more frequently throughout the day. Avoid fatty, fried foods.

Constipation: Increase your fiber intake by eating high fiber cereal and fresh fruits and vegetables. Also, make sure you are drinking plenty of water—at least 10 to 12 glasses per day.

Diarrhea: Increase your intake of foods containing pectin and gum fiber to help absorb excess water. Good choices include applesauce, bananas, white rice, oatmeal and refined wheat bread.

Heartburn: Eat small, frequent meals throughout the day, eat slowly and chew thoroughly, avoid spicy or rich foods, and caffeine. Drink fluids between meals, and limit fluid intake during meals. Try not to lie down after eating a meal, and keep your head elevated when lying down. Refer to the “Medicine Guidelines During Pregnancy” section in this book for safe heartburn medications.

Are cravings normal?

Many women will have food cravings during pregnancy, but others do not. If you have food cravings, it's OK to indulge as long as it fits into a healthy diet and does not occur too often.

If you are craving non-food items, such as ice, laundry detergent, dirt, clay, ashes or paint chips, you may have a condition known as pica. You should discuss this with your doctor immediately. Eating non-food items can be harmful to you and your baby and may be a sign of a nutritional deficiency.

Dental Care During Pregnancy

It's vitally important for you to take good care of your oral health while you are pregnant. Pregnancy increases your risk of developing gum disease.

Oral health can affect the health of your developing baby and dental infections have been linked to preterm labor.

Below are some suggestions for maintaining good oral health as well as your baby's health and safety before, during and after your pregnancy.

While you are pregnant

- Tell your dental care providers if you know you are pregnant. This will help them plan for any treatments or procedures. It's always best to complete any major dental treatment before pregnancy. Routine dental care, on the other hand, can be received during the second trimester. As a precautionary measure, dental treatments during the first trimester and second half of the third trimester should be avoided as much as possible. These are critical times in the baby's growth and development, and it's simply wise to avoid exposing the mother to procedures that could in any way influence the baby's growth and development. All elective dental procedures should be postponed until after the delivery.
- Tell your dentist the names and dosages of all medicines you are taking (including medicines and prenatal vitamins prescribed by your doctor) as well as any specific medical advice your doctor has given you to follow. Your dentist might need to alter your dental treatment plan based on this information. Certain drugs, such as tetracycline, can affect the development of your child's teeth and should not be given during pregnancy.
- Avoid dental X-rays during pregnancy. If X-rays are essential, your dentist will use a shield to safeguard you and your baby. Advances in dentistry have made X-rays much safer today than in past decades.
- Don't skip your dental checkup appointment simply because you are pregnant.
- Follow good oral hygiene practices to prevent and/or reduce gingival problems, including brushing your teeth at least twice a day and flossing at least once a day. Use a good-quality, soft-bristled toothbrush. Use a toothpaste that contains fluoride, and brush for at least two minutes to remove the plaque that forms on your teeth.
- If morning sickness is keeping you from brushing your teeth, change to a bland-tasting toothpaste during your pregnancy. Ask your dentist or hygienist to recommend brands.
- Rinse your mouth out with water or a mouth rinse if you suffer from morning sickness and have frequent bouts of vomiting.
- Ask your dentist about the need for fluoride supplements. Since fluoride is found in water and almost all brands of toothpaste, fluoride supplementation might not be necessary.
- Avoid sugary snacks. Sweet cravings are common during pregnancy. However, keep in mind that the more frequently you snack, the greater the chance of developing tooth decay. Additionally, some bacteria responsible for tooth decay are passed from the mother to the child, so be careful of what you eat.

- Eat a healthy, balanced diet. Your baby's first teeth begin to develop about three months into your pregnancy. Healthy diets containing dairy products, cheese and yogurt are good sources of these essential minerals and are good for your baby's developing teeth, gums and bones.
- Consult with your dentist or doctor about the need for anesthesia or other medicines should a dental emergency arise. Make sure you tell all healthcare providers you come into contact with that you are pregnant. This information could change their treatment plans.
- If you experienced any gum problems during pregnancy, such as gingivitis or a pregnancy tumor (a non-cancerous growth in the gums), see your dentist soon after delivery to have your entire mouth examined and your periodontal health evaluated.

Global Obstetrical Care

Most commercial payers cover obstetrical care as “global” care. Each insurance plan is different and you are strongly encouraged to review your benefit plans to ensure what is and is not covered. Your out-of-pocket responsibility depends on your insurance plan.

For insurance plans that do not include obstetrical services, you will work with a Cleveland Clinic financial counselor, who will help guide you through your financial responsibility.

Global obstetrical care includes all services provided to the patient in an uncomplicated pregnancy. The global care includes routine antepartum care, delivery and postpartum care.

Antepartum services include:

- Monthly visits up to 28 weeks (approximately five to six).
- Biweekly visits from 28 to 36 weeks (approximately four).
- Weekly visits from 36 weeks until delivery (approximately three to four).
- Initial and subsequent history and physical exams.
- Routine urinalysis.

Delivery services include:

- Admission to the hospital.
- Admitting history and physical exam.
- Management of uncomplicated labor.
- Delivery (vaginal or C-section).
- Delivery of placenta.
- All routine inpatient care following delivery.

HIV Testing

What is HIV?

HIV is the abbreviation for human immunodeficiency virus, the virus that causes acquired immune deficiency syndrome (AIDS). The virus weakens a person's ability to fight infections and cancers. A person can get HIV by coming into contact with an infected person's body fluids (including blood, semen, vaginal fluids and breast milk). HIV can be spread through:

- Vaginal, oral or anal sex.
- Sharing unclean needles to take drugs.
- Pregnancy (from mother to baby).
- Blood transfusions. (Since 1985, blood donations have been routinely tested for HIV, so infection from blood transfusions is rare.)

About the test

The Centers for Disease Control and Prevention (CDC) recommends that screening for HIV infection should be performed routinely for all patients aged 13 to 64 in all healthcare settings. We will order a HIV test for you as part of your routine blood work. The results of the test remain a part of your medical records and are treated the same way as any other part of your medical record. If you do not want to have a HIV test done, you will need to let us know before we do the blood test.

Given the serious nature of HIV infection and the high likelihood of success in preventing perinatal transmission, it is critically important that pregnant women be tested for HIV. As a result, the U.S. Public Health Service has recommended universal HIV testing of pregnant women since 1995.

- If you are pregnant and are HIV positive, it is critical that you take medications to help protect your unborn baby from becoming infected.

- If HIV infection is found, your healthcare provider can provide more appropriate care. You can also learn ways to stay healthy longer.
- HIV testing helps prevent the spread of HIV.

Do I have to take the test?

No. In Ohio, HIV testing is voluntary and should be made by you and your caregiver. In Florida, the law requires your caregiver to order the test, but patients are free to decline testing.

Neither your decision about whether to be tested nor the tests results themselves will prevent you from receiving healthcare. Please be advised that if you choose not to be HIV tested during pregnancy, the state mandates that your baby be screened for HIV after birth. Therefore, if you have a negative test during your pregnancy, it will likely prevent testing on your baby after birth. Also, if it is not known whether you are HIV positive, breastfeeding— an important part of proper care for your baby—may be delayed. You may choose to visit one of the many sites that offer anonymous testing for HIV. These places perform HIV tests without even taking your name. An anonymous HIV test does not become part of your medical record. For more information on anonymous testing, call the hotline in Ohio at 1.800.332.AIDS or in Florida at 1.800.FLA.AIDS.

What does a negative test result mean?

A negative test means no signs of HIV infection were found in your blood.

Rarely, the test may be negative when you have HIV. This can happen if you have recently acquired the HIV virus. For this reason, if you are at risk for continued exposure to HIV or may have been recently exposed to HIV, you should be tested again two to three months later.

Vaccination During Pregnancy

Why is vaccination necessary?

Vaccines strengthen people's immune systems so their bodies can fight off serious infectious diseases. Vaccines also benefit society by preventing the spread of communicable diseases.

Why do pregnant women need to be vaccinated?

Many women might not realize they are not up-to-date on their immunizations and are susceptible to diseases that can harm them or their unborn child. Pregnant women should talk to their physicians to figure out which vaccines they might need and whether they should get them during pregnancy or wait until after their child is born.

How do I know if a vaccine's ingredients are safe?

All vaccines are tested for safety under the supervision of the Food and Drug Administration (FDA). The vaccines are checked for purity, potency and safety, and the FDA and Centers for Disease Control and Prevention (CDC) monitor the safety of each vaccine for as long as it is in use. Some people might be allergic to an ingredient in a vaccine, such as eggs in the influenza vaccine, and should not receive the vaccine until they have talked to their doctors.

Can a vaccine harm my unborn child?

A number of vaccines, especially live-virus vaccines, should not be given to pregnant women because they might be harmful to the baby. (A live-virus vaccine is made using the live strains of a virus.) Some vaccines can be given to the mother in the second or third trimester of pregnancy, while others should only be administered either at one to three

months before conception or immediately after the baby is born. Vaccines that are offered during pregnancy, such as the flu shot, are recommended for pregnant women.

What happens if I am exposed to a disease while I am pregnant?

Depending on the circumstances, your doctor will weigh the risks of vaccination against the benefits the vaccine can provide.

Which vaccines should I receive while I am pregnant?

The following vaccines are considered safe to give to women who might be at risk of infection:

COVID-19: This vaccine can prevent serious illness in the mother during pregnancy. You can receive the vaccine at any stage of your pregnancy. The Centers for Disease Control and Prevention (CDC) recommends that all pregnant women receive the COVID-19 shot.

Hepatitis B: Pregnant women who are at high risk for this disease and have tested negative for the virus can receive this vaccine. It is used to protect the mother and baby against infection both before and after delivery.

Influenza: This vaccine can prevent serious illness in the mother during pregnancy. You can receive the vaccine at any stage of your pregnancy. The CDC recommends that all pregnant women receive the flu shot.

Tetanus/Diphtheria (Tdap): Tdap should be administered during pregnancy, preferably during the third trimester (after 20 weeks of gestation). If you or your family members did not receive this vaccination during pregnancy, Tdap should be administered immediately after your baby is born, while you are still in the hospital, to ensure pertussis or whooping cough immunity and reduce the risk of transmission to the newborn. The CDC recommends that all pregnant women receive this vaccine, please accept this vaccine.

Which vaccines should pregnant women avoid?

The following vaccines can potentially be transmitted to the unborn child and might result in miscarriage, premature birth or birth defects:

- **Hepatitis A:** The safety of this vaccine hasn't been determined and it should be avoided during pregnancy. Women at high risk for exposure to this virus should discuss the risks and benefits with their doctors.
- **Measles, Mumps, Rubella (MMR):** Women should wait at least one month to become pregnant after receiving these live-virus vaccines. If the initial rubella test shows you are rubella non-immune, then you will be given the vaccine after delivery.
- **Varicella:** This vaccine, used to prevent chicken pox, should be given at least one month before pregnancy.
- **Pneumococcal:** Because the safety of this vaccine is unknown, it should be avoided in pregnancy except for women who are at high risk or have a chronic illness.
- **Oral Polio Vaccine and Inactivated Polio Vaccine:** Neither the live-virus (OPV) nor the inactivated-virus (IPV) version of this vaccine is recommended for pregnant women. Also, the risk of getting polio in the United States is very low.

What side effects can I expect after a vaccination?

Side effects vary from none to those that can occur up to three weeks after vaccination.

If you experience any severe side effects, be sure to tell your doctor. Side effects can include:

- Fatigue.
- Fever.
- Headache.
- Non-contagious rash or red bumps.
- Pain in joints.
- Severe allergic reaction in very rare cases.
- Soreness and redness at injection site.
- Swelling of neck glands and cheeks.

Ask for a vaccine information sheet on the vaccine you have received, or visit the Centers for Disease Control and Prevention, <http://www.cdc.gov/vaccines/spec-grps/pregnant.htm>.

What if I never had chicken pox?

If you have had chicken pox, you are immune. If you have not had the chicken pox, you have likely received the varicella vaccine. If you haven't, you may still be immune. A blood test can make this determination. If you are non-immune and are exposed to active chicken pox, call your doctor's office for direction.

Sexually Transmitted Infections and Pregnancy

Sexually transmitted infections, commonly called STIs, are infections that are spread by having sex with someone who has an STI. Sexually transmitted infections are passed on from sexual activity that involves the mouth, anus or vagina.

Pregnant women with an STI may infect their baby before, during or after the baby's birth. For this reason, your healthcare provider will screen you for most STIs at your first prenatal visit. If you have sex with someone who is infected after your initial screening, you will need to be tested again.

Treatment of STIs is the best way to protect you and your baby.

STIs include:

- Chlamydia.
- Genital herpes.
- Gonorrhea.
- Hepatitis B.
- HIV/AIDS.
- HPV/Genital warts.
- Syphilis.
- Trichomonas vaginalis (“trich”).

What are the symptoms of STIs?

Sometimes, there are no symptoms. If symptoms are present, they might include:

- Bumps, sores or warts near the mouth, anus, penis or vagina.
- Swelling or redness near the penis or vagina.
- Skin rash.

- Painful urination.
- Weight loss, loose stools, night sweats.
- Aches, pains, fever and chills.
- Yellowing of the skin (jaundice).
- Discharge from the penis or vagina (vaginal discharge might have an odor).
- Bleeding from the vagina other than during a monthly period.
- Painful sex.
- Severe itching near the penis or vagina.

How can STIs affect my pregnancy and treatment options?

- **Chlamydia:** Pregnancy seems to be unaffected by chlamydia infection. However, infants exposed to the infection at birth can develop severe eye infections or pneumonia. Mothers with chlamydia are treated with antibiotics and all newborn babies are given antibiotic eye ointment after birth to prevent infections.
- **Genital herpes:** Herpes infection in pregnant women is relatively safe until she gets ready to deliver. Active herpes lesions on the genitals are contagious and can infect the infant during childbirth. Thus, many women are delivered via cesarean section.

Antiviral medications can be given, and a Cesarean section may be indicated.

- **Gonorrhea:** If contracted during pregnancy, the infection can cause mouth sores, fever and blood stream infections. The baby is usually unaffected, but if the baby is born while the mother has an active infection, the baby may develop an eye infection or blindness, joint infections, or blood infections.

Mothers with gonorrhea are treated with antibiotics and all newborn babies are given antibiotic eye ointment after birth to prevent infections.

- **Hepatitis B:** This is a liver infection caused by the hepatitis B virus. If a pregnant woman is infected with hepatitis B, she can transmit the infection to the fetus through the placenta, infecting the newborn baby. In addition, women with hepatitis B are more likely to have premature deliveries. However, early screening and vaccination can prevent the worst outcomes of this infection.

If you have hepatitis B, your doctor will give your newborn baby an injection of antibodies and a vaccine to prevent the baby from becoming infected.

- **HIV/AIDS:** Thanks to the advent of powerful medication combinations, transmission of HIV infection to your infant is almost completely preventable. However, if the disease is passed on, the baby may develop HIV.

Although HIV/AIDS is an incurable disease, you can prevent transmitting the virus to your baby by taking various medications.

- **HPV/genital warts:** The human papillomavirus (HPV), which can cause genital warts, is a common STI that can present with lesions or may have no symptoms at all.

If you contract genital warts during pregnancy, treatment may be delayed until after you deliver. Delivery is only affected if large genital warts are present, and your healthcare provider will discuss delivery options with you.

- **Syphilis:** Syphilis is easily passed on to your unborn child and is likely to cause fatal infections. Untreated infants can be born premature or develop problems in multiple organs, including eyes, ears, heart, skin and bones.

Your healthcare provider will likely prescribe antibiotics to you during pregnancy to reduce the risk of transmission to your baby.

- **Trichomonas vaginalis:** This is a parasite that causes vaginal discharge. If left untreated, babies can be premature and have low birth weight.

This infection is easily treatable with antibiotics.

If you are given an antibiotic to treat an STI, it's important that you take all of your medicine, even if the symptoms go away. Also, never take someone else's medicine to treat your illness. By doing so, you might make it more difficult to treat the infection. Likewise, you should not share your medicine with others.

How can I protect myself from STIs?

Here are some basic steps you can take to help protect yourself from STIs:

- Not having sex is the only sure way to prevent STIs.
- Use a condom every time you have sex. (If you use a lubricant, make sure it is water-based).
- Limit your number of sex partners.
- Practice monogamy. This means having sex with only one person. That person must also have sex with only you to reduce your risk.
- Get checked for STIs. Don't risk giving the infection to someone else or your baby. Just because you have been screened in early pregnancy, doesn't mean you can't contract an STI later in pregnancy. If you have engaged in unprotected sex since your initial STI screening, please request another set of STI screenings from your healthcare provider.
- Don't use alcohol or drugs before you have sex, especially when pregnant. You might be less likely to practice safe sex if you are drunk or high.
- Know the signs and symptoms of STIs. Look for them in yourself and your sex partners.
- Learn about STIs. The more you know about STIs, the better you can protect yourself.

How can I prevent spreading a sexually transmitted infection?

- Stop having sex until you see a healthcare provider and are treated.
- Follow your healthcare provider's instructions for treatment.
- Use condoms whenever you have sex, especially with new partners.

- Don't resume having sex unless your healthcare provider says it's OK.
- Return to your healthcare provider to get rechecked.
- Be sure your sex partner or partners also are treated.

Where can I learn more?

The Centers for Disease Control and Prevention (CDC) Hotline
1.800.232.4636
<http://www.cdc.gov/std/default.htm>

The Florida Department of Health
1.850.245.4303

How Smoking Affects You and Your Baby During Pregnancy

Smoking during pregnancy affects you and your baby's health before, during and after your baby is born. The nicotine (the addictive substance in cigarettes), carbon monoxide, lead, arsenic, and numerous other poisons you inhale from a cigarette are carried through your bloodstream and go directly to your baby.

Smoking while pregnant will:

- Lower the amount of oxygen available to you and your growing baby.
- Increase the chances of miscarriage, stillbirth and Sudden Infant Death Syndrome (SIDS).
- Increase the risk that your baby is born prematurely and/or born with low birth weight.
- Increase your baby's risk of developing respiratory problems.

The more cigarettes you smoke, the greater your baby's chances of developing these and other health problems. There is no safe level of smoking for your baby's health.

Using electronic cigarettes (vaping) during pregnancy isn't safe. Most electronic cigarettes (e-cigarettes) contain nicotine, which permanently damages a baby's developing brain and many other organs. E-cigarette liquids also contain chemicals, flavors and other additives that might not be safe for your baby.

Use of marijuana during pregnancy might increase the risk of having a baby that is smaller at birth. It might also slightly increase the risk of stillbirth. Using marijuana during pregnancy can also harm your health. The American College of Obstetricians and Gynecologists recommends against using marijuana during pregnancy.

How does second-hand smoke affect me and my baby?

Second-hand smoke (also called passive smoke or environmental tobacco smoke) is the combination of smoke from a burning cigarette and smoke exhaled by a smoker. The smoke that burns off the end of a cigarette or cigar contains more harmful substances (tar, carbon monoxide, nicotine and others) than the smoke inhaled by the smoker.

The American Cancer Society states that if you are regularly exposed to second-hand smoke, you increase your and your baby's risk of developing lung cancer, heart disease, emphysema, allergies, asthma and other health problems. Babies exposed to second-hand smoke might also develop reduced lung capacity and are at higher risk for sudden infant death syndrome (SIDS).

What happens if I keep smoking after my baby is born?

If you continue to smoke after your baby is born, you may reduce your supply of breast milk. You also increase increase his or her chance of developing certain illnesses and problems, such as:

- Frequent colds.
- Bronchitis and pneumonia.
- Asthma/wheezing.
- Chronic cough.
- Ear infections.
- High blood pressure.
- Learning and behavior problems later in childhood.
- Sudden Infant Death Syndrome (SIDS).

Why should I quit smoking?

Smoking is the leading cause of preventable death in the United States. By quitting you can:

- Prolong your life.
- Lower your risk of heart disease.
- Lower your risk of developing lung, throat, mouth, pancreatic and bladder cancer.
- Lower your risk of developing breathing problems, such as chronic obstructive pulmonary disease (COPD), asthma and emphysema.
- Lower your risk of developing allergies.
- Raise your energy level.
- Improve your appearance. Your skin will wrinkle less and look better, and your fingers and teeth will not be yellow.
- Improve your sense of smell and taste.
- Feel healthier overall, with improved self-esteem.
- Save a lot of money (the average smoker spends \$2,000 a year for cigarettes).

How can I quit smoking?

There is no one way to quit smoking that works for everyone, since each person has different smoking habits. Here are some tips:

- Hide your matches, lighters and ashtrays.
- Designate your home a non-smoking area.
- Ask people who smoke not to smoke around you.

Decrease caffeine intake. This can decrease your urge to smoke. Also, avoid alcohol, as it also might increase your urge to smoke and is harmful to your baby.

- Change your habits connected with smoking. If you smoke while driving or when feeling stressed, try other activities to replace smoking.
- Keep mints or gum (preferably sugarless) on hand for those times when you get the urge to smoke.
- Stay active to keep your mind off smoking and to relieve tension. Take a walk, exercise or read a book.
- Avoid places where many people smoke.

Look for support from others. Join a support group or smoking cessation program, such as Cleveland Clinic's Smoking Cessation Program. For more information, please call 440.312.6741, or visit <https://my.clevelandclinic.org/tobacco>.

Ohio Quit Line:
1.800.QUIT.NOW (1.800.784.8669);
www.smokefree.gov.

Florida Quit Line:
1.877.U.CAN.NOW (1.877.822.6669);
www.tobaccofreeflorida.com

Should I use a nicotine replacement to help me quit?

Discuss with your healthcare provider whether nicotine replacement therapy is appropriate for you.

How will I feel when I quit?

The benefits of not smoking start within days of quitting. After you quit, you and your baby's heartbeat will return to normal, and your baby will be less likely to develop breathing problems.

You might have symptoms of withdrawal because your body is used to nicotine, the addictive substance in cigarettes. You might

crave cigarettes, be irritable, feel fatigued and very hungry, cough often, get headaches, or have difficulty concentrating.

The withdrawal symptoms are only temporary. They are strongest when you first quit but will go away within 10 to 14 days. When withdrawal symptoms occur, stay in control.

Think about your reasons for quitting. Remind yourself that these are signs that your body is healing and getting used to being without cigarettes. Remember that withdrawal symptoms are easier to treat than the major disease that smoking can cause.

Even after the withdrawal is over, expect periodic urges to smoke. However, these cravings are generally brief and will go away whether you smoke or not.

Don't smoke.

If you smoke again (called a relapse), do not lose hope. Seventy-five percent of those who quit relapse. Most smokers quit three times before they are successful. If you relapse, don't give up. Plan ahead and think about what you will do next time you get the urge to smoke.

High Blood Pressure (Hypertension) During Pregnancy

During pregnancy, high blood pressure (hypertension) can affect the body in different ways than it normally would. Hypertension, especially if it is not well controlled, can cause complications during pregnancy for both the mother and the baby.

What is high blood pressure?

Blood pressure is the force of blood pushing against blood vessel walls. The heart pumps blood into the arteries (blood vessels) that carry the blood throughout the body. High blood pressure means that the pressure in the arteries is above the normal range.

What are the different forms of high blood pressure during pregnancy?

High blood pressure complicates about 10% of all pregnancies. There are several different types of high blood pressure during pregnancy. These types vary in severity and impact on the body and the pregnancy. The forms of high blood pressure during pregnancy include:

- **Chronic hypertension:** High blood pressure that is present before pregnancy.
- **Gestational hypertension:** High blood pressure that first occurs at 20 weeks of pregnancy or later, but no other signs or symptoms of preeclampsia are present. Some women will later develop preeclampsia, while others probably had high blood pressure (chronic hypertension) before the pregnancy.
- **Preeclampsia:** A condition only found in pregnancy. Often after 20 weeks of pregnancy. Preeclampsia is high blood pressure, typically with protein in the urine. It can cause complications with your kidneys, liver and other organs. Preeclampsia can be associated with

seizures (eclampsia). Preeclampsia can also effect the placenta, which can lead to small babies.

- **Chronic hypertension with superimposed preeclampsia:** Preeclampsia, which develops in someone who has chronic hypertension (high blood pressure before pregnancy).

Who is at higher risk of developing preeclampsia during pregnancy?

A woman is more likely to develop preeclampsia if this is her first pregnancy, if she is pregnant with more than one baby, or if she had preeclampsia with a previous pregnancy.

She also is at higher risk for preeclampsia if she has the following:

- Chronic hypertension (high blood pressure before becoming pregnant)
- Diabetes before becoming pregnant
- Gestational diabetes
- Blood clotting disorders
- Lupus
- Obesity with a BMI >30
- Antiphospholipid antibody syndrome
- Maternal age 35 years or older
- Has had gestational hypertension or preeclampsia during past pregnancies
- Has a family history of gestational hypertension
- Kidney disease
- Had in vitro fertilization
- Obstructive sleep apnea

What are the signs and symptoms of preeclampsia?

- Two episodes, at least four hours apart, of high blood pressure: systolic pressure of 140 mmHg or higher, or diastolic pressure of 90 mmHg or higher.
- Protein in your urine
- Low platelets
- Kidney issues
- Liver issues
- Fluid in your lungs
- New headache that won't go away
- Floaters or flashers in your vision

What is the danger of high blood pressure (hypertension) during pregnancy?

High blood pressure (hypertension) during pregnancy can prevent the placenta from receiving enough blood, oxygen and nutrients. The lowered amount of blood to the placenta can lead to a low birth weight. Other complications can occur from high blood pressure during pregnancy. These conditions do not happen to all women with high blood pressure. They can include:

- Seizures in the mother.
- Stroke.
- Temporary kidney failure.
- Liver problems.
- Poor growth in the baby.
- Low fluid around the baby.
- Placental abruption (placenta detaching from the uterus).
- Preterm delivery.

Can high blood pressure (hypertension) during pregnancy be prevented?

Since the cause of high blood pressure during pregnancy is not known, it is not a condition that can usually be prevented. In women at high risk for developing preeclampsia, taking baby aspirin daily for prevention is recommended. High blood pressure during pregnancy can sometimes be managed and controlled with the help of a healthcare provider. However, sometimes preeclampsia will require delivery of the baby. Your blood pressure will be checked regularly during prenatal appointments. If you have any concerns about your blood pressure, speak with your healthcare provider.

Will I still have high blood pressure (hypertension) after the baby is delivered?

High blood pressure during pregnancy typically goes away after the baby is delivered but increases the risk of high blood pressure and heart disease in the future. Women who had chronic hypertension before pregnancy will usually still have the condition after delivery. Sometimes, blood pressure can remain high after delivery, requiring treatment with medication. Your healthcare provider will work with you after your pregnancy to manage your blood pressure.

References

- *ACOG Practice Bulletin* Number 222. June 2020: Gestational Hypertension and Preeclampsia.
- U.S. Department of Health & Human Services, Office on Women's Health. Pregnancy Complications. Accessed 1/22/2019.
- March of Dimes. High Blood Pressure During Pregnancy. Accessed 1/22/2019.

Gestational Diabetes

What is gestational diabetes?

Gestational diabetes is a condition where carbohydrate intolerance develops during pregnancy. This can lead to high blood sugar (glucose) levels. About 2-10% of all pregnant women in the U.S. are diagnosed with gestational diabetes.

Am I at risk for gestational diabetes?

These factors increase your risk of developing diabetes during pregnancy:

- Being overweight or obese before becoming pregnant.
- Family history of diabetes (if your parents or siblings have diabetes).
- Being over age 25.
- Previously giving birth to a baby that weighed more than 9 pounds.
- Previously giving birth to a stillborn baby.
- Having gestational diabetes with an earlier pregnancy.
- Being diagnosed with pre-diabetes.
- Having polycystic ovary syndrome.
- Being Black, Hispanic/Latino, Asian-American, American Indian, or Pacific Islander American.
- Having high blood pressure before pregnancy.
- Having high cholesterol before pregnancy.

Keep in mind that half of women who develop gestational diabetes have no known risk factors.

What causes gestational diabetes?

Gestational diabetes is caused by some hormonal changes that occur in all women during pregnancy. The placenta is the organ that connects the baby (by the umbilical cord) to the uterus and transfers nutrients from the mother to the baby. Increased levels of certain hormones made in the placenta can prevent insulin—a hormone that controls blood glucose—from managing glucose properly. This condition is called insulin resistance. As the placenta grows larger during pregnancy, it produces more hormones and increases this insulin resistance. When this happens, more insulin is needed to keep glucose levels in a safe range.

Usually, the mother's pancreas is able to produce more insulin (about three times the normal amount) to overcome the insulin resistance. If it cannot, glucose levels will rise, resulting in gestational diabetes.

How is gestational diabetes diagnosed?

Gestational diabetes is usually diagnosed between the 24th and 28th week of pregnancy (when insulin resistance usually begins). If you had gestational diabetes before, or if you have risk factors for gestational diabetes, the test may be performed before the 13th week of pregnancy. If the early test is normal, you will be tested again around the 28th week of pregnancy.

To screen for gestational diabetes, you will take a test called the oral glucose tolerance test. You quickly drink a sweetened liquid, which contains 50g of glucose. The body absorbs this glucose rapidly, causing blood sugar levels to rise within 30-60 minutes. A blood sample will be taken from a vein in your arm about 60 minutes after drinking the solution. The blood test measures how the glucose solution was processed by your body.

If your test results are not normal, you will have a similar type of diabetes test in which you have to fast (not eat anything) for 6-8 hours before the test. You will have your blood drawn when you get to the lab. Then, you will quickly drink a sweetened liquid and blood glucose level will be drawn one hour, two hours and three hours later. If two or more of the glucose levels are above the goal range, you have gestational diabetes.

How is gestational diabetes managed?

Gestational diabetes is managed by:

- Checking your blood sugar levels fasting in the morning and one hour after the start of each meal.
- Following specific dietary guidelines given by your doctor, dietitian, or diabetes educator.
- Exercising.
- Taking insulin, if necessary.

How do I monitor my blood sugar if I have gestational diabetes?

Testing your blood sugar at certain times of the day will help determine if your exercise and eating patterns are keeping your blood glucose levels in control, or if you need to take insulin to protect your developing baby. Your doctor will tell you when and how often to test your blood glucose.

You may be instructed to check your blood sugar:

- When you wake up in the morning (fasting).
- Just before meals.
- 1 hour after the start of each meal.

- Target blood glucose reading.
- Fasting 70-95 mg/dL.
- 1 hour after the start of each meal <140 mg/dL.

Testing your blood glucose involves the following steps:

- Pricking your finger with a lancet (a small, sharp needle).
- Putting a drop of blood on a test strip.
- Using a blood glucose meter to display your results.
- Recording the results in a log book.
- Disposing of the lancet and strips properly (in a used “sharps” container or a hard plastic container, such as a laundry detergent bottle).

Your doctor, nurse or diabetes educator will show you how to use a glucose meter. Bring your blood glucose log with you to your doctor appointments and send them in to the doctor taking care of your diabetes weekly. He or she can evaluate how well your glucose levels are controlled, and can decide if changes need to be made to your treatment plan. Remember, as your placenta grows and makes more hormones, you will likely need more insulin to keep your glucose levels in the normal range.

The goal of monitoring is to keep your blood glucose as close to normal as possible. The higher your blood glucose levels are and the more often they are high, the more likely you are to have complications during your pregnancy. Taking insulin during pregnancy is far safer for you and the baby than high glucose levels.

How will my diet change if I have gestational diabetes?

Here are some goals for healthy eating during pregnancy if you have gestational diabetes:

- Eat three small meals and two or three snacks at regular times every day. Do not skip meals or snacks.
- Eat fewer carbohydrates at breakfast than at other meals because this is when insulin resistance is the greatest.
- Try to eat the same amount of carbohydrates during each meal and snack. We recommend 15-30 grams of carbohydrates at breakfast, 30-45 grams at lunch, 45-60 grams at dinner and 15-30 grams for snacks.
- Always eat carbohydrates with a protein or fat.
- Choose foods that are high in fiber, such as whole grain breads, cereals, pasta, rice, fruits and vegetables.
- Eat foods with less sugar and fat.
- Drink at least 8 cups (or 64 ounces) of liquids with no sugar per day.
- Make sure you are getting enough vitamins and minerals in your daily diet. Ask your doctor about taking a prenatal vitamin and mineral supplement to meet the nutritional needs of your pregnancy.

Should I exercise if I have gestational diabetes?

Every pregnant woman should check with her doctor before beginning an exercise program. Your doctor can give you personal exercise guidelines, based on your medical history. Thirty minutes of exercise every day, or most days, will help manage gestational diabetes.

Since both insulin and exercise lower blood glucose, you should follow these additional

exercise guidelines to avoid a low blood glucose reaction:

- Always carry some form of sugar, such as glucose tablets or hard candy.
- Eat one serving of fruit or the equivalent of 15 grams of carbohydrate for most activities lasting 30 minutes. If you exercise right after a meal, eat this snack after exercise.

Do I need to take insulin if I have gestational diabetes?

Based on your blood glucose monitoring results, your doctor will tell you if you need to take insulin injections during pregnancy. If insulin is prescribed for you, your doctor, nurse, or diabetes educator will teach you how to give yourself insulin injections.

As your pregnancy progresses, the placenta will make more pregnancy hormones, and larger doses of insulin may be needed to control your blood glucose. Your doctor will adjust your insulin dosage based on your blood glucose levels throughout the day.

When using insulin, a low blood glucose reaction, or hypoglycemia, can occur if you:

- Do not eat enough food.
- Skip a meal.
- Do not eat at the right time of day.
- Exercise more than usual.
- Take too much insulin.

Symptoms of hypoglycemia include:

- Confusion.
- Dizziness.
- Feeling shaky.
- Headaches.

- Sudden hunger.
- Sweating.
- Weakness.

Hypoglycemia is a serious problem that needs to be treated right away. If you think you are having a low blood sugar reaction:

- Check your blood sugar if you can.
- If your blood sugar is less than 60 mg/dl, eat a food that contains sugar, such as ½ cup of orange or apple juice; 1 cup of skim milk; 4-6 pieces of hard candy (not sugar-free); ½ cup regular soft drink; or 1 Tbsp. of honey, brown sugar or corn syrup.
- Fifteen minutes after eating one of the foods listed above, check your blood sugar. If it is still less than 60 mg/dl, eat another one of the food choices above and call your doctor or midwife. If it is more than 45 minutes until your next meal, eat a bread and protein source to prevent another reaction.
- Record all low blood sugar reactions in your log book, including the date, the time of day the reaction occurred, and how you treated it.

What are some complications of gestational diabetes?

All complications during pregnancy related to diabetes are directly related to glucose control. The higher the glucose levels are and the more often the glucose levels are high, the more likely you and your baby are to have complications.

Since insulin resistance generally does not develop until the 24th week of pregnancy, birth defects are not a common complication of gestational diabetes. (Birth defects generally occur during the first trimester of pregnancy.)

Gestational diabetes may increase your risk of developing high blood pressure during pregnancy (gestational hypertension or preeclampsia).

Cesarean deliveries are more common for women with gestational diabetes.

Babies can grow larger than expected in the uterus.

Extra amniotic fluid can form around your baby.

During delivery, there is an increased risk for the baby's shoulders getting stuck in the birth canal.

After delivery, your baby is at increased risk for low blood sugar, jaundice and difficulty breathing on their own.

Women with gestational diabetes have a 30% risk of having pre-diabetes or type 2 diabetes immediately after pregnancy.

50% of women with gestational diabetes will develop type 2 diabetes in the next 10 years.

Babies born to mothers with diabetes are at an increased risk for developing type 2 diabetes and obesity later in life.

How will labor and delivery be different if I have gestational diabetes?

Labor and delivery are generally not affected by gestational diabetes. However, if the baby has grown too large, a cesarean delivery may be necessary.

It's important to carefully control blood glucose levels during labor so that the baby doesn't develop a high insulin level (because of a high blood glucose level in the mother). If your glucose levels are high, you may need insulin through an IV during labor. Your blood glucose level will be checked every 1-2 hours during active labor and high glucose levels will be treated with insulin.

What happens to my baby after delivery?

Your baby's blood glucose level will be tested immediately after birth. If the blood glucose is low, your baby will be given formula with sugar to drink, or glucose through an intravenous tube in the vein. Your baby may be sent to the neonatal intensive care unit (NICU) for observation during the first few hours after birth to make sure he or she doesn't have a low blood glucose reaction.

If you had gestational diabetes, there is an increased risk that your newborn will develop jaundice. Jaundice is a yellow discoloration of the skin that occurs when there is bilirubin in the baby's blood. Bilirubin is a pigment that is released when extra red blood cells build up in the blood and can't be processed fast enough. Jaundice goes away rapidly with treatment; one form of treatment is to expose your baby to special lights.

Babies born to mothers with diabetes also mature their lungs later and are at an increased risk for difficulty breathing after delivery. If this happens, your baby may go to the NICU for treatment.

Since I have gestational diabetes, does it mean my baby will have diabetes?

Gestational diabetes does not cause diabetes in newborns. Your child's risk of developing diabetes is related to your glucose control during pregnancy, family history, body weight, eating habits and exercise. Breastfeeding can decrease the risk of your baby developing diabetes and obesity later in life.

Will I still have diabetes after I deliver my baby?

Usually, blood glucose levels return to normal after childbirth because the placenta, which was producing the extra hormones that caused insulin resistance, is delivered. Your doctor will

perform a glucose test on you 4 to 12 weeks after delivery. This test is done fasting and tests for pre-diabetes and type 2 diabetes.

Women who have had gestational diabetes have a 60% increased risk of developing type 2 diabetes later in life. Because of this risk, you should let your primary care doctor know that you had gestational diabetes so they can check your blood glucose level during your regular health checkups every year.

By maintaining an ideal body weight, following a healthy meal plan, and exercising, you will be able to reduce your risk of developing type 2 diabetes. Breastfeeding your baby may help you lose your pregnancy weight and allow your blood glucose levels to return to normal faster.

In addition, women who have gestational diabetes during one pregnancy have a 40-50% chance of developing gestational diabetes in the next pregnancy. If you had gestational diabetes during one pregnancy and are planning to get pregnant again, talk to your doctor first so that you can make the necessary lifestyle changes before your next pregnancy. If you do not develop type 2 diabetes before your next pregnancy, you should have an early glucose test at the end of the first trimester during all of your pregnancies.

Toxoplasmosis and Pregnancy

What is toxoplasmosis?

Toxoplasmosis is an infection caused by the protozoan parasite *Toxoplasma gondii* that can threaten the health of an unborn child. You can get the infection from handling soil or cat litter that contains cat feces infected with the parasite. You can also get it from eating undercooked meat from animals infected with the parasite or from uncooked foods that have come in contact with contaminated meat. If you have been infected with *Toxoplasma* once, you usually will not become infected again.

What are the symptoms of Toxoplasma?

Because most people with *Toxoplasma* have no symptoms, it might be difficult to know if you have been infected. When symptoms do appear, they can resemble the flu and include fever, feeling tired, night sweats, feeling achy and swollen lymph glands.

If I was infected with Toxoplasma before my pregnancy, is there a risk to my unborn baby?

With rare exceptions, women who have been infected at least six to nine months before conception develop immunity to *Toxoplasma* and do not pass it on to their babies.

What can happen to my baby if I am infected with Toxoplasma during my pregnancy?

About one-half of women infected with *Toxoplasma* can transmit the infection across the placenta to the unborn baby. Infection early in the pregnancy is less likely to be transmitted to the baby than infection later in the pregnancy. The rate of transmission to the developing baby in the first trimester is 10-15%, 25% in the second trimester and over 60% in the third trimester. However, an early infection is usually more severe than a later one.

Most babies infected during pregnancy show no sign of toxoplasmosis when they are born, but many of them develop learning, visual and hearing disabilities later in life.

How can I tell if my unborn baby has been infected?

If you have maternal toxoplasmosis infection, there are several ways to check if your unborn child has been infected:

- The fluid around the fetus or the fetal blood can be tested for infection.
- About one third of infected babies have a problem that might be visible on an ultrasound.
- The baby's blood can be tested after birth.

Can Toxoplasma be treated during my pregnancy?

The *Toxoplasma* infection can be treated during pregnancy with antibiotic medicine. The earlier the infection is identified and treated, the greater the chance of preventing infection of the unborn child. If the child has already been infected, treatment can make the disease less severe. The baby can also be treated in his or her first year of life.

What can I do to prevent Toxoplasma infection?

The CDC recommends the following prevention tips:

Cook foods at safe temperatures (165 degrees Fahrenheit or above) and use a food thermometer to ensure that meat is cooked thoroughly, leaving no pink in your meat. Juices should run clear.

- Peel or thoroughly wash fruits and vegetables before eating. Wash cutting boards, dishes, counters, utensils and hands with hot, soapy water after they have come in contact with raw foods.
- Wear gloves when gardening and during any contact with soil or sand because it might contain cat feces. Wash hands thoroughly after coming in contact with soil or sand.
- Avoid changing cat litter, if possible. If you must do it, wear gloves and wash your hands thoroughly afterward. Change the litter box daily, keep your cat inside, and do not handle stray or adopted cats. Do not feed your cat raw or undercooked meats.

Coping with the physical changes and discomforts of pregnancy

Your body will be constantly changing during pregnancy, which might cause some discomforts. These might occur in the early weeks of pregnancy, while others will occur only as you get closer to delivery. Other discomforts might appear early and then go away, only to come back later. This is normal and usually does not mean something is wrong.

Some of the most common discomforts and ways to relieve them are described here. Every woman's pregnancy is unique, and some of these discomforts might not affect you. Discuss any concerns with your healthcare provider. Please refer to the "Medicine Guidelines" section for over-the-counter medications to aid with discomforts of pregnancy.

DISCOMFORT	RECOMMENDATIONS
Abdominal pain and discomfort Sharp, shooting pains on either side of your stomach might result from the stretching tissue supporting your growing uterus. These pains might also travel down your thigh and into your leg.	<ul style="list-style-type: none">• Try massage.• Make sure you are getting enough fluids.• Try ice.
Round ligament pain Most common during the second trimester. Sharp pain in the abdomen or hip area that is either on one side or both, may extend to the groin area. Round ligament pain is considered a normal part of pregnancy.	<ul style="list-style-type: none">• Change your position or activity until you are comfortable. Avoid sharp turns or movements.• If you have a sudden pain in your abdomen, bend forward to the point of pain to relieve tension and relax the tissue.• Apply a hot water bottle or heating pad, or take a warm bath or shower.• Rest.

DISCOMFORT	RECOMMENDATIONS
<p>Muscle tightening</p> <p>The muscles in your uterus will contract (tighten) from about the fourth month of pregnancy. Irregular, infrequent contractions are called Braxton Hicks contractions.</p>	<p>Contact your healthcare provider if the pain is severe or constant or if you are less than 36 weeks pregnant and you have signs of pre-term labor.</p> <p>Signs of pre-term (premature) labor:</p> <ul style="list-style-type: none"> • More than four to six contractions (tightening of the muscles in the uterus, which cause discomfort or a dull ache in the lower abdomen) in an hour. • Regular tightening or pain in your back or lower abdomen. • Pressure in the pelvis or vagina. • Menstrual-like cramps. • Bleeding. • Fluid leakage. • Flu-like symptoms, such as nausea, vomiting and diarrhea.
<p>Backaches</p> <p>Backaches are usually caused by the strain put on the back muscles, changing hormone levels and changes in your posture.</p>	<ul style="list-style-type: none"> • Wear low-heeled (but not flat) shoes. • Avoid lifting heavy objects. • Squat down with your knees bent when picking things up instead of bending down at the waist. • Avoid twisting your upper body when lifting. • Sit in a chair with good back support, or place a small pillow behind your lower back. Also, place your feet on a footrest or stool. • Sleep on your left or right side with a pillow between your legs for support. • Apply a hot water bottle or heating pad, take a warm bath or shower, or try ice and/or massage. • Use a supportive mattress and pillows for sleeping.

DISCOMFORT	RECOMMENDATIONS
<p>Backaches cont.</p>	<ul style="list-style-type: none"> • Perform exercises, as advised by your healthcare provider, to make your back muscles stronger and to help relieve the soreness. • See a physical therapist, chiropractor or participate in a low back and pelvic pain shared medical appointment (SMA). Your provider can refer you. • Maintain good posture. Standing up straight will ease the strain on your back. Wear a supportive bra. • Wear a maternity support belt. • If you have pain that is mostly on one side and/or travels down one leg it may be sciatica. Lying on the opposite side/hip may help. Also, try ice, heat and/or massage. • Contact your healthcare provider if you have a low backache that goes around your stomach and does not go away within one hour after you change position or rest. This might be a sign of premature labor.
<p>Bleeding and swollen gums</p> <p>The increase in your volume of circulation and supply of certain hormones might cause tenderness, swelling and bleeding of gums.</p>	<ul style="list-style-type: none"> • Take proper care of your teeth and gums. Brush and floss regularly. • Get a dental checkup early in your pregnancy to make sure your teeth and mouth are healthy. See your dentist if you have a problem.

DISCOMFORT	RECOMMENDATIONS
<p>Breast changes</p> <p>Your breasts may increase in size as your milk glands enlarge and the fatty tissue increases. Your breasts are preparing to produce milk for your baby. Bluish veins might also appear as your blood supply increases. Your nipples will also darken and a thick fluid called colostrum might leak from your breasts. All of these breast changes are normal.</p>	<ul style="list-style-type: none"> • Wear a supportive bra. • Choose cotton bras or those made from other natural fibers. • Increase your bra size as your breasts become larger. Your bra should fit well without irritating your nipples. Try maternity or nursing bras, which provide more support and can be used after pregnancy. • Avoid caffeine. • Tuck a cotton handkerchief or gauze pad into each bra cup to absorb leaking fluid. Nursing pads, which you can buy in a pharmacy, are another option. • Clean your breasts with warm water only. Do not use soap or other products. <p>This is a great time to learn about the benefits of breastfeeding.</p>
<p>Constipation</p> <p>Your hormones, as well as vitamins and iron supplements, might cause constipation (trouble passing stool, or incomplete or infrequent passage of hard stools). Pressure on your rectum from your uterus might also cause constipation.</p>	<ul style="list-style-type: none"> • Add more fiber (such as whole grain foods, fresh fruits and vegetables) to your diet. • Drink plenty of fluids daily (at least 10 to 12 glasses of water and one to two glasses of fruit or prune juice). • Drink warm liquids, especially in the morning. • Exercise daily. • Set a regular time for bowel movements. Avoid straining when having a bowel movement. • Refer to the medication list as you may need to use stool softeners and/or glycerin suppositories.

DISCOMFORT	RECOMMENDATIONS
<p>Difficulty sleeping</p> <p>Finding a comfortable resting position can become difficult later in pregnancy.</p>	<ul style="list-style-type: none"> • Don't take sleep medication on a frequent basis. • Get exercise regularly. • Regulate the temperature in the room you sleep in as best as you can. • Avoid caffeine. • Try drinking warm milk at bedtime. • Try taking a warm shower or bath before bedtime. • Use extra pillows for support while sleeping. Lying on your side, place a pillow under your head, abdomen, behind your back, and between your knees to prevent muscle strain and help you get the rest you need. You will probably feel better lying on your left side. This improves circulation of blood throughout your body.
<p>Dizziness</p>	<ul style="list-style-type: none"> • Move around often when standing for long periods of time to avoid locking your knees. • Turn on your side before rising from a lying down position. • Try to move slowly when standing from a sitting position. Avoid sudden movements. • If you suddenly feel dizzy, sit and lower your head or lie down on your side.
<p>Fatigue</p> <p>Your growing baby requires extra energy, which might make you feel tired. Sometimes, feeling tired might be a sign of anemia (low iron in the blood), which is common during pregnancy.</p>	<ul style="list-style-type: none"> • Get plenty of rest. Go to bed early at night and try taking short naps during the day. • Avoid caffeine. • Maintain a regular schedule, when possible, but pace your activities. Balance activity with rest when needed. • Exercise daily to increase your energy level. • If you think anemia or depression might be a concern, ask your healthcare provider to test your blood.

DISCOMFORT	RECOMMENDATIONS
<p>Frequent urination</p> <p>During the first trimester, your growing uterus and growing baby press against your bladder, causing a frequent need to urinate. This will happen again when the baby's head drops into the pelvis before birth.</p>	<ul style="list-style-type: none"> • Avoid tight-fitting underwear, pants or pantyhose. • Avoid large volumes of fluid in the last hour or two before bedtime. • Contact your healthcare provider if your urine burns or stings. This can be a sign of a urinary tract infection (UTI) and should be treated right away.
<p>Headaches</p> <p>How often headaches occur and how bad they are can vary.</p>	<ul style="list-style-type: none"> • Apply an ice pack to your forehead or the back of your neck. • Rest, sit or lie quietly in a low-lit room. Close your eyes and try to release the tension in your back, neck and shoulders. • See options for pain relief in the medication list. • Contact your healthcare provider if you have nausea with your headaches; if your headache is severe and does not go away; or if you have blurry vision, double vision or blind spots.
<p>Heartburn or indigestion</p> <p>Heartburn (indigestion) is a burning feeling that starts in the stomach and seems to rise to the throat. It occurs during pregnancy because your digestive system works more slowly due to changing hormone levels. Also, your enlarged uterus can crowd your stomach, pushing stomach acids upward.</p>	<ul style="list-style-type: none"> • Eat several small meals each day instead of three large meals. • Eat slowly. • Drink warm liquids such as herbal tea. • Avoid fried, spicy or rich foods, or any foods that seem to give you indigestion. • Don't lie down directly after eating. • Keep the head of your bed higher than the foot of your bed. Or, place pillows under your shoulders to prevent stomach acids from rising into your chest. • See the medication list for antacids you could try.

DISCOMFORT	RECOMMENDATIONS
<p>Hemorrhoids</p> <p>Hemorrhoids are swollen veins that appear as painful lumps on the anus. They might form as a result of increased circulation and pressure on the rectum and vagina from your growing baby.</p>	<ul style="list-style-type: none"> • Try to avoid constipation. Constipation can cause hemorrhoids and will make them more painful. • Try to avoid sitting or standing for long periods of time. Change your position frequently. • Make an effort not to strain during a bowel movement. • Apply witch hazel pads, ice packs or cold compresses to the area, or take a warm tub bath a few times a day to provide relief. Adding Epsom salts to the bath water may help. • Avoid tight-fitting underwear, pants or pantyhose. • Discuss the use of a hemorrhoid treatment with your healthcare provider such as pain relieving topicals and/or some swelling reduction items.
<p>Leg cramps</p> <p>Pressure from your growing uterus can cause leg cramps or sharp pains down your legs.</p>	<ul style="list-style-type: none"> • Be sure to eat and drink foods and beverages rich in calcium (such as milk, broccoli and cheese). • Drink fluids with electrolytes, such as Powerade or Gatorade. However, be aware that these beverages are high in calories due to their sugar content. • Wear comfortable, low-heeled shoes. • Try wearing support hose but avoid any legwear that is too tight. • Elevate your legs when possible. Avoid crossing your legs. • Exercise daily. • Stretch your legs before going to bed. • Avoid lying on your back, since the weight of your body and the pressure of your enlarged uterus can slow the circulation in your legs, causing cramps.

DISCOMFORT	RECOMMENDATIONS
<p>Leg cramps cont.</p>	<ul style="list-style-type: none"> • Gently stretch any muscle that becomes cramped by straightening your leg, flexing your foot and pulling your toes toward you. • Try massaging the cramp, or apply heat or a hot water bottle to the sore area.
<p>Nasal congestion</p> <p>You might have a stuffy nose or feel like you have a cold. Pregnancy hormones sometimes dry out the lining in your nose, making it inflamed and swollen.</p>	<ul style="list-style-type: none"> • Apply a warm, wet washcloth to your cheeks, eyes and nose to reduce congestion. • Don't use nose sprays. They can aggravate your symptoms. • Drink plenty of fluids (at least 10 to 12 glasses of fluids a day) to thin mucus. • Elevate your head with an extra pillow while sleeping to prevent mucus from blocking your throat. • Use a humidifier or vaporizer to add moisture to the air.
<p>Nausea or vomiting</p> <p>Nausea can occur at any time of the day but might be worse in the morning when your stomach is empty (this is often called "morning sickness") or if you are not eating enough.</p> <p>Nausea is a result of hormonal changes and most often occurs early in pregnancy until your body adjusts to the increased production of hormones.</p>	<ul style="list-style-type: none"> • If nausea is a problem in the morning, eat dry foods such as cereal, toast or crackers before getting out of bed. Try eating a high-protein snack such as lean meat or cheese before going to bed. (Protein takes longer to digest). • Eat small meals or snacks every two to three hours rather than three large meals. Eat slowly and chew your food completely. • Sip on fluids throughout the day. Avoid large amounts of fluids at one time. Try cool, clear fruit juices, such as apple or grape juice. • Avoid spicy, fried or greasy foods. • If you are bothered by strong smells, eat foods cold or at room temperature and avoid odors that bother you. • To prevent nausea, take vitamin B6 25mg three times per day and doxylamine 12.5mg at bedtime. You can also try ginger extract 125 to 250mg every six hours to treat nausea.

DISCOMFORT	RECOMMENDATIONS
<p>Nausea or vomiting cont.</p>	<ul style="list-style-type: none"> • If you cannot tolerate your prenatal vitamin in the early part of your pregnancy, you may take folic acid by itself. Ask your provider. • Some people notice they have more saliva (or spit) in their mouths than usual. Hard candy or gum may help this. • Wrist bands that apply pressure in certain spots may help a well, often called sea bands. • Contact your healthcare provider if your vomiting is constant or so severe that you can't keep fluids or foods down. This can cause dehydration and should be treated right away.
<p>Shortness of breath</p> <p>You might feel short of breath when walking up stairs or walking briskly. This is common due to changes in your body and circulation during pregnancy.</p>	<ul style="list-style-type: none"> • Slow down and rest a few moments. Try to avoid rapid breathing. • Raise your arms over your head. This lifts your rib cage and allows you to breathe in more air. • Try to breath from your ribs, not your belly. • Avoid lying flat on your back, and try sleeping with your head elevated.
<p>Stretch marks</p> <p>Stretch marks are scars that form when the skin's normal elasticity is not enough for the stretching required during pregnancy. They usually appear on the abdomen and can also appear on the breasts, buttocks or thighs. While they won't disappear completely, stretch marks will fade after your child's birth. Stretch marks affect the surface under the skin and are usually not preventable.</p>	<ul style="list-style-type: none"> • Be sure that your diet contains enough sources of the nutrients needed for healthy skin (especially vitamins C and E). • Apply lotion to your skin to keep it soft and reduce dryness. • Exercise daily.

DISCOMFORT	RECOMMENDATIONS
<p>Swelling in the feet and legs</p> <p>Pressure from the growing uterus on the blood vessels carrying blood from the lower body causes fluid retention that results in swelling (edema) in the legs and feet.</p>	<ul style="list-style-type: none"> • Drink plenty of fluids (at least 10 to 12 glasses of fluids a day). • Exercise regularly. • Avoid foods high in salt (sodium). • Elevate your legs and feet while sitting. Avoid crossing your legs. • Wear loose, comfortable clothing. Tight clothing can slow circulation and increase fluid retention. • Don't wear tight shoes. Choose supportive shoes with low, wide heels and supportive socks or hose can help. • Keep your diet rich in protein. Too little protein can cause fluid retention. • Notify your healthcare provider if your hands or face swell. This might be a warning sign of preeclampsia or toxemia, a pregnancy-related high blood pressure. • Rest on your side during the day to help increase blood flow to your kidneys
<p>Vaginal discharge</p> <p>Increased blood supply and hormones cause your vagina to increase normal secretions. Normal vaginal discharge is white or clear, non-irritating and, odorless, and might look yellow when on your underwear or panty liners.</p>	<ul style="list-style-type: none"> • Choose cotton underwear or brands made from other natural fibers. • Avoid tight-fitting jeans or pants. • Do not douche. It is possible you can introduce air into your circulatory system or break your bag of waters in later pregnancy. • Avoid feminine sprays or deodorants. • Clean the vaginal area with a mild/unscented soap or just plain water. • Wipe yourself from front to back. • Contact your healthcare provider if you have burning, itching, irritation or swelling; bad odor; bloody discharge; or bright yellow or green discharge. These symptoms could be a sign of infection.

DISCOMFORT	RECOMMENDATIONS
<p>Varicose veins</p> <p>An increased volume of blood and the pressure of your growing uterus can slow your circulation, sometimes causing the veins in your legs to become larger or swollen.</p>	<p>Although varicose veins are usually hereditary, here are some preventive tips:</p> <ul style="list-style-type: none"> • Avoid standing or sitting in one place for long periods. It's important to get up and move around often. • Avoid remaining in any position that might restrict the circulation in your legs (such as crossing your legs while sitting). • Elevate your legs and feet while sitting. • Exercise regularly. • Wear support stockings but avoid any leg wear that is too tight; knee high or waist high is best. Avoid thigh-high legwear.

Finding a Comfortable Position: Correct Posture and Body Mechanics During Pregnancy

What is good posture?

Posture is the position in which you hold your body while standing, sitting or lying down. Good posture during pregnancy involves training your body to stand, walk, sit and lie in positions where the least strain is placed on your back.

What is the correct way to stand?



1. Hold your head up straight with your chin in. Do not tilt your head forward, backward or sideways.
2. Make sure your ear lobes are in line with the middle of your shoulders.
3. Keep your shoulder blades back and your chest forward.
4. Keep your knees straight, but not locked.
5. Stretch the top of your head toward the ceiling.
6. Tighten your stomach, pulling it in and up when you are able. Do not tilt your pelvis forward or backward. Keep your buttocks tucked in when you are able.

7. Point your feet in the same direction, with your weight balanced evenly on both feet. The arches of your feet should be supported with low-heeled (but not flat) shoes.



8. Avoid standing in the same position for a long time.
9. If you need to stand for long periods, adjust the height of the work table to a comfortable level if possible. Try to elevate one foot by resting it on a stool or box. After several minutes, switch your foot position.
10. While working in the kitchen, open the cabinet under the sink and rest one foot on the inside of the cabinet. Change feet every five to 15 minutes.

What is the correct way to sit?

1. Sit up with your back straight and your shoulders back. Your buttocks should touch the back of your chair.

2. Sit with a back support (such as a small, rolled-up towel or a lumbar roll) placed at the hollow of your back. Here's how to find a good sitting position when you're not using a back support or lumbar roll:
 - Sit at the end of your chair and don't slouch completely.
 - Draw yourself up and accentuate the curve of your back as far as possible.
 - Hold for a few seconds.
 - Release the position slightly (about 10 degrees).
3. Distribute your body weight evenly on both hips.
4. Keep your hips and knees at 90 degree angle. Use a foot rest or stool if necessary. Your legs should not be crossed and your feet should be flat on the floor.



Correct sitting position without lumbar support (left) and with lumbar support (right).

5. Try to avoid sitting in the same position for more than 30 minutes.
6. At work, adjust your chair height and workstation so you can sit up close to your work and tilt it up at you. Rest your elbows and arms on your chair or desk, keeping your shoulders relaxed.

7. When sitting in a chair that rolls and pivots, don't twist at the waist while sitting. Instead, turn your whole body.
8. When standing up from the sitting position, move to the front of the seat of your chair. Stand up by straightening your legs. Avoid bending forward at your waist. Immediately stretch your back by doing 10 standing backbends.



It is OK to assume other sitting positions for short periods of time, but most of your sitting time should be spent as described above so there is minimal stress on your back. If you have back pain, sit as little as possible, and only for short periods of time (10 to 15 minutes).

What is the correct driving position



1. Use a back support (lumbar roll) at the curve of your back. Your knees should be at the same level as your hips.
2. Move the seat close to the steering wheel to support the curve of your back. The seat should be close enough to allow your knees to bend and your feet to reach the pedals.

3. Always wear both the lap and shoulder safety belts. Place the lap belt under your abdomen, as low on your hips as possible and across your upper thighs. Never place the belt above your abdomen. Place the shoulder belt between your breasts. Adjust the shoulder and lap belts as snug as possible.
4. If your vehicle is equipped with an air bag, it is very important to wear your shoulder and lapbelts. In addition, always sit back at least 10 inches away from the site where the air bag is stored. On the driver's side, the air bag is located in the steering wheel. When driving, pregnant women should adjust the steering wheel so it is tilted toward the chest and away from the head and abdomen.
4. Stand with a wide stance close to the object you are trying to pick up, and keep your feet firmly on the ground. Tighten your stomach muscles along with your pelvic floor muscles (Kegel) and lift the object using your leg muscles. Straighten your knees in a steady motion. Don't jerk the object up to your body.
5. Stand completely upright without twisting. Always move your feet forward when lifting an object.
6. If you are lifting an object from a table, slide it to the edge of the table so you can hold it close to your body. Bend your knees so you are close to the object. Use your legs to lift the object and come to a standing position.

What is the correct way to lift objects?

1. If you must lift objects, do not try to lift objects that are awkward or are heavier than 20 pounds.
2. Before you lift an object, make sure you have firm footing.
7. Avoid lifting heavy objects above waist level.
8. Hold packages close to your body with your arms bent. Keep your stomach muscles tight. Take small steps and go slowly.
9. To lower the object, place your feet as you did to lift. Tighten your stomach muscles, and bend your hips and knees.



Correct



Incorrect

3. To pick up an object that is lower than the level of your waist, keep your back straight and bend at your knees and hips. Do not bend forward at the waist with your knees straight.

Reaching objects overhead

1. Use a foot stool or chair to bring yourself up to the level of what you are reaching.
2. Get your body as close as possible to the object you need to reach.
3. Make sure you have a good idea of how heavy the object is you are going to lift.
4. Use two hands to lift.

What is the best position for sleeping and lying down?

The best lying or sleeping position might vary. No matter in what position you lie, place a pillow under your head, but not your shoulders. The pillow should be a thickness that allows your head to be in a normal position to avoid straining your back. You might also want to put a pillow between your legs for support.



- Try to sleep in a position that helps you maintain the curve in your back (such as on your side with your knees slightly bent, with a pillow between your knees). Do not sleep on your side with your knees drawn up to your chest. Avoid sleeping on your stomach.
- Select a firm mattress and box spring set that does not sag. If necessary, place a board under your mattress. You can also place the mattress on the floor temporarily if necessary. If you have always slept on a soft surface, it might be more painful to change to a hard surface.

Try to do what is most comfortable for you.

- Try using a back support (lumbar support) at night to make you more comfortable. A rolled sheet or towel tied around your waist might be helpful.
- If sleeping on your back is preferred, use a thin pillow under one side so that you are tipped slightly to one side. This will help you not become dizzy, short of breath or nauseated from being flat on your back by keeping your blood flowing normally in your belly.
- When standing up from the lying position, turn on your side, draw up both knees towards your chest and let your legs gently drop off the bed. Sit up by pushing yourself up with your hands. Avoid bending forward at your waist.

Exercise During Pregnancy

A regular exercise routine throughout your pregnancy can help you stay healthy and feeling your best.

How can I stay fit?

Regular exercise during pregnancy can improve your posture and decrease some common discomforts such as backaches, constipation, bloating, swelling and fatigue. Exercise can also improve mood and assist with sleep. Being fit during pregnancy means safe, mild to moderate exercise at least three times a week, unless you have been otherwise advised by your physician.

If you were physically active before your pregnancy, you should be able to continue your activity in moderation. Don't try to exercise at your former level. Instead, do what's most comfortable for you now. Stay within 70% of your target heart rate (target heart rate can be measured at 220 minus your current age).

If you have never exercised regularly before, you can safely begin an exercise program during pregnancy after consulting with your healthcare provider. If you did not exercise three times a week before getting pregnant, do not try a new, strenuous activity. Start with a low-intensity activity and gradually move to a higher activity level.

Is exercise safe for everyone?

Every pregnant woman should consult with her healthcare provider before beginning an exercise program. Your healthcare provider can give you personal exercise guidelines, based on your medical history.

If you have a medical problem, such as asthma, heart or lung disease, or high blood pressure, exercise might not be advisable for you. Exercise might also be harmful if you have an obstetric condition such as:

- Carrying more than one baby.
- Vaginal bleeding or spotting.
- Low placenta.
- Weak cervix.
- Threatened or recurrent miscarriage.
- Premature ruptured membranes.
- Previous premature births or history of early labor.
- Serious heart or lung disease.
- High blood pressure.

What exercises are safe?

Most exercises are safe to perform during pregnancy, as long as you exercise with caution and you do not overdo it.

The safest and most productive activities are swimming, brisk walking, indoor stationary cycling, prenatal yoga and low-impact aerobics (taught by a certified aerobics instructor). These activities carry little risk of injury, benefit your entire body and can be continued until birth.

Other activities such as jogging can be done in moderation. You might want to choose exercises or activities that do not require great balance or coordination, especially later in pregnancy.

Exercises to avoid

There are certain exercises and activities that can be harmful if performed during pregnancy.

Avoid:

- Holding your breath during any activity.
- Activities during which falling is likely (such as skiing, gymnastics and horseback riding).

- Contact sports such as hockey, softball, football, basketball and volleyball (to reduce your risk of injury).
- Any exercise that might cause even mild abdominal trauma such as activities that include jarring motions or rapid changes in direction.
- Activities that require extensive jumping, hopping, skipping, bouncing or running.
- Deep knee bends, full sit-ups, double leg raises and straight-leg toe touches.
- Bouncing while stretching (bounce stretching is unsafe for everyone).
- Exercises that require lying on your back or right side for more than three minutes (especially after your third month of pregnancy).
- Waist-twisting movements while standing.
- Heavy exercise spurts followed by long periods of inactivity.
- Heavy lifting over 50 pounds.
- Exercise in hot, humid weather (if at all possible), or high altitudes.
- Hot tubs, saunas and steam rooms.
- Scuba diving.

What should an exercise program include?

For total fitness, an exercise program should strengthen and condition your muscles.

Always begin by warming up for five minutes and stretching for five minutes. Include at least 15 minutes of cardiovascular activity. Measure your heart rate at times of peak activity. Your heart rate might range from 140 to 160 beats per minute during activity. Follow aerobic activity with five to 10 minutes of gradually slower exercise that ends with gentle stretching.

Basic exercise guidelines:

- Wear loose-fitting, comfortable clothes, as well as a good support bra.
- Choose shoes that are designed for your type of exercise. Proper shoes are your best protection against injury.
- Exercise on a flat, level surface to prevent injury.
- Consume enough calories to meet the needs of your pregnancy (300 more calories per day than before you were pregnant), as well as your exercise program.
- Finish eating at least one hour before exercising.
- Drink water before, during and after your workout.
- After doing floor exercises, get up slowly and gradually to prevent dizziness.
- Never exercise to the point of exhaustion. If you cannot talk normally while exercising, you are probably over exerting yourself, and you should slow down your activity.

Stop exercising and consult your healthcare provider if you:

- Feel pain.
- Have abdominal, chest or pelvic pain.
- Notice an absence of fetal movement.
- Feel faint, dizzy, nauseous or light-headed.
- Feel cold or clammy.
- Have vaginal bleeding.
- Have a sudden gush of fluid from the vagina or a trickle of fluid that leaks steadily (when your bag of “water” breaks, also called rupture of the amniotic membrane).
- Notice an irregular or rapid heartbeat.

- Have a sudden swelling in your ankles, hands, face or experience calf pain.
- Have increased shortness of breath.
- Have persistent contractions that continue after rest before 37 weeks
- Have difficulty walking.
- Your baby is not as active as usual.

What physical changes might affect my ability to exercise?

Physical changes during pregnancy create extra demands on your body. Keeping in mind the changes listed here, remember that you need to listen to your body and adjust your activities or exercise routine as necessary.

- Your developing baby and other internal changes require more oxygen and energy.
- Hormones produced during pregnancy cause the ligaments that support your joints to stretch, increasing the risk of injury.
- The extra weight and the uneven distribution of your weight changes your center of gravity. The extra weight also puts stress on joints and muscles in the lower back and pelvic area, makes it easier for you to lose your balance.

How soon can I exercise after delivery?

It is best to ask your healthcare provider how soon you can begin your exercise routine after delivering your baby.

Although you might be eager to get in shape quickly, return to your pre-pregnancy fitness routines gradually. Follow your healthcare provider's exercise recommendations.

Most women can safely perform a low-impact activity one to two weeks after a vaginal birth (three to four weeks after a cesarean birth). Do about half of your normal floor exercises and don't try to overdo it. Wait until

about six weeks after birth before running or participating in other high-impact activities.

Listed here are some basic stretching and toning exercises for pregnant women. Remember: Before you start any exercise program, consult with your healthcare provider. Your healthcare provider can give you personal exercise guidelines, based on your medical history.

Stretching Exercises

Stretching makes the muscles limber and warm. Here are some simple stretches you can perform before or after exercise.

- **Neck rotation:** Relax your neck and shoulders. Drop your head forward. Slowly rotate your head to your right shoulder, then back to the middle and over the left shoulder. Complete four, slow rotations in each direction.
- **Shoulder rotation:** Bring your shoulders forward, then rotate them up toward your ears, then back down. Do four rotations in each direction.
- **Swim:** Place your arms at your sides. Bring your right arm up and extend your body forward and twist to the side, as if swimming the crawl stroke. Follow with your left arm. Do the sequence 10 times.
- **Thigh shift:** Stand with one foot about two feet in front of the other, toes pointed in the same direction. Lean forward, supporting your weight on the forward thigh. Change sides and repeat. Do four on each side.
- **Leg shake:** Sit with your legs and feet extended. Move the legs up and down in a gentle shaking motion.
- **Ankle rotation:** Sit with your legs extended and keep your toes relaxed. Rotate your feet, making large circles. Use your whole foot and ankle. Rotate four times on the right and four times on the left.

Muscle Toning Exercises

The following exercises can be done to strengthen the muscles of your vagina, abdomen, pelvic floor, back and thighs.

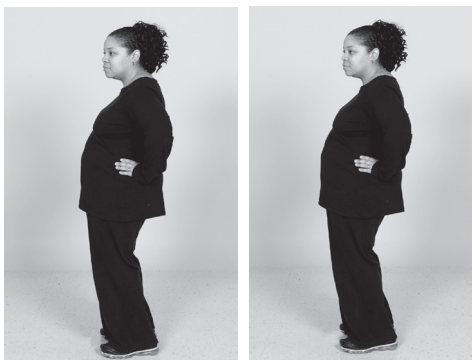
Pelvic tilt

Pelvic tilts strengthen the muscles of the abdomen and lower back, increase hip mobility, and help relieve low back pain during pregnancy and labor.

- **All fours:** On the floor, get on your hands and knees, keeping your hands in line with your shoulders and your knees in line with your hips. Keep your back flat and shoulders relaxed. Inhale. While tightening your abdomen, tuck your buttocks under and tilt your pelvis forward in one motion. Exhale. Relax, being careful not to let your back sag. Continue to breathe. Repeat 10 times.

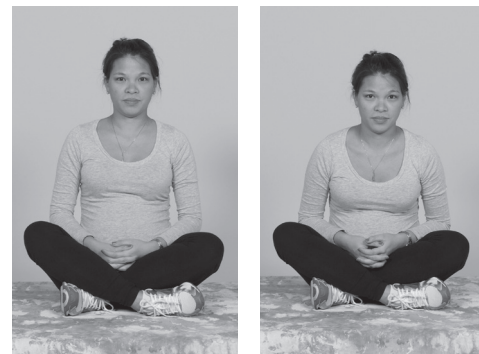


- **Standing:** Stand with your feet about 10 inches apart, legs relaxed and knees slightly bent. Place your hands on your hips. Inhale. While tightening your abdomen, tuck your buttocks under and tilt your pelvis forward in one motion. Exhale and relax. Repeat 10 times.



Tailor exercises

- **Tailor exercises:** Strengthen the pelvic, hip, and thigh muscles, and can help relieve low back pain.
- **Tailor sit:** Sit with your knees bent and ankles crossed. (See illustration 3a) Lean slightly forward. Keep your back straight but relaxed. (See illustration 3b) Use this position whenever possible throughout the day.



3a

3b

- **Tailor press:** Sit with your knees bent and the soles of your feet together. Grasp your ankles and pull your feet gently toward your body. Place your hands under your knees. Inhale. While pressing your knees down against your hands, press your hands up against your knees (counter-pressure). Hold for a count of five.



Kegel exercises

Kegel exercises, also called pelvic floor exercises, help strengthen the muscles that support the bladder, uterus and bowels.

By strengthening these muscles during pregnancy, you can develop the ability to relax and control the muscles in preparation for labor and birth.

Kegel exercises are highly recommended during the postpartum period to promote the healing of perineal tissues, increase the strength of the pelvic floor muscles, and help these muscles return to a healthy state, including increased urinary control.

How to do Kegel exercises

Imagine you are trying to stop the flow of urine or trying to not pass gas. When you do this, you are contracting the muscles of the pelvic floor and are practicing Kegel exercises. While doing Kegel exercises, try not to move your leg, buttock, or abdominal muscles. In fact, no one should be able to tell you are doing Kegel exercises.

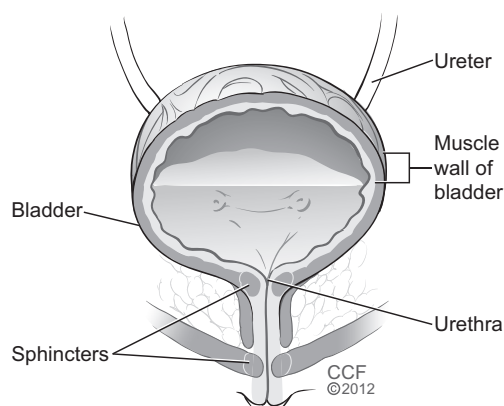
How often should I do Kegel exercises?

Kegel exercises should be done every day. We recommend doing three sets of Kegel exercises a day. Each time you contract the muscles of the pelvic floor, hold for a slow count of 10 seconds and then relax. Repeat this 15 times for one set of Kegels.

Pregnancy, Childbirth and Bladder Control

Many women experience urine leakage, which is also called incontinence, during pregnancy or after they have given birth.

The bladder is a round, muscular organ that is located above the pelvic bones. It is supported by the pelvic muscles. A tube called the urethra allows urine to flow out of the bladder. The bladder muscle relaxes as the bladder fills with urine, while the sphincter muscles help to keep the bladder closed until you are ready to urinate.

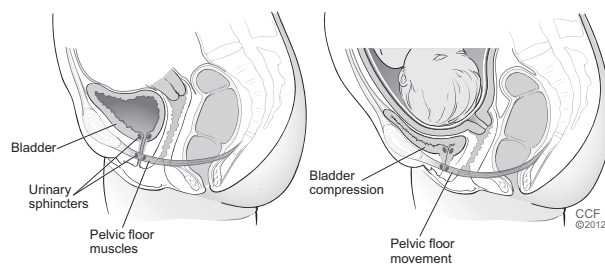


There are other systems of the body that help to control the bladder. Nerves from the bladder send signals to the brain when the bladder is full, and nerves from the brain signal the bladder when it needs to be emptied. All of these nerves and muscles must work together so the bladder can function normally.

How do pregnancy and childbirth affect bladder control?

During pregnancy, you may leak urine between trips to the bathroom. This type of leakage is called stress incontinence, due to the pressure that the unborn baby places on the pelvic floor muscles, the bladder and the urethra.

The extra pressure can make you feel the urge to urinate more often. Stress incontinence may be only temporary and often ends within a few weeks after the baby is born.



Pregnancy, the type of delivery and the number of children a woman has are factors that can increase the risk of incontinence. Women who have given birth, whether by vaginal delivery or cesarean section, have much higher rates of stress incontinence than those who never have had a baby.

Loss of bladder control may be caused by pelvic organ prolapse that sometimes occurs after childbirth. The pelvic muscles can stretch and become weaker during pregnancy or vaginal delivery. If the pelvic muscles do not provide adequate support, your bladder may sag or droop. This condition is known as a cystocele. When the bladder sags, it can cause the urethra's opening to stretch.

Pelvic nerves that regulate bladder function may be injured during a long or difficult vaginal delivery. Delivery with forceps can result in injuries to the pelvic floor and anal sphincter muscles. Prolonged pushing during a vaginal delivery also increases the likelihood of injury to the pelvic nerves and subsequent bladder control problems.

How are bladder control problems diagnosed?

Although most problems with bladder control during or after pregnancy disappear over time, you should visit your doctor if they persist for six weeks or more after you have given birth. It is a good idea to keep a diary to record

your trips to the bathroom, how often you experience urine leakage, and when it occurs.

The doctor will perform a physical examination to rule out various medical conditions and see how well your bladder is functioning.

Your doctor may order various tests, which might include:

- **Urinalysis:** You will be asked to provide a urine sample to be analyzed for possible infections that could cause incontinence.
- **Ultrasound:** Images produced by ultrasound waves can show the kidneys, bladder and urethra.
- **Bladder stress test:** Your doctor will check for signs of urine leakage when you cough forcefully or bear down.
- **Cytoscopy:** A thin tube with a miniature camera at one end is inserted into the urethra so the doctor can examine your bladder and urethra.
- **Urodynamics:** A thin tube is inserted into the bladder to fill it with water so the pressure inside the bladder can be measured.

How are bladder control problems treated?

There are several techniques for treating bladder control problems. Practicing Kegel exercises may help to improve bladder control and reduce urine leakage.

In addition, changing your diet, losing weight, and timing your trips to the bathroom may help.

Drinking beverages such as carbonated drinks, coffee and tea might make you feel like you need to urinate more often. Switching to decaffeinated beverages or water can help to prevent urine leakage. Limit your consumption

of fluids after dinner to reduce the number of trips to the bathroom during the night. You should consume foods high in fiber to avoid being constipated, since constipation may also result in urine leakage.

Excess body weight can put additional pressure on the bladder. Losing weight after your baby is born can help to relieve some of the pressure.

Keeping a record of the times during the day when you are most likely to experience urine leakage, you may be able to avoid leakage by planning trips to the bathroom ahead of time.

After you have established a regular pattern, you might be able to extend the time between trips to the bathroom. By making yourself hold on longer, you will strengthen your pelvic muscles and increase control over your bladder.

Additionally, pelvic floor strengthening can be accomplished with the help of a physical therapist, so talk to your provider about this option.

How can loss of bladder control due to pregnancy or childbirth be prevented?

Labor and vaginal delivery have an impact on the pelvic floor muscles and nerves that affect bladder control, so you should discuss your options with your healthcare provider.

Cesarean sections are associated with a lower risk of incontinence or pelvic prolapse than vaginal deliveries, but they may present other risks. Large babies who weigh more than nine pounds at birth may increase the risk of nerve damage during delivery.

Exercising pelvic floor muscles with Kegel exercises can help prevent bladder control problems. Bladder control problems might show up months to years after childbirth.

Talk to your healthcare team if this happens to you.

Sex During Pregnancy

Can I have sex during pregnancy without harming my baby?

Yes. There is no reason to change or alter your sexual activity during pregnancy unless your healthcare provider advises otherwise.

Intercourse or orgasm during pregnancy will not harm your baby, unless you have a medical problem. Remember that your baby is well protected in your uterus by the amniotic fluid that surrounds him or her.

Your healthcare provider might recommend not having intercourse early in pregnancy if you have a history of miscarriages. Intercourse might also be restricted if you have certain complications of pregnancy, such as pre-term labor or bleeding. You might need to ask your healthcare provider to clarify if this means no penetration, no orgasms, or no sexual arousal, as different complications might require different restrictions.

Comfort during intercourse

As your pregnancy progresses, changing positions might become necessary for your comfort. This might also be true after your baby is born.

A water-based lubricant may be used during intercourse if necessary.

During intercourse, you should not feel pain. During orgasm, your uterus will contract which may be mildly uncomfortable. It is common to have vaginal spotting (blood) after intercourse. Call your healthcare provider immediately if you have heavy vaginal bleeding, persistent pain, or if your water breaks. Nothing should enter the vagina after your water breaks.

Communicate with your partner

Talk to your partner. Tell your partner how you feel, especially if you have mixed feelings about sex during pregnancy. Encourage your partner to communicate with you, especially if you notice changes in your partner's responsiveness. Communicating with your partner can help you both better understand your feelings and desires.

Will my desires change?

It is common for your desires to be different now that you are pregnant. Changing hormones cause some women to experience an increased sex drive during pregnancy, while others might not be as interested in sex as they were before they became pregnant.

Take time for intimacy

If your healthcare provider has limited your sexual activity, or if you are not in the mood for intercourse, remember to take time for intimacy with your partner. Being intimate does not require having intercourse. Love and affection can be expressed in many ways.

Removing because there are a number of situations in which this is just not applicable.

How soon can I have sex after my baby is born?

In general, you can resume sexual activity when you have recovered, when your bleeding has stopped, and when you and your partner feel comfortable.

Your healthcare provider might recommend that you wait until after your first postpartum healthcare appointment before having intercourse with your partner.

After pregnancy, some women notice a lack of vaginal lubrication during intercourse.

A water-based lubricant may be used during intercourse to decrease the discomfort of vaginal dryness.

Women who only feed their baby breast milk experience a delay in ovulation (when an egg is released from the ovary) and menstruation. However, ovulation will occur before you start having menstrual periods again, so remember that you can still become pregnant during this time. Follow your healthcare provider's recommendations on the appropriate method of birth control to use.

Sleep During Pregnancy

The hormonal changes and physical discomfort associated with pregnancy can affect quality of sleep. Each trimester brings its own unique changes, including changes in sleep.

The National Sleep Foundation offers the following most common reasons why sleep patterns change throughout your pregnancy:

- You might wake more frequently to empty your bladder.
- Heartburn, nausea, leg cramps and sinus congestion may be problems.
- Physical and emotional changes are occurring in your life.
- You might feel very sleepy during some periods of the day as a result of disturbed sleep, and as a side effect of increased levels of the hormone progesterone.
- You might feel uncomfortable in general as your belly increases in size and your weight increases.

Getting enough sleep during pregnancy

If your sleep disturbances are severe, do not hesitate to ask your doctor to help you find solutions that will work for you. One or more of the following might help you get the sleep you need during pregnancy:

- **Pillows:** Pillows can be used to support both the abdomen and back.

A pillow between the legs can help support the lower back and make sleeping on your side easier. Some specific types of pillows include the wedge-shaped pillow, full-length body pillow, and U shaped pillow. It is recommended to sleep on your side.

- **Nutrition:** Drinking a glass of warm milk might help bring on sleep. Foods high in carbohydrates, such as a small bowl of dry cereal with a small four-ounce cup of milk, a slice of toast, bread or crackers, can promote sleep because they increase the level of sleep-inducing tryptophan. A snack high in protein (like one teaspoon of peanut butter or a low-fat cheese slice with whole grain crackers) can keep blood sugar levels up, and could help prevent bad dreams, headaches, and hot flashes. Avoid foods containing caffeine such as coffee, tea, caffeine-containing soft drinks and chocolate.
- **Relaxation techniques:** Relaxation techniques can help calm your mind and relax your muscles. These techniques include stretching and yoga, massage and deep breathing.
- **Exercise:** Regular exercise during pregnancy promotes your physical and mental health. Exercise also can aid in helping you sleep more deeply. Vigorous exercise within four hours of bedtime should be avoided.

Travel during pregnancy

Can I travel while I'm pregnant?

Yes, you can travel when you're pregnant. However, just like many other aspects of pregnancy, you will need to plan ahead before hitting the road. There are few things you will want to take into consideration before traveling, including:

- **How far along you are in your pregnancy:** There actually is an ideal time to travel during your pregnancy—the second trimester. For many women, the first trimester is dominated by morning sickness and discomfort as your body adjusts to the pregnancy. The third trimester is also generally more uncomfortable and you will want to be close to your healthcare provider as your due date approaches. The second trimester, however, is typically the time when you feel best during a pregnancy. The risks of complications are lowest during this stretch of time and the nausea from your first few months of pregnancy has typically faded.
- **If you have any medical conditions:** Before traveling, you should talk to your healthcare provider and discuss any medical conditions you may have. You may need to adapt your travel plans if you have a medical condition like high blood pressure, anemia or gestational diabetes. This could include planning to stand up to stretch your legs every few hours or wearing compression stockings. Your provider may also suggest that you bring a copy of your medical records with you in case you need treatment while away from home. Look at medical centers and hospitals near your destination and know how to get to them in case of an emergency.

- **How many babies you are carrying:** If you are carrying multiple babies, the risk of delivering early goes up. Your provider may suggest that you stay closer to home if you are pregnant with multiple babies. Talk to your healthcare provider about the best time to travel during a pregnancy with multiples.
- **Possible outbreaks of illness or disease at your destination:** Check your destination to see if there are any actively spreading diseases. Some diseases, such as the Zika virus, can harm both you and your baby if you are infected while you are pregnant. If you need to travel somewhere that's experiencing an outbreak, make sure you talk to your healthcare provider about ways to prevent getting sick.

During pregnancy, you can travel by a variety of methods—including cars, trains, airplanes, buses and cruise ships. No matter how you travel, you need to modify your habits while traveling to stay healthy. If you will be sitting for a long period of time, you'll need to stretch your legs. This could mean stopping the car for stretching breaks and walking around for a few minutes. Or it could be getting out of your seat on a plane or train. In those cases, try and book an aisle seat so that it's easier to get up. Just make sure you have a solid footing when walking around on a moving train or plane. You want to avoid falls.

Getting up and moving around during travel can help prevent a condition called deep vein thrombosis from developing. This condition happens when blood clots form and travel throughout your body. Your risk of developing blood clots is higher during pregnancy.

Is it safe to fly while pregnant?

You can safely fly in an airplane during pregnancy. On longer flights, you may need to get up to stretch your legs to avoid blood clots.

Talk to your healthcare provider before leaving for your trip to make sure there are no medical conditions that could cause a complication during your flight.

At what point during pregnancy can I no longer fly in an airplane?

Each airline will have its own policy about when in a pregnancy you can no longer fly. Make sure you look at the guidelines for your particular airline before booking a flight. In general, most airlines don't allow you to fly in your last month of pregnancy. Some limit your travel even as early as 28 or 29 weeks of pregnancy. You may also want to call the airline to make sure you'll be able to fly. Some international flights may have an earlier cutoff for pregnant passengers than domestic flights.

When do I need to stop traveling?

The closer you get to your due date, the closer you will want to stay to home and your healthcare provider. Remember, your due date is an estimate. The end of pregnancy can be a bit unpredictable and you can go into labor at any time in the last few weeks. Most healthcare providers recommend that you stay closer to home in the third trimester, and especially in the last month of pregnancy. If you need to travel at the end of your pregnancy, you will want to plan ahead and know locations of hospitals and medical centers near your destination.

You may also need to stop traveling if there is a complication during your pregnancy. If you develop a condition that needs to be closely monitored by your provider, like preeclampsia, you will want to avoid long trips. You may also be asked to not travel long distances a little earlier in your pregnancy if you are carrying multiple babies.

Do I need vaccinations if I'm traveling during pregnancy?

Some vaccines are not recommended for during pregnancy. These include live vaccines like the MMR (measles, mumps and rubella). Others, like the influenza vaccine, are considered safe during pregnancy. If you are traveling to an area where you would typically receive vaccinations to protect yourself from disease, talk to your healthcare provider about the risks and benefits of receiving the vaccination. Sometimes, the risk of getting sick is greater than any side effects of the vaccine. In those cases, your healthcare provider may give you the vaccine during pregnancy.

What's Zika and should I worry about it when traveling?

The Zika virus can be spread by a direct mosquito bite as well as through sex. Typically found in tropical regions—like South America, Central America, Mexico and the Caribbean—this virus has been linked to microcephaly. This is a serious birth defect where a baby's brain doesn't fully develop before birth, shortening the child's life expectancy.

If you need to travel to a region with active Zika during your pregnancy, talk to your healthcare provider first. During your trip, it will be important to avoid mosquito bites. A few tips your healthcare provider may suggest to avoid mosquito bites include:

- Using an insect repellent (one containing DEET is safe for pregnant women and can help prevent mosquito bites).
- Covering any exposed skin.
- Wearing light colored clothing.
- Avoiding standing water (mosquitoes breed in still water).
- Using mosquito nets over your bed and having screens on windows and doors.

Zika can also be passed between couples during sex. It's important to use a condom if you or your partner have been exposed to Zika. The virus typically leaves your body in about six months.

What happens if I get sick or go into labor while I'm traveling?

You should always be prepared for a medical emergency when you're traveling during pregnancy. There are a few safety precautions that you should follow just in case something happens.

- **Bring your medical records with you when you travel:** If you have a medical emergency or need treatment of any kind when you're far from home, these records will ensure that you get the right care. The entire history of your pregnancy and any pre-existing conditions that you may have will all be included in these documents.
- **Know where you can receive care:** No matter how you are traveling or where you are going, it's important to know where you could receive care if you needed it. If you are on a cruise ship, ask about the onboard medical care and what's available at the ports where your ship will stop. Look at your stops on long road trips or air travel to see where hospitals or medical centers are along your route. This planning can be very helpful if you do experience an emergency and need to find care quickly.
- **Communicate with your health insurance:** Check in with your health insurance before you travel so that you know what coverage you have in what locations. In some cases, like international travel, you may need to purchase insurance just for your trip.

What other things should I know when I'm traveling during pregnancy?

When you're traveling, there are few tips that you can follow that will help keep you healthy and safe. These include:

- Drinking bottled water and not adding ice to your drinks.
- Following nutrition guidelines, including avoiding food from street vendors and not eating raw fish.
- Always wearing a seat belt. It should be fastened across your hips (under your belly) and the shoulder belt should go across your body and between your breasts.

Depression During Pregnancy

Pregnancy has long been viewed as a period of well-being that is protected against psychiatric disorders. But depression happens almost as commonly in pregnant women as it does in non-pregnant women.

If you have had any of the following symptoms, please notify your healthcare provider right away:

- Having recurrent thoughts of death or suicide.
- Having a depressed mood for most of the day, nearly every day for the last two weeks.
- Feeling guilty, hopeless or worthless.
- Having difficulty thinking, concentrating or making decisions.
- Losing interest or pleasure in most of the activities during the day nearly every day for the last two weeks.

If you do have any of the above symptoms your healthcare provider may ask you the following two questions:

1. Over the past two weeks, have you felt down, depressed or hopeless?
2. Over the past two weeks, have you felt little interest or pleasure in doing things?

If you answer yes to either of these questions, your healthcare provider will administer a more in-depth depression screening.

What is the impact of depression on pregnancy?

- Depression can interfere with a woman's ability to care for herself and her family during pregnancy. You might be less able to follow medical recommendations, and sleep and eat properly.

- Depression can put you at risk for increased use of substances that have a negative impact on pregnancy (tobacco, alcohol, illegal drugs).

Depression might interfere with your ability to bond with your growing baby. A baby in the womb is able to recognize the mother's voice and sense emotion by pitch, rhythm and stress. Pregnant people with depression might find it difficult to develop this bond and instead might feel emotionally isolated.

How does pregnancy affect depression?

- The stresses of pregnancy can cause depression or a recurrence or worsening of depression symptoms.
- Depression during pregnancy can place you at risk for having an episode of depression after delivery (postpartum depression).

So what are my options if I'm depressed during my pregnancy?

- Preparing for a new baby is lots of hard work, but your health should come first. So resist the urge to get everything done. Cut down on your chores and do things that will help you relax. And remember, taking care of yourself is an essential part of taking care of your unborn child.
- Talking about your concerns is very important. Talk to your friends, your partner and your family. If you ask for support, you'll find that you often get it.

If you are not finding relief from anxiety and depression by making these changes, seek your doctor's advice or a referral to a mental health professional.

2. First Trimester

- › Your first trimester of pregnancy
- › When to call your provider
- › Prenatal ultrasonography
- › Ultrasound appointment guidelines
- › Screening for chromosome abnormalities
- › CPT codes for genetic tests

Your First Trimester of Pregnancy

First trimester (Weeks 1 through 12)

The first trimester will span from conception to 12 weeks. During this trimester, your baby will change from a small grouping of cells to a fetus that is starting to have a baby's features.

Month 1 (Weeks 1 through 4)

As the fertilized egg grows, a water-tight sac forms around it, gradually filling with fluid. This is called the amniotic sac, and it helps cushion the growing embryo.

During this time, the placenta also develops. The placenta is a round, flat organ that transfers nutrients from the mother to the baby, and transfers wastes from the baby. Think of the placenta as a food source for your baby throughout the pregnancy.

In these first few weeks, a primitive face will take form with large dark circles for eyes. The mouth, lower jaw and throat are developing. Blood cells are taking shape, and circulation will begin. The tiny "heart" tube will beat 65 times a minute by the end of the fourth week.

By the end of the first month, your baby is about 1/4 inch long – smaller than a grain of rice.

Month 2 (weeks 5 through 8)

Your baby's facial features continue to develop. Each ear begins as a little fold of skin at the side of the head. Tiny buds that eventually grow into arms and legs are forming. Fingers, toes and eyes are also forming.

The neural tube (brain, spinal cord and other neural tissue of the central nervous system) is well formed now. The digestive tract and sensory organs begin to develop too. Bone starts to replace cartilage.

Your baby's head is large in proportion to the rest of its body at this point. At about

six weeks, your baby's heart beat can usually be detected.

After the eighth week, your baby is called a fetus instead of an embryo.

By the end of the second month, your baby is about an inch long and weighs about 1/30 of an ounce.

Month 3 (weeks 9 through 12)

Your baby's arms, hands, fingers, feet and toes are fully formed. At this stage, your baby is starting to explore a bit by doing things like opening and closing its fists and mouth. Fingernails and toenails are beginning to develop and the external ears are formed. The beginnings of teeth are forming under the gums. Your baby's reproductive organs also develop, but the baby's genitalia is difficult to distinguish on ultrasound.

By the end of the third month, your baby is fully formed. All the organs and limbs (extremities) are present and will continue to develop in order to become functional. The baby's circulatory and urinary systems are also working and the liver produces bile.

At the end of the third month, your baby is about 4 inches long and weighs about one ounce.

Since your baby's most critical development has taken place, your chance of miscarriage drops considerably after three months.

When to Call Your Healthcare Provider During Your First Trimester of Pregnancy

During the first trimester, there are a few things to watch for.

Call your healthcare provider right away if you have:

- A fever higher than 100.4 degrees Fahrenheit.
- Heavy bleeding, soaking more than one pad an hour for three hours.
- Unusual or severe cramping or abdominal pain.
- Severe or persistent vomiting and/or diarrhea.
- Fainting spells or dizziness.
- Pain, burning or trouble urinating.
- Unusual vaginal discharge.
- Swelling in your hands, fingers or face.
- Blurred vision or spots before your eyes.
- One arm or leg (extremity) swollen more than the other.
- Severe headaches.
- Pain or cramping in your arms, legs or chest.

Additional Information About Your Pregnancy

During your pregnancy, you **CAN**:

- Dye your hair.
- Have acrylic nails applied.
- Have TB (tuberculosis) skin testing (Mantoux®) done.
- Go to a chiropractor.

- Shave your pubic hair (See below).
- Use insect repellent, DEET.

During your pregnancy, you should **NOT**:

- Use alcohol, drugs or smoke.
- Fast during holidays.
- Go in a whirlpool or hot tub.
- Visit a tanning bed.
- Shave pubic hair close to your delivery date—clipping is preferred.

Resources

Additional websites that provide educational material about pregnancy include:

American College of Nurse-Midwives:
www.midwife.org

Centers for Disease Control and Prevention, Pregnancy.
<https://www.cdc.gov/pregnancy/index.html>

March of Dimes
<https://www.marchofdimes.org/>

The American College of Obstetricians and Gynecologists.
<https://www.acog.org/>

Prenatal Ultrasonography

What is ultrasonography?

In ultrasonography, or ultrasound, high-frequency sound waves are sent through your abdomen by a device called a transducer. The sound waves are recorded and changed into video or photographic images of your baby. The ultrasound can be used during pregnancy to show images of the amniotic sac, placenta and ovaries.

The idea for ultrasonography came from sonar technology, which makes use of sound waves to detect underwater objects. Ultrasound might be used with other diagnostic procedures, such as amniocentesis, or by itself.

Are there any side effects?

Studies have shown ultrasound is not hazardous. There are no harmful side effects to you or your baby. In addition, ultrasound does not use radiation, as X-ray tests do.

When is an ultrasound performed during pregnancy?

Transvaginal ultrasound

Most prenatal ultrasound procedures are performed on the surface of the skin, using a gel as a conductive medium to aid the quality of the image. However, a transvaginal ultrasound is performed using a probe that is inserted into the vaginal canal. This method of ultrasound produces an image quality that is greatly enhanced.

A transvaginal ultrasound may be used early in pregnancy to determine how far along you are in your pregnancy (gestational age) if this is uncertain or unknown. It may also be used to get a clearer view of the uterus or ovaries if a problem is suspected.

Ultrasound

An ultrasound is generally performed for all pregnant women around 20 weeks gestation. During this ultrasound, the doctor will evaluate whether the placenta is attached normally, and that your baby is growing properly in your uterus.

The baby's heartbeat and movement of its body, arms and legs can also be seen on the ultrasound.

If you wish to know the sex of your baby, it can usually be determined at 20 weeks. Be sure to tell the ultrasound doctor whether or not you want to know the sex of your baby. Please understand that ultrasound is not 100% percent accurate in confirming a baby's sex. There is a chance that the ultrasound images can be misinterpreted.

An ultrasound might be performed earlier in your pregnancy to determine:

- Presence of more than one fetus.
- Your due date or gestational age (the age of the fetus).

Later in pregnancy, ultrasound might be used to determine:

- Fetal well-being.
- Placenta location.
- Amount of amniotic fluid around the baby.
- Position of the baby.
- Baby's expected weight.

Major anatomical abnormalities or birth defects may be detected before birth on an ultrasound.

Even though ultrasound is safe for mother and baby, it is a test that should be done only when medically necessary. If you have an ultrasound that is not medically necessary (for example, to simply see the baby or find out the baby's sex), your insurance company might not pay for the ultrasound.

Before the test

There is no special preparation for the ultrasound test. Some doctors require you to drink four to six glasses of water before the test, so your bladder is full. This will help the doctor view the baby better on the ultrasound. You will be asked to refrain from urinating until after the test. You will be allowed to go to the bathroom right after the test has been completed. You might be asked to change into a hospital gown.

During the test

You will lie on a padded examination table during the test. A small amount of water-soluble gel is applied to the skin over your abdomen. The gel does not harm your skin or stain your clothes.

A small device, called a transducer, is gently applied against the skin on your abdomen. The transducer sends high-frequency sound waves into the body, which reflect off internal structures, including your baby. The sound waves or echoes that reflect back are received by the transducer and transformed into pictures on a screen. These pictures can be printed out.

There is virtually no discomfort during the test. If a full bladder is required for the test, you might feel some discomfort when the probe is applied. You might be asked to hold your breath briefly several times. The ultrasound test takes about 30 minutes to complete.

After the test

The gel will be wiped off your skin. Your ultrasound test is performed by a registered, specially trained technologist and interpreted by a board-certified physician. Your doctor will review the test results with you at your next visit.

Ultrasound Appointment Guidelines



Having an ultrasound for pregnancy can be an exciting event, and your team of caregivers is privileged to share in this experience. The ultrasound is, however, a medical test ordered by your physician. Giving you the best care and overall patient experience during your ultrasound appointment is our main goal. By providing a tranquil, stress-free environment with fewer distractions, you will receive the best quality scan possible.

You can help this by:

- Limiting the number of adult visitors to two during your appointment.
- Ensuring children under eight years of age are accompanied and supervised by an adult other than the patient.
- Refraining from cell phone use and taking videos or pictures while exams and consults are being performed.

Other important information:

- Pictures can help you and your family members bond with your baby. Please know, however, that clarity or availability of images is not guaranteed.
- 3D image requests are not a standard part of the examination and are not guaranteed.
- In an effort to provide our patients with timely appointments, you are asked to arrive promptly.
- Please be advised that if you arrive past your scheduled appointment time, you may have a delayed wait as we fit you back into the schedule, or in some instances you may be asked to reschedule.
- If you do not wish to be told the sex of the baby at the time of the study, you can be provided with a sealed envelope containing that information. Other requests, such as calling individuals who are not present, cannot be accommodated.

Our maternal-fetal medicine physicians practice at these Ohio locations:

Akron General Hospital
330.384.1650

Ashtabula County Medical Center
440.997.6915

Beachwood Family Health Center
216.839.3100

Cleveland Clinic Main Campus A81
216.444.6601

Fairview Medical Center
216.476.7144

Akron General Health and
Wellness Center, Green
330.896.5010

Hillcrest Hospital Atrium
440.312.2229

Independence Family Health Center
216.986.4130

Lakewood Medical Office Building
216.237.6301

Medina Hospital
330.721.5350

Richard E. Jacobs Health Center (Avon)
440.695.4000

Strongsville Family Health Center
440.878.2500

Twinsburg Family Health Center
330.888.4000

Westlake Medical Campus
216.476.7144

Wooster Family Health Center
330.287.4930

Our maternal-fetal medicine physicians practice at these Florida locations:

Cleveland Clinic Martin Health
772.345.5280

Cleveland Clinic Indian River Hospital
772.770.6116

Screening for Chromosome Abnormalities in Pregnancy

Cleveland Clinic offers options for patients who are interested in determining the risk for chromosome abnormalities (extra or missing number of chromosomes) and certain birth defects in their baby during a pregnancy. These tests allow patients the opportunity early in pregnancy to find out if their baby has one of these conditions.

While the risk for having a baby with a chromosome abnormality increases with the mother's age at the time of delivery, the majority of these babies are born to younger women. Thus, screening is an option for everyone. These tests are optimal and should only be done after a thorough discussion with your healthcare provider. In some instances, your provider may refer you for genetic counseling to see which, if any, test is best for you.

Sequential Screening

The sequential screen combines ultrasound and blood tests to determine the risk for chromosome abnormalities, including Down syndrome (trisomy 21) and trisomy 18. It also determines the risk for a group of birth defects known as open neural tube defects (ONTD), which include spina bifida. Ultrasound examination is performed in the first trimester and involves measuring the nuchal translucency. The nuchal translucency is a fluid-filled space behind the neck, which is typically increased in size in fetuses with Down syndrome, other chromosome abnormalities, and birth defects. Blood tests, which measure the levels of certain hormones in the mother, are drawn at the time of the nuchal translucency measurement and again between 15 and 21 weeks gestational age.

- Results are made available following first trimester testing and again after second trimester blood test.
- This test can detect 90-92% of fetuses with Down syndrome and 90% of fetuses with trisomy 18, with a false positive rate is 5%.
- Patients at increased risk for chromosome abnormalities based on their sequential screen results have the opportunity for additional testing, which can provide them with a more definitive answer, including testing such as chorionic villus sampling or amniocentesis.
- The sequential test identifies approximately 75-90% of babies with ONTDs, and when combined with ultrasound in the second trimester, approximately 95% of these cases can be detected
- There are no risks to the mother or the fetus with the sequential screen test.
- For patients who present for care after the first trimester or decide later in pregnancy to undergo screening, the quad screen can be performed in the second trimester between 15 and 21 weeks gestational age. This test detects 75-80% of cases of Down syndrome and 60-75% of cases of Trisomy 18, with a 5-7% false positive rate. It can also detect approximately 80% of cases on ONTDs.
- All patients, regardless of their choice to undergo screening, are offered a detailed ultrasound to evaluate fetal anatomy between 18 and 20 weeks gestational age.

Non-Invasive Prenatal Testing (NIPT) or Cell-Free DNA screening

NIPT evaluates fetal DNA, which is found in the mother's blood, to determine risks for chromosome abnormalities such as Down syndrome, trisomy 18, trisomy 13, as well as certain abnormalities of fetal sex chromosomes. Again, this is a blood test for the mother and poses no risk to the pregnancy. NIPT can be performed any time after 10 weeks gestational age. Previously NIPT was recommended for patients at increased risk for pregnancies with chromosomal abnormalities, however recent evidence supports its use in low-risk pregnancies and multiple pregnancies.

- NIPT can detect approximately 99% of fetuses with Down syndrome and trisomy 18 and up to 92% of fetuses with trisomy 13.
 - False positive results are rare but possible, particularly in younger patients.
 - There is no risk to mother or fetus.
 - NIPT will decrease the need for invasive testing for many patients; however, any positive result should be confirmed with either chorionic villus sampling or amniocentesis, both of which are diagnostic.
 - NIPT does not detect all chromosome abnormalities. Therefore, further testing with amniocentesis or chorionic villus sampling may still be necessary in some cases with abnormal ultrasound findings, even after a negative NIPT result.
- NIPT does not provide a risk for ONTDs. This result can be obtained via the maternal serum alpha-fetoprotein (MSAFP), which should be performed between 15 and 21 weeks gestational age, as well as with detailed ultrasound.
 - All patients undergoing NIPT should have a detailed ultrasound to evaluate fetal anatomy between 18 and 20 weeks gestational age.

CPT Codes for Genetic Tests

Screening procedures

Here are a list of common CPT codes for your reference. Some of the tests below are considered screening tests, so you may want to contact your insurance company for coverage information before the procedure.

PROCEDURE	CPT
Transvaginal OB ultrasound	76817
Obstetrics ultrasound <14 weeks	76801
Nuchal translucency ultrasound	76813
Routine anatomy ultrasound	76805
High-risk detailed anatomy ultrasound	76811
OB follow-up ultrasound	76816
Fetal biophysical profile	76818, 76819
Fetal umbilical Doppler	76820
Fetal middle cerebral artery Doppler	76821
Amniocentesis	59000 and 76946
Chronic villus sampling (CVS)	59015 and 76945
NIPT or “Materni T21” if through Sequenom Lab*	81420*

*Please refer to NIPT Pamphlet MaterniT21 (Sequenom Lab)

3. Second Trimester

- › Your second trimester of pregnancy
- › Welcome to the second trimester
- › When to call your provider
- › Oral Glucose Challenge Test

Your Second Trimester of Pregnancy

Second trimester

This middle section of pregnancy is often thought of as the best part of the experience. By this time, any morning sickness is probably gone and the discomfort of early pregnancy has faded. The baby will start to develop facial features during this month. You may also start to feel movement as your baby flips and turns in the uterus. During this trimester, many people find out the sex of the baby. This is typically done during an anatomy scan (an ultrasound that checks your baby's physical development) around 20 weeks.

Month 4 (Weeks 13 through 16)

Your baby's heartbeat may now be audible through a Doppler ultrasound. The fingers and toes are well-defined. Eyelids, eyebrows, eyelashes, nails and hair are formed. Teeth and bones become denser. Your baby can even suck his or her thumb, yawn, stretch and make faces.

The nervous system is starting to function. The reproductive organs and genitalia are now fully developed, and your doctor can see on ultrasound if you are having a boy or a girl.

By the end of the fourth month, your baby is about 6 inches long and weighs about 4 ounces.

Month 5 (Weeks 17 through 20)

At this stage, you may begin to feel your baby moving around. Your baby is developing muscles and exercising them. This first movement is called quickening and can feel like a flutter.

Hair begins to grow on baby's head. Your baby's shoulders, back and temples are covered by a soft fine hair called lanugo. This hair protects your baby and is usually shed at the end of the baby's first week of life.

The baby's skin is covered with a whitish coating called vernix caseosa. This "cheesy" substance is thought to protect your baby's skin from the long exposure to the amniotic fluid. This coating is mostly shed just before birth.

By the end of the fifth month, your baby is about 10 inches long and weighs from 1/2 to 1 pound.

Month 6 (Weeks 21 through 24)

If you could look inside the uterus right now, you would see that your baby's skin is reddish in color, wrinkled and veins are visible through the baby's translucent skin. Finger and toe prints are visible. In this stage, the eyelids begin to part and the eyes open.

Baby responds to sounds by moving or increasing the pulse. You may notice jerking motions if the baby hiccups.

If born prematurely, your baby may survive after the 23rd week with intensive care.

By the end of the sixth month, your baby is about 12 inches long and weighs about 2 pounds.

Month 7 (Weeks 25 through 28)

Your baby will continue to mature and develop reserves of body fat. At this point, the baby's hearing is fully developed. The baby changes position frequently and responds to stimuli, including sound, pain and light. The amniotic fluid begins to diminish.

If born prematurely, your baby would be likely to survive after the seventh month.

At the end of the seventh month, your baby is about 14 inches long and weighs from 2 to 4 pounds.

When to Call Your Healthcare Provider During the Second Trimester.

(13-28 Weeks)

During the second trimester, there are a few things to watch for. Please call your healthcare provider right away if you have:

- Unusual or severe cramping or abdominal pain.
- Noticeable changes, such as a decrease in your baby's movement after 28 weeks gestation (fewer than six to 10 movements in one hour or less).
- Difficulty breathing or shortness of breath that seems to be getting worse.
- Signs of premature labor, including:
 - Regular tightening or pain in the lower abdomen or back.
 - Any bleeding in the second or third trimester.
 - Fluid leak.
 - Pressure in the pelvis or vagina.

If you are Rh- you may also receive this injection if you:

- Are having an invasive procedure (such as an amniocentesis).
- Had an abdominal trauma.
- Had any significant bleeding during pregnancy.
- If you need to have your baby turned inside the uterus (due to breech presentation).

Rh factor testing in the second trimester

Rh factor is an antigen protein found on most people's red blood cells. If you don't have the protein, then you are Rh- (negative). You will be given an injection of Rh immune globulin (called Rhogam®) during the 28th week of your pregnancy to prevent the development of antibodies that could be harmful to your baby. You will also be given an injection of Rhogam® after delivery if your baby has Rh+ blood.

Oral Glucose Challenge Test During Pregnancy

What is an oral glucose challenge test?

The oral glucose challenge test is performed to screen for gestational diabetes. This test involves quickly (within five minutes) drinking a sweetened liquid (called Glucola), which contains 50 grams of glucose. A blood sample is taken from a vein in your arm about 60 minutes after drinking the solution. The blood test measures how the glucose solution was processed by the body.

Normal blood glucose levels peak within 30 to 60 minutes after drinking the glucose solution. A higher than normal blood glucose level does not always mean you have gestational diabetes.

When is the oral glucose challenge test performed?

Gestational diabetes is generally diagnosed between the 24th and 28th week of pregnancy. If you have had gestational diabetes in a previous pregnancy, or if your healthcare provider is concerned about your risk of developing gestational diabetes, the test might be performed earlier.

On the day of the test, please follow instructions given to you by your healthcare provider or the lab (if applicable).

General guidelines

You may eat a light breakfast on the day of the test, avoiding items with high sugar content, such as orange juice, pancakes and doughnuts. Report to your specified location for the Glucola drink. After drinking the Glucola, do not ingest any food or drink and do not smoke until your blood is drawn, one hour later.

If there is a lab at your healthcare provider's office, it may be done at the time of one of your prenatal visits.

Further diagnostic test

If your healthcare provider determines your blood glucose level was elevated, you will have an additional gestational diabetes screening test. The follow-up test is called a glucose tolerance test. It is a longer, more definitive test that will determine if you have gestational diabetes. If this test is indicated, your healthcare provider will provide you with more information on how it is done.

4. Third Trimester

- › Your third trimester of pregnancy
- › When to call your provider during the third trimester
- › Counting your baby kicks
- › Non stress test
- › Group B streptococcus and pregnancy
- › True vs. false labor
- › Premature labor
- › What to pack for the hospital
- › Your birth day
- › Types of delivery
- › Pain relief options during childbirth

Your Third Trimester of Pregnancy

Third trimester

This is the final part of your pregnancy. During this trimester your baby will mature and add weight. You will experience symptoms during your final trimester like frequent urination, backaches and even hiccups—which are actually a normal part of pregnancy at this stage. You may be tempted to start the countdown till your due date and hope that it would come early, but each week of this final stage of development helps your baby prepare for childbirth. Throughout the third trimester, your baby will gain weight quickly, adding body fat that will help after birth.

Remember, even though popular culture only mentions nine months of pregnancy, you may actually be pregnant for 10 months. The typical, full-term pregnancy is 40 weeks, which can take you into a tenth month. It's also possible that you can go past your due date by a week or two (41 or 42 weeks). Your healthcare provider will monitor you closely as you approach your due date. If you pass your due date, and don't go into spontaneous labor, your provider may induce labor. This means that medications will be used to make you go into labor and have the baby. Make sure to talk to your healthcare provider during this trimester about your birth plan.

Month 8 (Weeks 29 through 32)

Your baby will continue to mature and develop reserves of body fat. You may notice that your baby is kicking more. Baby's brain is developing rapidly at this time, and your baby can see and hear. Most internal systems are well developed, but the lungs may still be immature.

Your baby is about 18 inches long and weighs as much as 5 pounds.

Month 9 (Weeks 33 through 36)

During this stage, your baby will continue to grow and mature. The lungs are close to being fully developed at this point.

Your baby's reflexes are coordinated so he or she can blink, close the eyes, turn the head, grasp firmly, and respond to sounds, light and touch.

Your baby is about 17 to 19 inches long and weighs from 5 ½ to 6 ½ pounds.

Month 10 (Weeks 37 through 40)

In this final month, you could go into labor at any time. You may notice that your baby moves less due to tight space. At this point, your baby's position may have changed to prepare for birth. Ideally, the baby is head down in your uterus. You may feel very uncomfortable in this final stretch of time as the baby drops down into your pelvis and prepares for birth.

Your baby is ready to meet the world at this point.

Your baby is about 18 to 20 inches long and weighs about 7 pounds.

When to Call Your Healthcare Provider During Your Third Trimester of Pregnancy

(29-41 Weeks)

During the third trimester, you should call your healthcare provider right away if you have:

- Unusual or severe cramping or abdominal pain.
- Noticeable changes, such as a decrease in your baby's movement after 28 weeks gestation (fewer than six to 10 movements in one hour or less).
- Difficulty breathing or shortness of breath that seems to be getting worse.
- Increased pressure in the pelvis or vagina.
- Persistent menstrual-like cramps.
- Increased vaginal discharge.
- Leaking of fluid from the vagina.
- Vaginal bleeding.
- Flu-like symptoms such as nausea, vomiting and diarrhea.

(37-41 Weeks)

Cleveland Clinic follows ACOG national guidelines regarding induction of labor. If your pregnancy is healthy, it is best to let labor begin on its own.

Cleveland Clinic recommends against induction of labor before 41 weeks for healthy mothers with healthy babies. Women who go into labor naturally have a lower risk of complications such as C-section and excessive bleeding.

Signs of premature labor (before 36 weeks)

- Four or more contractions or tightening of the muscles in the uterus in one hour that do not go away after changing your position or relaxing.
- Regular tightening or low, dull pain in your back that either comes or goes or is constant (but is not relieved by changing positions or other comfort measures).
- Pressure in the pelvis or vagina.
- Lower abdominal cramping that might feel like gas pain (with or without diarrhea).

Signs of preeclampsia

- Vision problems.
- Headaches.
- Pain in the upper abdomen.
- Sudden weight gain.
- Severe leg pain and swelling.

Signs of labor after 36 weeks

- Your water breaks.
- Strong contractions occur every five minutes for one hour.
- Labor contractions that are not stopped by changing your position or relaxing.
- Contractions that you are unable to walk through.

Things to Do Before the Big Day

- Register at your hospital of delivery.
- Choose a pediatrician. Make an appointment to visit the office and meet the pediatrician, if you choose.

- Take a tour of the maternity unit. Some hospitals offer sibling tours. Tours will let you know where to be dropped off and park on your delivery day.
- Know your healthcare providers evening phone number and review how you will get in touch with your ride and/or support person.
- If you want to take childbirth or breastfeeding classes, now's the time. For a complete list of classes go to: clevelandclinic.org/babyclasses.
- Go to the dentist if you haven't in a while.
- Update your insurance policies and wills to include the baby. We encourage making a living will and a power-of-attorney for healthcare plan.
- Contact your insurance company regarding a breast pump. They will direct you where to obtain one.
- Decide if you want to take the cord blood for your own use or donate it.
- Decide what you want to do about contraception after the birth of your baby.
- Consider the pros and cons of circumcision for a male infant.
- Get your maternity leave/family leave paperwork in order for both you and your partner.
- Buy the things you will need for your baby, especially the car seat.
- Continue to take your prenatal supplement. Make sure you are getting enough calcium and iron.

Counting Your Baby's Movements (Kick Counts/NST)

Your baby's regular movements are a sign of good health

Though babies may sleep for up to an hour, most of the time your baby is active and moving. On average, a healthy baby kicks or moves at least six to 10 times within a one hour period.

An easy way to check the health of your baby is to keep track of your baby's movements twice a day ("kick counts"). We think it is best to begin kick counts at 28 to 30 weeks of pregnancy and continue each day until your baby's birth.

How to count and record your baby's movements

Pick a time twice a day to record your baby's movements. Your baby may be most active when you are at rest. Many women find after a meal to be the best time to record their baby's movements. Sit in a comfortable position and place your hands, palms down, on your baby.

When you're ready to begin counting your baby's movements, look at the time. Mark the start time and count each time you feel your baby kick, move, roll, flutter or swish. Continue counting until your baby has moved six to 10 times. If you do not count six to 10 movements in one hour or less, call your healthcare provider right away for further instructions.

Non-Stress Testing (NST)

The NST is the most common special fetal test. It measures your baby's heart rate in response to the baby's environment.

The NST can be done at your healthcare provider's office or in a hospital setting. NST can be performed while you are sitting in a chair or lying down. The test takes roughly 20 minutes.

Two belts are placed on your abdomen; one has sensors to measure the fetal heart rate and the other detects uterine contractions. You will also be asked to record your baby's movement by pressing a button. Most babies have a sleep/wake schedule of 20 to 40 minutes.

Results of the NST will be interpreted by your healthcare provider. Depending on the results, you may have additional testing such as a biophysical profile or contraction stress test.

Group B Streptococcus and Pregnancy

What is Group B Streptococcus?

Group B Streptococcus (GBS) is a normal bacteria (germ) that is present in up to of pregnant women. A woman with GBS can pass the bacteria to her infant during delivery. Most newborns who get GBS do not become ill. However, the bacteria can cause serious and even life-threatening infections in a small percentage of newborns.

How does a baby get GBS?

In pregnant women, GBS is found most frequently in the vagina and rectum, (this is different than strep throat, which is Group A Streptococcus). GBS can live in a pregnant woman's body and cause symptoms and an infection. GBS can also live in a pregnant woman's body and not cause any symptoms and not pose any danger to her health. In this situation, the woman is called a carrier.

Early infection: Among the babies who become infected, most of the infections (75%) occur in the first week of life. In fact, most infection is apparent within a few hours after birth. Sepsis, pneumonia and meningitis are the most common problems. Premature babies face greater risk if they become infected, but most babies (75%) who get GBS are full-term.

Late infection: GBS infection might also occur in infants one week to several months after birth. Meningitis is more common with late-onset GBS-related infection than with early-onset infection. About half the babies who develop late-onset GBS got the infection passed to them from their mothers during birth. The source of the infection for others with late disease is thought to be contact with other people who are GBS carriers, or the GBS carrier mother after birth, or perhaps still other unknown sources. Late-onset infection is less common and is less likely to result in a baby's death than early-onset infection.

Will I be tested for GBS?

Your doctor will test you for GBS late in your pregnancy, around week 35 to 37, by using a cotton swab to take samples of cells from the vagina, cervix and rectum. Testing for GBS earlier than this will not help predict if you will have GBS at the time of delivery.

Delivery is a time of increased exposure to GBS bacteria for newborns if it is present in the vagina or rectum of the mother. A positive culture result means you are a GBS carrier, but it does not mean that you or your baby will definitely become ill.

How is GBS treated?

In the pregnant mother: The most effective way to prevent GBS infection in your baby is to treat you with antibiotics during labor if you test positive as a carrier of GBS. Being a carrier of GBS is a temporary situation. It is important to treat at the time of labor as it is not effective to treat at an earlier time.

If you test positive your provider will treat you with an antibiotic administered through a vein during your labor and delivery. Giving you an antibiotic at this time helps prevent the spread of GBS from you to your newborn; 90% of infections are prevented by this protocol.

One exception to the timing of treatment is when GBS is detected in urine. When this is the case, oral antibiotic treatment should begin at the time GBS is identified regardless of stage of pregnancy and be given again intravenously during labor.

Any pregnant woman who has previously given birth to a baby who developed a GBS infection, or who has had a urinary tract infection in this pregnancy caused by GBS, will also be treated during labor.

In the newborn: Despite testing and antibiotic treatment during a pregnant woman's labor, some babies still get GBS infections. Common symptoms of GBS infection in newborns are fever, difficulty feeding, irritability or lethargy (limpness or difficulty in waking up the baby). Your doctor might take a sample of the baby's blood or spinal fluid to see if the baby has GBS infection. Antibiotics will be given if treatment is determined to be necessary.

True vs. False Labor

Before true labor begins, you might have false labor pains, also known as Braxton Hicks contractions. These irregular uterine contractions are perfectly normal and might start to occur from your fourth month of pregnancy. They are your body's way of getting ready for the real thing.

What do Braxton Hicks contractions feel like?

Braxton Hicks contractions can be described as tightening in the abdomen that comes and goes. These contractions do not get closer together, do not increase in how long they last or how often they occur, and do not feel stronger over time. They often come with a change of position and stop with rest.

What do true labor contractions feel like?

The way a contraction feels is different for each woman and might feel different from one pregnancy to the next. Labor contractions cause discomfort or a dull ache in your back and lower abdomen, along with pressure in the pelvis. Some women might also feel pain in their sides and thighs. Some women describe contractions as strong menstrual cramps, while others describe them as strong waves that feel like diarrhea cramps.

So how do you know when you are having true labor?

Timing of contractions:

False labor: Contractions are often irregular and do not get closer together.

True labor: Contractions come at regular intervals and get closer together as time goes on. True labor contractions also become longer, stronger and more intense. (Contractions last about 30 to 70 seconds each.)

Change with movement:

False labor: Contractions might stop when you walk or rest, or might even stop when you change position.

True labor: Contractions continue, despite moving or changing positions.

Sharp, shooting pains on either side of your abdomen that travel into the groin might result from stretching ligaments that support your growing uterus.

To ease your discomforts of false labor pains:

- Try changing your position or activity.
- Make sure you are drinking enough fluids (at least 10 to 12 glasses of water, juice or milk per day).
- Try to rest and relax.

Your healthcare provider is available any time to answer your questions and ease your concerns about whether or not your contractions are signs of true or false labor. Don't be afraid to call your healthcare provider if you are not sure what it is you are feeling. He or she might ask you some questions to help determine if you are truly in labor. If there's any question at all, it's better to be evaluated by your healthcare provider.

It is essential to call your healthcare provider at any time if you have:

- Bright red vaginal bleeding.
- Continuous leaking of fluid or wetness, or if your water breaks (can be felt as a gushing of fluid).

- Strong contractions every five minutes for one hour.
- Contractions that you are unable to walk through.
- A noticeable change in your baby's movement, or if you feel fewer than six to 10 movements in one hour.

Premature Labor

What is premature labor?

Premature or pre-term labor is labor that begins more than three weeks before you are expected to deliver. Contractions (tightening of the muscles in the uterus) cause the cervix (lower end of the uterus) to open earlier than normal.

Pre-term labor might result in the birth of a premature baby.

However, labor often can be stopped to allow the baby more time to grow and develop in the uterus. Treatments to stop premature labor include bed rest, fluids given intravenously (in your vein) and medicines to relax the uterus.

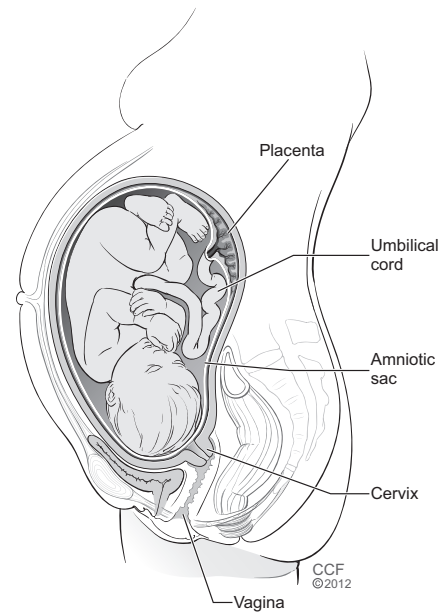
What are the signs of premature labor?

It is important for you to learn the signs of premature labor so you can get help to stop it and prevent your baby from being born too early. To check for contractions, place your fingertips on your abdomen.

If you can feel your uterus tightening and softening, write down how often the contractions are happening.

Please call your healthcare provider right away if you have any of the following symptoms and if the symptoms noted below do not go away in one hour, or if the pain is severe and persistent:

- Four or more contractions or tightening of the muscles in the uterus in one hour that do not go away after changing your position or relaxing.
- Regular tightening or low, dull pain in your back that either comes or goes or is constant (but is not relieved by changing positions or other comfort measures).
- Lower abdominal cramping that might feel like gas pain (with or without diarrhea).
- Increased pressure in the pelvis or vagina.
- Persistent menstrual-like cramps.
- Increased vaginal discharge.
- Leaking of fluid from the vagina.
- Vaginal bleeding.
- Flu-like symptoms such as nausea, vomiting and diarrhea.
- Decreased fetal movements (fewer than six to 10 times in a one-hour period).



What happens if your healthcare provider instructs you to go to the hospital?

After you talk to your healthcare provider about your signs of premature labor, he or she might tell you to go to the hospital. Once you arrive:

- Your pulse, blood pressure and temperature will be checked.
- A monitor will be placed on your abdomen to check the baby's heart rate and evaluate uterine contractions.
- Your cervix will be checked to see if it is opening.

If you are in premature labor, you might receive medicine to stop labor. If the labor has progressed and cannot be stopped, you might need to deliver your baby. If you are not in premature labor, you will be able to go home.

What to Pack for the Hospital

It is a good idea to pack your bag a month or two before your due date. Then you don't have to rush around when it is time to go!

Here are some ideas for what to pack:

- Photo identification and insurance card.
- Personal toiletries (contact lenses, glasses, lip balm, soap, shampoo, conditioner, lotion, toothbrush and toothpaste, etc.).
- Hair accessories to pull your hair back if you need it.
- Back massage aids like tennis balls, hand held massager, etc.
- Aromatherapy oils.
- Robe.
- One or two nightgowns or comfortable clothes for sleeping. Of course, we have hospital gowns you can use.
- Three or four pairs of cotton underwear.
- Slippers/socks.
- Two or three supportive bras. Nursing bras are good.
- List of names and phone numbers of family and friends to notify about your good news! Cell phones may be used.
- Personal entertainment. This may include books, magazines or downloaded movies. Some people bring video games. **REMEMBER YOUR CHARGING CABLES.**
- Comfortable shoes to wear home.



Here is what your labor coach should pack:

- Snacks or money for snacks and meals.
- At least one change of clothes.
- Personal toiletries.
- Slippers or socks.
- Comfortable clothes for sleeping.
- Cell phone.
- Chargers for their electronics.

Here is what you should pack for your baby:

- Car seat: It is a good idea to install your car about a month before your due date. Installing it early will help you to be sure that it is installed properly. Some car dealers, police, or fire stations have free safety inspections for car seat installation. Check to see what is available in your community.
- T-shirt (not a “onesie.” You don't want to cover the umbilical cord).
- Sleeper.
- Receiving blanket.
- Hat.
- Clothes to wear home. (Remember that you will want to dress your baby for whatever weather you are dressing for. If it is cold, bring warm clothes and if it is hot, bring cool ones.)

Please note: Everything your baby needs for his or her stay in the hospital will be provided, including diapers.

Your Birth Day: What to Expect During Labor

It is normal for you to feel both excited and scared about labor and delivery. We hope this handout helps answer questions so you will know what to expect.

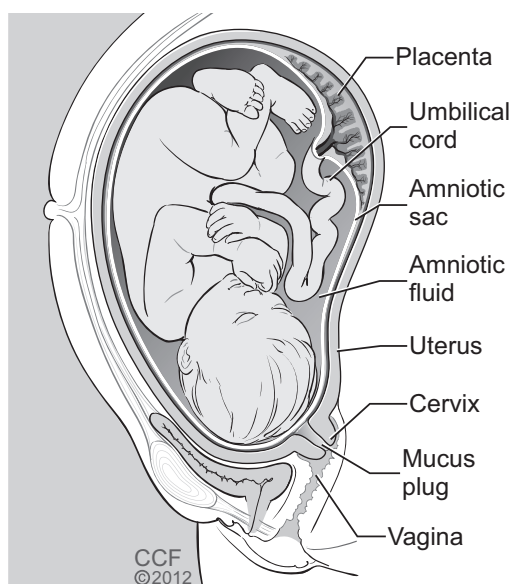
When does labor begin?

Labor begins when the cervix begins to open (dilate) and thin (efface). The muscles of the uterus tighten (contract) at regular intervals

During the contractions (or surges) the abdomen becomes hard. Between them, it will soften as the uterus relaxes.

How will I know if I'm in labor?

Some people experience very distinct signs of labor while others don't. Many people will have a sense that they are in early labor without really being certain. No one knows what causes labor to start, but several hormonal and physical changes may indicate the beginning of labor. Your contractions will often start at regular, but spaced intervals. Over time, they will gradually get stronger and more frequent. You are looking for surges that last for a full minute. If you think you are in labor but are uncertain, call your provider and discuss the possibilities!



Some of the changes you may experience include:

Lightening

This is the process of your baby settling or lowering into your pelvis. It can happen a few weeks or a few hours before labor. Because your uterus rests on your bladder, you may feel that you have to urinate more frequently with lightening.

Mucous Plug

The mucous plug accumulates at the cervical opening during pregnancy to protect your baby. When your cervix starts to open a bit, or make changes bringing you closer to labor, you may see some of the mucous that was in the cervix. It may be clear, pink or slightly bloody. Labor can start soon after the mucous plug comes out or even a few weeks later.

Contractions

We refer to labor as the time when contractions come at regular intervals and increase in frequency (how often they occur), duration (how long the surge lasts), and intensity (how strong the contractions are). As time passes, the surges will come at closer intervals and will get stronger.

Labor contractions can cause discomfort or a dull ache in your back and lower abdomen, along with pressure in your lower pelvis. Some people describe their contractions as strong menstrual cramps. You may notice a small amount of bleeding from the vagina. Labor contractions are not stopped by changing your position, hydrating or relaxing. Although the surges may be uncomfortable, you will be able to relax between them.

This first part of your labor is called the first stage, or latent phase of labor. It is much easier to manage in the comfort of your home than in the hospital. Of course, you should make certain that your baby is moving normally through this time. This is a great time to do the kick counts that you've been taught to do. If you have worries, contact your provider.

Timing your contractions

Write down the time at the beginning of a contraction and the time at the end of the same surge. This includes time you are contracting and the time of rest, before the next one.

These suggestions may help you cope during early labor

If contractions are serious and you are really laboring, you won't be able to calm them down. Surges that can be made to go away are not likely to be real labor. Try these things to help you cope:

- Try to distract yourself with a walk, shopping, or watching a movie.
- Soak in a warm tub or take a warm shower.
- Try to sleep. You are going to need the energy for labor!

Will your waters break?

The amniotic sac around the baby (your waters) only breaks about 10% of the time. If it does, you may feel either a sudden gush of fluid or a trickle of fluid that leaks steadily. This fluid is usually straw-colored and odorless.

If your water breaks, you should let your provider know. Think of the term TACO and let your provider know the details: T=time that your waters broke, A=the amount of fluid you felt, C=the color of the fluid, and O=the odor of the fluid.

Labor may not start right away. As always, make sure that your baby is moving well. If you are worried, tell us!

Effacement and dilation of the cervix

Your cervix gets shorter and thins out in order in order to stretch and open around your baby's head. The shortening and thinning of the cervix is called effacement and is measured in percentages from 0% to 100%. The stretch and opening of your cervix is called dilation and is measured from one to 10 centimeters.

Effacement and dilation are a direct result of effective uterine contractions. Progress in labor is measured by how much the cervix has opened and thinned to allow your baby to pass through the vagina.

When should I call my provider or go to the hospital?

Please call your provider according to their instructions. Call us during early labor if you have questions or concerns.

Also call if:

- You think your waters have broken.
- You are bleeding and it is more than just spotting.
- Your contractions become very strong-you cannot walk through them-and they have been that way every 3-5 minutes for an hour. (If you have already had one baby, you may not want to wait that long. Talk with your provider.)
- If you are concerned about your baby's movement.

What happens when I get to the hospital?

When you get to the hospital, you will go to Labor and Delivery and check in at the desk. Most times, you will be seen first in the triage area for admission to the hospital or for testing. Please have only one person go with you to triage. The rooms are quite small. If you are admitted, you will be taken to your labor room. When you arrive there, you may experience the following:

- Your pulse, blood pressure and temperature will be checked.
- A monitor will be placed on your abdomen to check on your baby's heart rate and also on contractions.
- A nurse or provider will examine your cervix to see how far labor has progressed.
- An IV (intravenous) line may be placed into a vein in your arm to deliver fluids and medicines.

Types of delivery

Vaginal delivery is the most common type of delivery, but sometimes, help is needed. This help can come in the form of vacuum or forceps assists or sometimes, a cesarean section. These delivery types are described in the "Types of Deliveries" section of this booklet.

What are the stages of labor?

The first stage of labor is the longest part of labor and is divided into two parts, early labor and active labor.

Early Labor

During early labor, your cervix will start to dilate and efface, or thin. These changes come as a result of the regular and strengthening contractions that you will feel. Some people will notice some slightly bloody discharge from

the vagina. This early labor can last from hours to days. It is best done at home as long as you know that your baby is active and well. This is the time that you will want to use some of those distractions mentioned earlier. Your excitement will likely be high during early labor.

Active Labor

During active labor, surges become stronger and closer together. We often tell our patients to call us when contractions are five minutes apart, last for one minute, and have been consistent for one hour. Remember 5-1-1. You may notice that the surges are felt in your abdomen and in your back. This is the time to call us and head into the hospital. Your waters may (or may not) break at this time.

Sometimes during active labor, you may find your excitement giving way to some hesitation and fear. You may ask for pain relief in this phase. This is a good time to talk with your provider about the best ways to get you what you need for discomfort. You're the only one who knows what you want for pain relief.

The second stage of labor begins when your cervix is completely dilated. Most people feel an urge to bear down as they enter the second stage of labor. It can take a few minutes or a few hours to push your baby into the world. Some of the things that can affect how long it takes are whether or not you have had another baby, a baby's size, and a baby's position. You may want to try pushing in several positions when you are pushing. Sometimes, the best way to push is on your hands and knees. Your provider may ask you to push more gently. This will allow your perineum to stretch gently and help reduce injury. Once the baby's head is out, the body should quickly follow. Your baby will be placed on your abdomen if everything is going according to plan. Often, when there

are no complications, your partner or you can catch your baby. After a short delay, the umbilical cord will be clamped and cut and we will wait for the placenta to follow.

The third stage of labor is the time when the placenta is delivering. Generally, all you will need to do during this time is to focus on your newborn and try to relax. Occasionally, we may ask you to push once or twice. Remember, though, that the placenta is much smaller and softer than a whole baby! We like to see the placenta deliver within about 30 minutes. Managing your bleeding is very important, not just for your health, but to keep up a milk supply if you are planning on nursing. We often use some medications to make sure that your uterus tightens up when the placenta comes out. This helps to control bleeding.

Types of Delivery

What is an assisted delivery?

Vaginal delivery is the most common type of birth. When necessary, assisted delivery methods are needed. While labor can be a straightforward, uncomplicated process, it might require the assistance of the medical staff. This assistance can vary from use of medicines to emergency delivery procedures.

The procedure your doctor might use will depend on the conditions that might arise while you are in labor. These assisted delivery procedures can include the following.

Episiotomy

An episiotomy is a surgical incision made in the perineum (the area of skin between the vagina and the anus). The incision enlarges the vaginal opening to allow the baby's head to pass through more easily and to prevent tearing of the mother's skin. Most women will not need one. This is reserved for special circumstances.

There are two types of incisions:

- The midline, made directly back toward the anus.
- The mediolateral, which slants away from the anus. A local anesthetic might be used in mothers who do not opt for an epidural during labor.

Amniotomy (Breaking the Bag of Water)

An amniotomy is the artificial rupture of the amniotic membranes, or sac, which contains the fluid surrounding the baby. The amniotomy can be done either before or during labor.

An amniotomy is usually done to:

- Induce or augment labor.
- Place an internal monitor to assess the uterine contraction pattern.

- Place an internal monitor on the baby's scalp to assess the infant's well-being.
- Check for meconium (a greenish-brown substance, which is the baby's first stool).

Your healthcare provider will use an amniohook, which looks like a crochet hook, to rupture the sac. Once the procedure is completed, delivery should take place within 24 hours to prevent infection.

Induced labor

For a number of reasons, your provider may need to start your labor rather than wait for labor to begin on its own. Labor is most often induced in pregnancies with medical problems or other complications. Cleveland Clinic follows ACOG national guidelines regarding induction of labor. If you have non-medical circumstances leaning you toward induced labor that you want to discuss with your provider, we encourage that conversation. Induction of labor is typically reserved for medical indications where benefit outweighs risk.

Labor can be induced either mechanically, with a cervical ripening balloon, or with medicines like cytotec and oxytocin. The decision on which method to use depends on how ripe, or favorable, your cervix is for induction. The cervical ripening balloon and cytotec tend to help soften and thin the cervix, although on occasion, can also promote labor. Oxytocin is given through an intravenous line and causes your uterus to contract. Contractions also soften and thin the uterus, but they also help to bring your baby down into the pelvis.

Common medical reasons for inducing labor can include:

- Diabetes.
- High blood pressure.
- Ruptured membranes.
- A baby that has growth restriction.
- A past due pregnancy.

Fetal monitoring

This is the process of watching your baby's heart rate in relation to your contractions. Monitoring can either be external or internal.

- External monitoring consists of placing two paddles on your abdomen and securing them with Velcro belts. One paddle is a small ultrasound and it records information about your baby's heartbeat. The second paddle records when your contractions are happening and how long they last. Monitors that use Bluetooth technology, and don't require you to be connected to a machine, may be available.
- Internal monitoring involves placing a small electrode on the baby's head to monitor the baby's heartbeat. This is the most accurate way to monitor the baby's heartbeat. A small pressure sensor is placed near the baby to measure the strength of the contractions.

Forceps delivery

Forceps look like two large spoons that the doctor inserts into the vagina and around the baby's head to gently deliver it through the vagina. You will still have to push your baby out. The rest of the baby is delivered normally. Your healthcare provider will discuss any risk with you.

Vacuum extraction

A vacuum extractor looks like a small suction cup that is placed on the baby's head to help with delivery. A vacuum is created using a pump, and the baby is guided down the birth canal. The pump can often leave a bruise on the baby's head, which typically resolves within 48 hours.

Cesarean section

A cesarean section, also called a C-section, is a surgical procedure performed if a vaginal delivery is not possible. During this procedure, the baby is delivered through surgical incisions made in the abdomen and the uterus.

When would I need a cesarean section?

A cesarean delivery might be planned in advance if a medical reason calls for it, or it might be unplanned and take place during your labor if certain problems arise.

You might need to have a planned cesarean delivery if any of the following conditions exist:

- **Cephalopelvic disproportion (CPD):** This is a term that means that the baby's head or body is too large to pass safely through the mother's pelvis, or the mother's pelvis is too small to deliver a normal-sized baby.
- **Previous cesarean birth:** Although it is possible to have a vaginal birth after a previous cesarean, it is not an option for all women. Factors that can affect whether a cesarean is needed include the type of uterine incision used in the previous cesarean and the number of prior cesareans, which impact the risk of rupturing the uterus with a vaginal birth.
- **Multiple pregnancy:** Although twins can often be delivered vaginally, two or more babies might require a cesarean delivery.

- **Placenta previa:** In this condition, the placenta is attached too low in the uterine wall and blocks the baby's exit through the cervix.
- **Transverse lie:** The baby is in a horizontal, or sideways, position in the uterus. If your doctor determines that the baby cannot be turned through abdominal manipulation, you will need to have a cesarean delivery.
- **Breech presentation:** In a breech presentation, or breech birth, the baby is positioned to deliver feet or butt first. If your doctor determines that the baby cannot be turned through abdominal manipulation, you will need to have a cesarean delivery.

An unplanned cesarean delivery might be needed if any of the following conditions arise during your labor:

- **Failure of labor to progress:** In this condition, the cervix begins to dilate and stops before the woman is fully dilated, or the baby stops moving down the birth canal.
- **Cord compression:** The umbilical cord is looped around the baby's neck or body, or caught between the baby's head and the mother's pelvis, compressing the cord.
- **Prolapsed cord:** In rare occurrence, the umbilical cord comes out of the cervix before the baby does.
- **Abruptio placentae:** Rarely, the placenta separates from the wall of the uterus before the baby is born. During labor, the baby might begin to develop heart rate patterns that could present a problem. Your doctor might decide that the baby can no longer tolerate labor and that a cesarean delivery is necessary.
- **Fetal distress:** The baby is not tolerating labor and not responding to measures taken to make them feel better. Your baby could be at risk for serious injury.

What can I expect before the cesarean?

If the cesarean delivery is not an emergency, the following procedures will take place.

- You will be asked if you consent to the procedure, and in some hospitals, you might be asked to sign a consent form.
- The anesthesiologist will discuss the type of anesthesia to be used.
- You will have a heart, pulse and blood pressure monitor applied.
- Hair clipping will be done around the incision area.
- A catheter will be inserted to keep your bladder empty.
- Medicine will be put directly into your vein.

What is the procedure for a cesarean?

At the start of the procedure, the anesthesia will be administered. Your abdomen will then be cleaned with an antiseptic. Our anesthesia team will be sure that you are comfortable prior to the surgery. The doctor will then make an incision through your skin and into the wall of the abdomen. They might use either a vertical or horizontal incision. (A horizontal incision is also called a bikini incision, because it is placed beneath the belly button.) Next, a three- to four-inch incision is then made in the wall of the uterus, and the doctor removes the baby through the incisions. The umbilical cord is then cut, the placenta is removed and the incisions are closed. The whole procedure will take one to two hours.

What happens after the delivery?

Because the cesarean is major surgery, it will take you longer to recover from this type of delivery than it would from a vaginal delivery. Depending on your condition, you will probably stay in the hospital from two to four days.

Once the anesthesia wears off, you will begin

to feel the pain from the incisions, so be sure to ask for pain medicine. You might also experience gas pains and have trouble taking deep breaths. You will have a bloody vaginal discharge—this is lochia— after the surgery due to the shedding of the uterine wall. This is the same thing that happens if you've delivered vaginally. The discharge will be red at first and then gradually change to yellow. This is not a menstrual period. Be sure to call your healthcare provider if you experience heavy bleeding or a foul odor from the vaginal discharge.

What are some of the risks involved in a cesarean delivery?

Like any surgery, a cesarean section involves some risks. These might include:

- Infection.
- Loss of blood or need for a blood transfusion.
- A blood clot that may break off and enter the bloodstream (embolism).
- Injury to the bowel or bladder.
- A cut that might weaken the uterine wall.
- Abnormalities of the placenta in subsequent pregnancies.
- Difficulty becoming pregnant.
- Risks from general anesthesia (if used).
- Fetal injury.

Can I have a baby vaginally after a cesarean delivery?

The majority of women who have had a cesarean delivery might be able to deliver vaginally in a subsequent pregnancy. If you meet the following criteria, your chances of vaginal birth after cesarean (VBAC) are greatly increased:

- A low transverse incision was made into your uterus during your cesarean.
- Your pelvis is not too small to accommodate a normal-sized baby.
- You are not having a multiple pregnancy.
- Your first cesarean was performed for breech presentation of the baby.

Pain Relief Options During Childbirth

What will labor be like?

Each person's labor is unique, and each may experience labor discomfort differently. Pain during labor is caused by uterine muscle contractions and by pressure on the cervix. Pain might also be felt from the pressure of the baby on the bladder and bowels, and from the stretching of the birth canal and vagina when the baby is going through the birth canal.

The way a contraction feels is different for everyone and might feel different from one pregnancy to the next. Labor contractions cause discomfort or a dull ache in your back and lower abdomen, along with pressure in the pelvis. Some people might also feel pain in their sides and thighs. Some describe contractions as strong menstrual cramps, while others describe them as strong waves that feel like diarrhea cramps.

The intensity of labor pain is not always why people seek pain relief. Often it's the repetitive nature and length of time the pain persists with each contraction. Sometimes, fear of the unknown can be overwhelming when added to the power of the contractions. Pain relief may be just what it takes to bring some sense of control to a laboring person.

What pain relief options are available during childbirth?

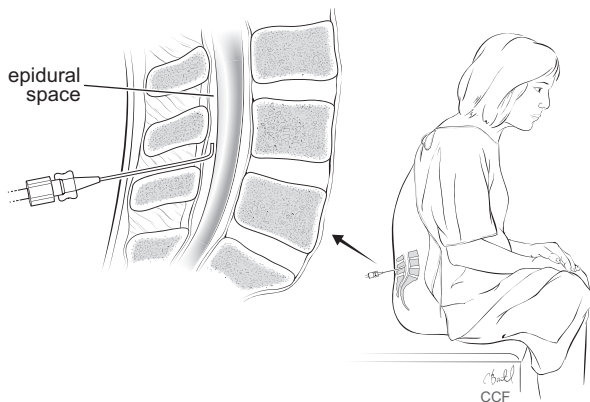
It is important for you to learn what pain relief options are available during childbirth. Please discuss your options with your healthcare provider well before delivery. Getting pain relief should not cause you to feel guilty. You are the only one who knows how you feel, so decisions regarding control of your labor pain must be made specifically by you. If your goal is a birth without anesthesia, talk to your provider. Our providers are able to help with this option, too.

Remember that your pain relief choices might be governed by certain circumstances of your labor and delivery. Throughout your labor, your healthcare provider will assess your progress and comfort to help you choose a pain relief technique should you request one.

Sometime during your labor, you will have a chance to talk with an anesthesia team member about pain relief during labor. The anesthetist (usually a nurse that specializes in anesthesia) or anesthesiologist will be happy to answer your questions. They can talk with you about the following:

- Analgesic medicines can be injected into a vein or a muscle to dull labor discomfort. Analgesic medicines do not completely stop pain, but they do lessen it. Because analgesic medicines affect your entire body and might make both you and your baby sleepy, they are mainly used during early labor to help you rest and conserve your energy.
- General anesthesia is used for emergencies during the birthing process. General anesthesia induces sleep and must be given by an anesthesiologist. Although safe, general anesthesia prevents you from seeing your child immediately after birth.
- Local anesthesia might be used by your healthcare provider during delivery to numb a painful area or after delivery when stitches are necessary. Local anesthetic medicines do not reduce discomfort during labor.

- Regional anesthesia (also called epidural, spinal or systemic anesthesia) is the most common and effective pain relief. Regional anesthesia greatly reduces or eliminates pain throughout the birthing process. It can also be used if a cesarean birth becomes necessary. It is administered by an anesthesiologist during labor to reduce discomfort. There are three types of regional anesthesia: spinal, epidural and combined spinal/epidural. With each type, medicines are placed near the nerves in your lower back to block pain in a wide region of your body while you stay awake. It can also be used if a cesarean birth becomes necessary. For safety reasons, it is standard policy for family members to be asked to leave the room for regional anesthesia.



Three types of regional anesthesia:

- 1. Epidural:** A thin plastic tube is placed in the back and medicine can be given through the tube when needed. The tube is left in place during the labor course. If a caesarean section is needed, a stronger dose of medicine can be given through the tube.
- 2. Spinal:** Most commonly used in a planned cesarean section. Local anesthetic is placed using a single injection with a very fine needle. This method works fast, and only needs a small dose of anesthetic.

- 3. Combined Spinal-Epidural, or CSE:** A combination of the above. The spinal makes you numb quickly, but can also be used to give more anesthetic if needed.

How is regional anesthesia given?

Your anesthesiologist will inject medicines near the nerves in your lower back to block the discomfort of contractions. The medicine will be injected while you are either sitting up or lying on your side.

After reviewing your medical history and asking you some questions, your anesthesiologist will numb an area on your lower back with a local anesthetic. A special needle is inserted into this numb area to find the exact location to inject the anesthetic medicine. After injecting the medicine, your anesthesiologist removes the needle. In most cases, a tiny plastic tube called an epidural catheter stays in place after the needle is removed to deliver medicines as needed throughout labor.

When is regional anesthesia given?

The best time to administer regional anesthesia varies depending on you and your baby's response to labor. If you request regional anesthesia, your healthcare provider will contact your anesthesiologist and together they will discuss with you the risks, benefits and timing of regional anesthesia. If you request regional anesthesia, you might receive epidural or spinal anesthesia, or a combination of the two. Your healthcare provider will select the type of regional anesthesia based on your general health and the progress of your labor.

Will regional anesthesia affect my baby?

Lots of research has shown that regional anesthesia is safe for you and for your baby.

How soon does regional anesthesia take effect and how long does it last?

Epidural anesthesia starts working within 10 to 20 minutes after the medicine has been injected. Pain relief from epidural anesthesia lasts as long as your labor, since more medicine can always be given through the catheter.

Spinal anesthesia starts working immediately after the medicine has been injected. Pain relief lasts about two and one-half hours. If your labor is expected to last beyond this time, an epidural catheter will be inserted to deliver medicines to continue your pain relief as long as needed.

How numb will regional anesthesia make me feel?

Although you will feel significant pain relief, you might still be aware of pressure from your contractions. You may also feel pressure when your provider examines your cervix and when your baby is very low in the pelvis.

Will a regional block slow my labor?

In some, contractions can slow after regional anesthesia. Most people find that regional anesthesia helps them to relax which may improve their contraction pattern while allowing rest. However, a study of 62,000 people who gave birth in the US concluded that the second stage of labor, or pushing, was about 30 minutes longer with an epidural than without.

If I have regional anesthesia, will I be able to push?

Yes. Because an epidural provides an opportunity to rest, you may have more energy available to push. While the sensation to push may be dulled a bit, using a mirror can often help you see the work that you are doing. You

may still feel some pressure from the baby moving into the birth canal, but overall, you will be more comfortable pushing with an epidural in place.

Are there any side effects to regional anesthesia?

Your anesthetist/anesthesiologist takes special precautions to prevent complications. Although complications are rare, some side effects might include:

- **Decreased blood pressure:** You will receive intravenous (IV) fluids, and your blood pressure will be carefully monitored and treated to prevent this from happening. Occasionally, this can have an effect on the baby. When we see this, we often use a medication to help boost your blood pressure.
- **Mild itching during labor:** If itching becomes bothersome, your anesthesiologist can treat it.
- **Headache:** Drinking fluids and taking pain tablets can help relieve headaches after regional anesthesia. If the headache persists, tell your anesthesiologist and other medicines can be ordered for you. It is a rare complication to have a spinal headache.
- **Local anesthetic reaction:** While local anesthetic reactions are rare, they can be serious. Be sure to tell your anesthesiologist if you become dizzy or develop ringing in your ears so that he or she can quickly treat the problem.

Alternatives to regional anesthesia

Your labor team is also very happy to help you with other options for managing the power of your labor

- Labor tubs can be very helpful in reducing the discomforts of labor. Feeling weightless in the tub, or feeling the pressure of the warm water surrounding you can make it much easier to cope with the strength of the contractions. If a tub doesn't seem fitting for you, consider laboring in the shower on a birth ball.
- Counter pressure is a very useful tool for making labor more manageable. Pressure applied by your provider, partner or nurse can make the surges of labor much less distressing.
- Aromatherapies are also available to help you get through your labor. Often, smells that have a connection to comforting times in our lives can work wonders to help us relax and get through labor. There are also scents that are known to improve focus and relaxation.
- Movement and activity is encouraged for our laboring patients. Just the simple act of movement, either rhythmically or not, can help to improve the perception of pain in labor.
- Nitrous oxide is an inhaled gas that is just like what you may get in a dentist's office. The gas we use in labor is not as concentrated, but does a great job reducing the anxiety and fear that can come with labor. Almost 90% of women give it great reviews!
- Narcotics for pain management are most useful in early active labor. Because they can make you sleepy and are given intravenously and/or intramuscularly, they can also make your baby a bit sleepy. Depending on how close you are to second stage (pushing) we may prefer to suggest alternatives. We want your baby to greet you with a lusty cry when they are born.
- Bring your favorite music. It is known that music can calm us and help us to relax. Since so much of labor takes place in our head, this may be just what you need to get to the next stage.
- Affirmations posted about your room can also help give you a feeling of well-being and strength. Write affirmations on index cards and look at them between surges. Your team will also remind you of your power and strength.

More information on pain relief during childbirth – available in 40 languages, can be found at the Obstetric Anaesthetists' Association (https://www.labourpains.com/International_Translations).

5. After Delivery

- › What to expect after delivery
- › Physical changes after delivery
- › Vaginal tears
- › Long acting reversible contraception
- › Depression after the birth of a child
- › Exercise after delivery

What to Expect after Delivery

Right after birth, you may be able to hold your baby. If possible, your baby will be placed skin-to-skin with you for at least an hour. The baby may search for the breast or begin to breastfeed at this time. In most cases, your baby will be weighed and examined in the labor and delivery room right in front of you.

If you or your baby have special medical needs or need special procedures during labor or birth, a team of pediatric caregivers will be present when your baby is born.

In some cases, your baby might need to go to the nursery for special care. Generally, babies stay in the nursery for a short time and then are returned to your room. You and your partner are welcome in the nursery to hold and feed your baby. When you want to visit your baby in the nursery, please ask your nurse.

After you and your baby have had time to recover, often times you will be transferred from the labor and delivery room to a postpartum room. Check with your hospital about its specific room arrangements.

Throughout your hospital stay, your heart rate, temperature and blood pressure will be checked often. Your healthcare provider also will check the size of your uterus and rub your abdomen to keep your uterus firm and to reduce bleeding.

You will be encouraged to get up and walk around as soon as possible.

Breastfeeding your baby

You can start to breastfeed soon after birth. Your baby's sucking will help stimulate your milk flow and will stimulate the uterus to contract to its normal size more quickly. Make sure you feel comfortable feeding your baby

before you go home. Breastfeeding may be natural, but it is also a skill that takes practice. Help with breastfeeding is available. Visit with a lactation consultant or nurse who can observe you breastfeeding and help you comfortably and properly feed your baby.

Getting to know your baby

The best way to learn how to take care of your newborn is to spend a lot of time with him or her by rooming-in. This is when your baby stays with you and your partner in your room from birth until you go home. Rooming-in with your baby helps you learn your baby's cues—how he or she responds when hungry, tired or wants to be held. Your healthcare provider will probably ask you to keep a record of when and how much (time on breast or ounces of formula) your baby eats. Your healthcare provider might give you a form to record this information. It's important to record when you change your baby's diaper and whether it was urine or a bowel movement. Your nurse will give you a form to record this information.

Your nurse can help you learn your baby's cues. Your partner or members of the nursing staff can help you care for your baby if needed.

Visitors

You might want to limit visitors for the first few hours after birth, since you and your partner will be tired and might want to spend time alone with your baby.

Check with your hospital regarding visiting hours and their policy. Before holding your baby, visitors should wash their hands to protect your baby from germs. Please ask visitors who are sick or have a fever, cough or runny nose to visit the baby when they are well.

How long will I stay in the hospital?

Check the specific laws in your state. Many states require insurance companies, by law, to provide coverage for 48 hours after a vaginal birth and 96 hours after a cesarean birth. The length of your hospital stay will depend on the type of birth you had, and how you and your baby are feeling. Your healthcare provider will talk with you about you and your baby's readiness to go home. Together you will decide the length of stay that's best for you and your baby. If your stay is less than 48 hours (or less than 96 hours if you had a cesarean birth), your hospital might arrange for a nurse to come to your house to evaluate how you and your baby are doing. Ask your healthcare provider if this is a service that is offered.

Before you go home, your healthcare provider will perform a physical exam and teach you how to care for yourself and your newborn. The healthcare provider will answer your questions to help assure a smooth transition for you at home.

If you have been discharged from the hospital but your baby needs to stay for observation, medicine, or other medical procedures, you might be able to stay in the hospital, but in a different room. Ask your hospital about their specific policy.

Before you leave the hospital

Make an appointment for baby's first checkup, as instructed by the hospital pediatrician.

How should I prepare for our first ride home?

As you may know, all state laws require children less than 40 pounds to be secured in an approved, properly used child safety seat while being transported in a motor vehicle.

Be sure to have an infant car seat that meets federal safety standards. It is a good idea to bring your baby's car seat to your hospital room on the day of discharge. When you are ready to go home, place your baby in the safety seat and adjust the straps as needed. If you need help, please ask your healthcare provider. Put the baby's safety seat in the back seat of the car (facing the back of the car) and be sure to follow the instructions on the safety seat so that it is properly secured in your motor vehicle.

If you have questions about child safety seats, please call the Auto Safety Hotline at 1.888.327.4236 or refer to "Car Seat Safety" in the Baby Care section of this book.

Follow-up visit

Within the first week after you leave the hospital, schedule a follow-up appointment with your healthcare provider for two weeks post partum and another four to six weeks after delivery. In some cases, you might need to have an even earlier follow-up visit two weeks postpartum and another visit four to six weeks after delivery.

Physical Changes After Delivery

Here are some of the physical changes you can expect:

Lochia (vaginal discharge)

Lochia is the vaginal discharge you have after a vaginal delivery. It has a stale, musty odor like menstrual discharge. Lochia is dark red in color for the first three days after delivery. A few small blood clots, no larger than a plum, are normal. For about the fourth through 10th day after delivery, the lochia will be more watery and pinkish to brownish in color. From about the seventh to 10th day through the 14th day after delivery, the lochia is creamy or yellowish in color.

You might notice increased lochia when you get up in the morning, when you are physically active, or while breastfeeding. Moms who have cesarean sections may have less lochia after 24 hours than moms who had vaginal deliveries. The bleeding generally stops four to six weeks after delivery. You should wear pads, not tampons, as nothing should go in the vagina for six weeks.

Incision drainage

If you had a C-section or tubal ligation, it is normal to have a small amount of pink, watery drainage from the incision. Keep the incision clean and dry. Wash the incision with soap and warm water. You can bathe or shower as usual. If the drainage doesn't stop or develops a thick yellow or green consistency, call your healthcare provider.

Breast milk

When you are breastfeeding, your breasts may leak milk. If you are unable to breastfeed, the leaking may occur initially and will stop within a week or two after delivery. Breast pads, worn inside your bra, may help keep you dry.

Breast engorgement

Breast engorgement is breast swelling characterized by a feeling of warmth, hardness and heaviness in the breasts. Engorgement is caused by increased circulation to the breasts. It can happen as milk comes in or if you miss a feeding (if you are breastfeeding).

If you are bottle-feeding your baby, you can relieve the discomfort of engorgement by taking pain medication as directed by your healthcare provider. You can also apply ice packs. Wearing a supportive bra also helps.

When breastfeeding, you can usually prevent engorgement by frequently feeding your baby or pumping your breasts. To relieve the discomfort, apply warm compresses or take a warm shower to help the milk let down (but then feed your baby or pump immediately after).

If you still have discomfort, you may try the following:

- Apply ice packs.
- Express some milk before feeding.
- Use an anti-inflammatory such as ibuprofen, as directed by your healthcare provider, to reduce swelling.
- Wear a supportive bra.

Seek help from your healthcare provider, lactation consultant, attend a lactation support group, or call the lactation hotline if this continues to be a problem for you. If there is one area of the breast that is red and wedge-shaped and toward the nipple, this may mean there is an infection. Call your healthcare provider if you suspect an infection at any time.

Uterine contractions

Within a few hours after birth, the upper portion of your uterus (fundus) is at about the level of your navel. It remains there for about a day then gradually descends each day. If you are breastfeeding, this may occur more rapidly. Without complications, your uterus will return to its approximate non-pregnant size (the size of a pear) in about six weeks.

After-pains, or cramps, are caused by uterine contractions that stop the bleeding from the area where the placenta was attached. These pains are more common in women who have had more than one pregnancy. The discomfort can be intense—especially if you are breastfeeding—for about five minutes, but will gradually subside.

To relieve discomfort, you may try these methods:

- Lie on your stomach with a pillow under your lower abdomen.
- Take a walk.
- Take pain medication as recommended by your healthcare provider.
- Take a sitz bath.
- Use a heating pad on your stomach.

Urination contractions

You may feel discomfort when urinating. Discomfort is common, but be sure to tell your healthcare provider if you feel pain or if urinating is difficult.

Discomfort in the perineal area

If you had an episiotomy, the area of the skin between the vagina and anus (called the perineum) might be very sore and sensitive. A cool compress placed on the perineum may reduce pain and swelling during the first few days after giving birth. To relieve discomfort, try warm sitz baths. Sit in a tub filled with a

few inches of water. To prevent an infection, do not add bubble bath or other products. You can also buy a small basin that fits on the toilet. You may also use this treatment for discomfort associated with hemorrhoids.

Perineal care

Keeping the perineum clean will increase comfort and prevent the risk of an infection. After each time you use the bathroom and/or change your pads, fill the peri bottle (a small squeeze bottle given to you at the hospital) with warm water. Squirt the water over the area between your vagina and rectum in a front-to-back motion. Pat the area dry with toilet tissue. Do not rub the area. Apply a clean pad often to maintain cleanliness. Continue to do the perineal care for one week after delivery.

Incontinence

The stretching of your muscles during delivery can cause temporary loss of urinary and sometimes bowel control. Urinary incontinence may occur more frequently when you laugh, cough or strain.

Practice Kegel exercises to improve urinary incontinence. It will improve a few weeks after delivery. If incontinence continues to be a problem after your first postpartum check-up, talk to your healthcare provider.

Constipation

The first bowel movement after delivery may be delayed until the third or fourth day after delivery. Your healthcare provider may prescribe or recommend an over-the-counter stool softener to make bowel movements less uncomfortable. Increase fruits, vegetables and whole grains in your diet to keep your bowel movements regular. Also, make sure you are drinking at least 10 to 12 glasses of fluid per day. Narcotic pain relievers may worsen the

situation, so minimize their use, if possible. Over-the-counter creams can help hemorrhoid discomfort, as can sitz baths. If constipation continues to be a problem, call your healthcare provider.

Perspiration

Increased perspiration, especially at night, is common after delivery as your body adjusts to new hormone levels after delivery.

Menstruation

If you are breastfeeding, you may not get your period (menstruate) until after your baby weans from the breast. Please be aware that although you may not get your period while breastfeeding, you can still get pregnant. If you are bottle feeding, you will usually menstruate six to 12 weeks after delivery. The first few periods after delivery may be irregular.

When to call your healthcare provider after delivery

Call your healthcare provider if you have:

- A fever over 100.4 degrees Fahrenheit or severe chills.
- Foul-smelling vaginal discharge.
- Bright red bleeding that continues beyond the third day.
- Passing of large blood clots (larger than a plum).
- Pain, burning or trouble urinating.
- Increase in the amount of vaginal discharge or bleeding in which you need to use more than one sanitary pad per hour.
- Blurred vision.
- Severe headaches or fainting.
- Increased pain, redness, drainage or separation of abdominal incision (cesarean delivery).

- Severe pain, swelling, or redness, of one extremity more than the other.
- Warm, red painful areas on either or both breasts.
- Difficulty breathing.
- Any signs of postpartum depression such as: being unable to cope with everyday situations, thoughts of harming yourself or your baby, feeling anxious, panicked or scared most of the day. Please see the “Depression After the Birth of a Child or Pregnancy Loss” portion of the book for more information.

Vaginal Tears (Perineal lacerations) During Childbirth

What is a vaginal tear?

A vaginal tear can happen during childbirth. Also called a perineal laceration, this is a tear in the tissue (skin and muscle) around your vagina and perineum. The perineal area is the space between the vaginal opening and your anus.

During a typical vaginal delivery, the skin of your vagina prepares for childbirth by thinning out. This part of your body is meant to stretch and allow the baby's head and body to pass through without trauma.

How serious are vaginal tears?

There are several different grades of vaginal tears. These grades are determined by the severity of the tear.

- **First-degree tear:** The least severe of tears, this small injury involves the first layer of tissue around the vagina and perineal area.
- **Second-degree tear:** This second level of this injury is actually the most commonly seen tear during childbirth. The tear is slightly bigger here, extending deeper through the skin into the muscular tissue of the vagina and perineum.
- **Third-degree tear:** A third-degree tear extends from your vagina to your anus. This type of tear involves injury to the skin and muscular tissue of the perineal area, as well as damage to the anal sphincter muscles. These muscles control your bowel movements.
- **Fourth-degree tear:** This is the least common type of tear during childbirth. Extending from the vagina, through the perineal area and anal sphincter muscles and into the rectum, this injury is the most severe type of tear.

What causes a vaginal tear during childbirth?

A vaginal tear during childbirth can happen for a variety of reasons. A few factors that could cause a tear can include:

- If it's your first delivery.
- The position of the baby (face-up deliveries).
- Use of forceps or a vacuum during delivery.
- A large baby (more than 8 pounds).
- If you've had an episiotomy.
- If you are of Asian ethnicity.

How are vaginal tears treated or repaired?

Treatment of a vaginal tear depends on the severity of the injury. In a first-degree tear, you may not need any stitches. In a second-, third- and fourth-degree tear, you will receive stitches to repair the injury. Any stitches will dissolve on their own within six weeks. In some of the most severe cases, your healthcare provider may need to repair the injury to the anal sphincter. This will also be done with dissolvable stitches.

You may feel some discomfort in the weeks after delivery while your tear heals. There are a few things you can do to help ease this discomfort. These tips work with each type of tear.

- Use a peri-bottle (a squirt bottle) to wash yourself clean after using the bathroom.
- Gently pat yourself dry with toilet paper instead of wiping.
- Avoid constipation by drinking plenty of water and using a stool softener.

Your healthcare provider may also give you cooling pads to wear with your sanitary pad post-delivery. These can help relieve discomfort from your tear.

Make sure you check with your healthcare provider before taking any pain relief medications. What you can and can't have may change if you are breastfeeding.

How long does it take a vaginal tear to heal?

Most women feel relief from any pain caused by a vaginal tear in about two weeks. If your tear required stitches, they will dissolve within six weeks. You will not need to go back in to your healthcare provider's office to have your stitches removed or receive any additional treatment for the tear.

Keep an eye out for any signs of an infection while your tear heals. These can include:

- A foul-smelling discharge.
- A fever.
- Pain that doesn't go away even with medication.

Some women experience pain with sex after having a tear. If you feel any pain or discomfort after your tear, talk to your healthcare provider.

Can an episiotomy prevent me from tearing?

An episiotomy is a procedure where the healthcare provider makes a cut from the edge of your vaginal opening outwards. This is meant to widen the opening in a controlled way.

Though an episiotomy widens the vaginal opening, it doesn't always keep you from tearing. An episiotomy creates risks for a more severe tear (third- or fourth-degree). However, there may be other reasons that an episiotomy is necessary. Talk to your healthcare provider about the pros and cons of this procedure.

Can I have a vaginal delivery in a second pregnancy if I had a vaginal tear previously?

In most cases, experiencing a tear during one delivery doesn't mean you will tear again during a future delivery. Most small tears heal well and will not prevent you from having future vaginal deliveries. If you have had a third- or fourth-degree tear in the past, you can be at risk for a tear during vaginal childbirth in the future. The risk is usually low enough that you can still have a vaginal delivery if you would like to. In some cases, your healthcare provider may suggest a caesarean section (C-section) delivery to prevent a tear.

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Long Acting Reversible Contraception (LARC)

Long acting reversible contraception methods include the intrauterine device (IUD) and birth control implant (Nexplanon®).

These are highly effective in preventing pregnancy and can last several years depending on the method chosen. They are easy to use as nothing needs to be done once they are placed and they are also easy to remove when desired. They can be placed immediately after you have a baby or at your follow up visit. These methods are very effective, with fewer than one in 100 women who use it becoming pregnant (less than 1%) per year.

This rate is in the same range as permanent sterilization. These methods are 20 times more effective than the pill, patch, shot or ring. Most women can use the IUD or implant. Your physician can discuss if these methods will work for you.

IUDS

An IUD is a plastic, T-shaped device that is placed into the uterus. It works by preventing fertilization of the sperm and egg. The hormonal IUD also thickens the cervical mucus which makes it harder for sperm to travel and thins out the lining of the uterus to prevent implantation.

The postpartum period may be a convenient time to have an IUD inserted because you are already in the hospital. You may not feel the insertion if you have an epidural or spinal for labor pain management.

There are two types:

1. The hormonal IUD releases some progestin hormone into the uterus and are approved for 3-5 years depending on the one chosen.

2. The copper IUD does not have any hormone and is approved for 10 years.

Possible side effects of the IUD are some cramping and bleeding that may decrease within the first year. The hormonal IUD may lead to decreased bleeding or no period over time, which is safe. Some infrequent side effects of the hormonal IUDs can be headaches, nausea, depression and breast tenderness. Most of these symptoms resolve with time.

The benefits of the IUD:

- Once placed, you do not have to do anything further.
- It can be inserted immediately after a vaginal or cesarean delivery or at your postpartum visit.
- The hormonal IUD can decrease menstrual pain and bleeding.
- All IUDs are safe with breastfeeding.
- It can be easily removed at any time and there is no delay in attempting future pregnancies.

The risks of the IUD:

- Uterine perforation, which means the IUD can pierce through the wall of the uterus. This is rare and occurs in one out of 1,000 procedures.
- The uterus may expel the IUD. This can occur in 5% of cases in the first year, but up to 10-20% if placed immediately postpartum.

- PID (pelvic inflammatory disease) is an infection of the uterus and fallopian tubes. It is rare and occurs in fewer than one in 100 women.
- Increased risk of an ectopic pregnancy (pregnancy not in the uterus) if pregnancy occurs, which is rare.

NEXPLANON (The implant)

Nexplanon is a single flexible rod that is inserted under the skin in the upper arm. It releases the hormone progestin to prevent pregnancy. It is effective for up to three years. This hormone prevents ovulation, which prevents pregnancy.

Possible side effects are unpredictable bleeding, which generally improves with time. Some individuals may notice mood changes, headaches and acne.

The benefits of the rod are:

- Once it is placed, you do not have to do anything for up to three years.
- It can be easily removed if desired.
- It is safe with breastfeeding.
- It can be placed postpartum while you are in the hospital or at your postpartum visit.

The potential risks are:

- Difficulty removing the implant which can occur in less than 2% of women.
- If a woman becomes pregnant with the rod in place, which is rare, there is a slightly higher risk of an ectopic pregnancy.

Most insurances will cover the implant and the IUD.

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- 7) Up to Date: Etonorgestrel Contraceptive Implant, updated 11/4/16

Depression after the Birth of a Child or Pregnancy Loss

What is postpartum depression?

Postpartum depression is a complex mix of physical, emotional and behavioral changes that occur after giving birth and are attributed to the chemical, social and psychological changes associated with having a baby.

Who is affected by postpartum depression?

Postpartum depression is common. As many as 75% of new mothers experience the “baby blues” after delivery. Up to 15% of these women will develop a more severe and longer-lasting depression—called postpartum depression—after delivery.

One in 1,000 women develop the more serious condition called postpartum psychosis.

What factors increase my risk of being depressed after the birth of my child?

- Having a personal or family history of depression or premenstrual dysphoric disorder (PMDD).
- Limited social support.
- Marital conflict.
- Ambivalence about the pregnancy.
- A history of depression during pregnancy—50% of depressed pregnant women will have postpartum depression.

Types of postpartum depression

Postpartum blues: Better known as the “baby blues,” this condition affects between 50% and 75% of women after delivery. If you are experiencing the baby blues, you may experience frequent, prolonged bouts of crying for no apparent reason, sadness and anxiety. The condition usually begins in the first week

(one to four days) after delivery. Although the experience is unpleasant, the condition usually subsides within two weeks without treatment. All you’ll need is reassurance and help with the baby and household chores.

Postpartum depression: This is a far more serious condition than postpartum blues, affecting about one in 10 new mothers. If you’ve had postpartum depression before, your risk increases to 30%. You may experience alternating emotional highs and lows, frequent crying, irritability and fatigue, as well as feelings of guilt, anxiety, and inability to care for your baby or yourself. Symptoms range from mild to severe and may appear within days of the delivery or gradually, even up to a year later.

Although symptoms can last from several weeks up to a year, treatment with therapy or antidepressants is very effective.

Postpartum psychosis: This is an extremely severe form of postpartum depression and requires emergency medical attention. This condition is relatively rare, affecting only one in 1,000 women after delivery. The symptoms generally occur quickly after delivery and are severe, lasting for a few weeks to several months.

Symptoms include severe agitation, confusion, feelings of hopelessness and shame, insomnia, paranoia, delusions or hallucinations, hyperactivity, rapid speech, or mania. Postpartum psychosis requires immediate medical attention since there is an increased risk of suicide and risk of harm to the baby. Treatment will usually include admission to hospital for the mother and medicine.

What causes postpartum depression?

More research is needed to determine the link between the rapid drop in hormones after delivery and depression. The levels of estrogen and progesterone (the female reproductive hormones) increase tenfold during pregnancy but drop sharply after delivery. By three days postpartum, levels of these hormones drop back to pre-pregnant levels. In addition to these chemical changes, the social and psychological changes associated with having a baby create an increased risk of postpartum depression.

If you have had any of the following symptoms, please notify your healthcare provider right away:

- Thoughts of harming yourself or your baby.
- Recurrent thoughts of death or suicide.
- Depressed mood for most of the day, nearly every day for the last two weeks.
- Feeling anxious, guilty, hopeless, scared, panicked or worthless.
- Difficulty thinking, concentrating making decisions, or dealing with everyday situations.
- Loss of interest or pleasure in most of the activities during the day nearly every day for the last two weeks.

If you do have any of the previous symptoms, your healthcare provider may ask you the following two questions:

1. Over the past two weeks, have you felt down, depressed or hopeless?
2. Over the past two weeks, have you felt little interest or pleasure in doing things?

If you answer yes to either one, your healthcare provider will administer a more in-depth depression screening.

Can postpartum depression be prevented?

Here are some tips that can help prevent, or help you cope with postpartum depression:

- Be realistic about your expectations for yourself and your baby.
- Limit visitors when you first go home.
- Ask for help. Let others know how they can help you.
- Sleep or rest when your baby sleeps.
- Exercise. Take a walk and get out of the house for a break.
- Screen your phone calls.
- Follow a sensible diet. Avoid alcohol and caffeine.
- Keep in touch with your family and friends. Do not isolate yourself.
- Foster your relationship with your partner. Make time for each other.
- Expect some good days and some bad days.

Treating postpartum depression

Postpartum depression is treated differently depending on the type and severity of the woman's symptoms. Treatment options include anti-anxiety or antidepressant medicines, psychotherapy and support group participation.

In the case of postpartum psychosis, medicines used to treat psychosis are usually added. Hospital admission is also usually necessary.

If you are breastfeeding, don't assume that you can't take medicines for depression, anxiety or even psychosis. Speak to your healthcare provider about your options.

What is the outlook?

With professional help, almost all women who experience postpartum depression are able to overcome their symptoms.

Exercise after Delivery

Light to moderate intensity walking is appropriate for most people who are recovering from childbirth. Typically, if you're ready to start a fitness routine, you should check with your healthcare provider to make sure it's safe for you to begin exercising, especially if you have had a C-section.

If your goal is weight loss, consistent exercise and a healthy diet are the best ways to lose weight and return to your pre-pregnant weight. But don't over-do it. A one- to two- pound weight loss per week is the healthiest rate of weight loss. It's not uncommon for it to take up to 12 months for you to return to your previous weight. Breastfeeding mothers should consume at least 1,800 calories per day (source: La Leche League, 2010; Lauwers & Swisher, 2015).

Here are some questions you can think about before choosing an exercise routine:

- What physical activities do I enjoy?
- Do I prefer group or individual activities?
- Are there any activities I can do with my baby?
- What programs best fit my schedule?
- Do I have physical conditions that limit my choice of exercise?
- What goals do I have in mind? (e.g., losing weight, strengthening muscles or improving flexibility)

How do I get started?

When starting out, you should plan a routine that is easy to follow and stay with. As the program becomes more routine, you can vary your exercise times and activities.

- Choose an activity you enjoy. Exercising

should be fun and not a chore. You might even be able to include your baby. Try jogging or walking with the stroller, and think of your little bundle of joy as a 12-pound weight. Exercise can double as playtime.

- Schedule regular exercise into your daily routine. Add a variety of exercises so you do not get bored.
- Abdominal exercises will be most effective after six weeks.
- Stick with it. If you exercise regularly, it will soon become part of your lifestyle.
- If you feel you need supervision or medical advice to begin an exercise program, ask your healthcare provider.
- A general rule after C-sections is to not lift weights heavier than your baby (six to 10 pounds) in the first six to eight weeks.

Stop exercising and call your doctor if you have:

- Severe or chronic pain.
- Increased vaginal bleeding.
- Faintness.
- Nausea.
- Shortness of breath.
- Extreme fatigue and muscle weakness.

6. Breastfeeding

- › The benefits of breastfeeding
- › 24 hour rooming-in
- › Skin-to-skin contact for you and your baby
- › Breastfeeding the first weeks
- › Over the counter meds and breastfeeding
- › Contraception during breastfeeding

The Benefits of Breastfeeding for Baby and for Mom

Breastfeeding: Healthier for baby

Breastfed babies have:

- Stronger immune systems.
- Less diarrhea, constipation, gastroenteritis, gastroesophageal reflux (GERD) and preterm necrotizing enterocolitis (NEC).
- Fewer colds and respiratory illnesses like pneumonia, respiratory syncytial virus (RSV) and whooping cough.
- Fewer ear infections, especially those that damage hearing.
- Fewer cases of bacterial meningitis.
- Better vision and less retinopathy of prematurity.
- Lower rates of infant mortality.
- Lower rates of Sudden Infant Death Syndrome (SIDS).
- Less illness overall and less hospitalization.
- Parents have up to six times less absenteeism from work.
- Less risk of developing celiac disease.

Breast milk provides abundant and easily absorbed nutritional components, antioxidants, enzymes, immune properties and live antibodies from mother. Mother's more mature immune system makes antibodies to the germs to which she and her baby have been exposed. These antibodies enter her milk to help protect her baby from illness. Immunoglobulin A coats the lining of the baby's immature intestines keeping germs and allergens from leaking through. Breast milk also contains substances that naturally soothe infants.

Breastfed babies may become healthier children with:

- Fewer instances of allergies, eczema and asthma.
- Fewer childhood cancers, including leukemia and lymphomas.
- Lower risk of type I and II diabetes.
- Fewer instances of Crohn's disease and colitis.
- Lower rates of respiratory illness.
- Fewer speech and orthodontic problems.
- Fewer cavities.
- Reduce risk for obesity in childhood.
- Improved brain maturation.

Teens and adults will find benefits for life:

- Less likely to develop rheumatoid arthritis and lupus.
- Less likely to develop heart disease in adulthood.
- Lower risk of multiple sclerosis.
- Lower rates of pre- and postmenopausal breast cancers.

Breastfeeding: Healthier for mom physically

- Promotes faster weight loss after birth, burning about 500 extra calories a day to build and maintain a milk supply.
- Stimulates the uterus to contract and return to normal size.
- Less postpartum bleeding.
- Fewer urinary tract infections.

- Less chance of anemia.
- Less risk of postpartum depression and more positive mood.
- Greater immunity to infection.

Healthier emotionally

- Breastfeeding produces the naturally soothing hormones oxytocin and prolactin that promote stress reduction and positive feelings in the nursing mother.
- Increased confidence and self-esteem.
- Increased calmness. Breastfed babies cry less overall, and have fewer incidences of childhood illness. Breastfeeding can support the wellness of body, mind and spirit for the whole family.
- Breastfeeding makes travel easier. Breast milk is always clean and the right temperature.
- Physical/emotional bonding between mother and child is increased. Breastfeeding promotes more skin-to-skin contact, more holding and stroking. Many feel that affectionate bonding during the first years of life help reduce social and behavioral problems in both children and adults.
- Breastfeeding mothers learn to read their infant's cues and babies learn to trust caregivers. This helps shape the infant's early behavior.

Benefits for life

Breastfeeding may result in:

- Lower risk of breast cancer.
- Lower risk of ovarian cancer.
- Lower risk of thyroid cancer.
- Lower risk of endometrial cancer.

- Lower risk of rheumatoid arthritis and lupus.
- Less endometriosis.
- Less osteoporosis with age.
- Less diabetes.
- Less hypertension, decreases blood pressure.
- Less cardiovascular disease.

Studies also show, the longer mothers and infants breastfeed, the more benefit they receive.

24-Hour Rooming-In: Rest is Healing

Having a baby is exciting, exhausting work. That's why it's called "labor."

Mothers and babies belong together. Twenty-four hour rooming-in is provided as part of our family-centered care to help you learn how to rest and care for your newborn.

Twenty-four hour rooming-in helps you prepare for going home with your new baby. Many women welcome the idea of getting as much sleep as possible after labor, and it can be tempting to send your baby to the nursery to get some rest. However, research shows you are just as likely to get the same amount of rest with your baby in the room. Having your baby with you right from the beginning is shown by research to be the best way for you and your baby to rest and establish a routine. This is a wonderful time to get to know and connect with your new baby. Babies recognize their parent's voice, smell, and heartbeat. Having your baby within your presence helps your baby relax. Twenty-four hour rooming-in helps you prepare for going home with your new baby and offers more opportunities to learn about your baby's behaviors and what they mean.

24-Hour Rooming-In Benefits for Mother:

- Better quality sleep.
- Increased confidence in handling and caring for baby.
- Ability to learn what your baby's cues are (sleepy, stressed, in need of quiet time or hungry).
- Earlier identification of early feeding cues (rooting, opening mouth, and sucking on

tongue, fingers or hand).

- Improved breastfeeding experience.
- Less infant crying and distress (they love to be near you).
- Less "baby blues" and postpartum depression.
- Parents are better-rested and more relaxed by the end of the first week home.
- Increases opportunity for skin-to-skin contact.

24-Hour Rooming-In Benefits for Baby:

- Better quality sleep. Your baby will develop a more regular sleep-wake cycle earlier, and may help ease the transition to day/night routines.
- More stable body temperatures.
- Generally more content, less crying.
- More stable blood sugar.
- Breastfeed sooner, longer, and more easily.
- Lower levels of stress hormones.
- Babies exposed to normal bacteria on mother's skin, which may protect them from becoming sick due to harmful germs.

The best advice we can give new parents is to learn how to rest when your baby sleeps day and night in the first days. Early in the newborn period, babies eat frequently, and find comfort and security in being close to you. Learning how to feed your infant can be easier when you learn to read your baby's early hunger cues and sleep/awake states. Keeping baby with you helps you learn how to feed and care for them while our expert staff is close by

to assist you.

To further meet the needs of all patients and families, Cleveland Clinic offers 24-hour visitation. We encourage you to think ahead about what your wishes will be during your hospital stay. Do you prefer to have round the clock visitors, or will you choose to limit visitors to close family and specific times of the day? We are glad to help you set boundaries in order to help you rest and recover during these first hours and days after delivery. Some parents put a note on their door requesting privacy to rest and bond. Other moms have a code phrase to indicate to their partner they are tired and want help asking visitors to leave.

Whatever your wishes, it is our goal to provide you with the best possible care while preparing you to care for your newborn at home. Please let us know how we can best assist you.

Skin-to-Skin Contact for You and Your Baby

What is meant by “skin-to-skin”?

Skin-to-skin means your healthy baby is placed belly-down, directly on your chest, right after birth. Your care provider dries your baby off, puts a hat on him or her, covers him or her with a warm blanket, and gets your baby settled on your chest. The first hours of snuggling skin-to-skin let you and your baby get to know each other. They also have important health benefits including regulation of their vital signs.

If your baby needs to meet the pediatrician first, or if you deliver by C-section, you can unwrap your baby and cuddle shortly after birth. If necessary, your partner can do the initial skin to skin. Newborns crave skin-to-skin contact, but it's sometimes overwhelming for new moms. It's OK to start slowly as you get to know your baby.

Breastfeeding

Keep your baby skin-to-skin as much as possible. Snuggling gives you and your baby the best start for breastfeeding. Research studies have shown that babies who have had the benefit of skin-to-skin breastfeed better. They also continue to keep nursing an average of six weeks longer.

The American Academy of Pediatrics recommends that all breastfeeding babies spend time skin-to-skin right after birth. Keeping your baby skin-to-skin in the first few weeks makes it easy to know when to feed your baby, especially if your baby is a little sleepy.

A smooth transition

Your chest is the best place for your baby to adjust to life in the outside world.

Compared with babies who are swaddled or

kept in a crib, skin-to-skin babies stay warmer and calmer, cry less, and have healthier blood sugar levels.

Bonding

Skin-to-skin cuddling may affect how you relate with your baby. Researchers have watched mothers and infants in the first few days after birth, and they noticed that skin-to-skin moms touch and cuddle their babies more. Even a year later, skin-to-skin moms snuggled more with their babies during a visit with the pediatrician.



Skin-to-skin beyond the delivery room

Keep cuddling skin-to-skin after you leave the hospital. Your baby will stay warm and comfortable on your chest, and the benefits for bonding, soothing, and breastfeeding will likely continue. If your baby is sleepy, skin-to-skin can help keep your baby interested in nursing.

Partners can snuggle, too. Parents who hold babies skin-to-skin help keep them calm and cozy. Babies are comforted by skin-to-skin during procedures. Skin-to-skin may enhance brain development. Fathers and mothers who hold babies skin-to-skin are thought to have increased confidence and are more relaxed.

Breastfeeding: The First Weeks

Getting started

The first weeks of breastfeeding are a learning time for you and your baby. You are learning how to care for and feed your baby, and your baby is discovering how to breastfeed and ask for comfort. Be patient. Over the next days and weeks, both of you will learn how to breastfeed. Help with breastfeeding is available. Your care team (nurse, lactation consultant, physician) will help you and your baby breastfeed before you leave the hospital. You may call for assistance any time of day.

During the first weeks, your milk will change from colostrum (a thick, rich fluid) to mature milk (a thinner, whitish fluid). This happens gradually.

Your milk provides all the food and fluid your baby needs.

A good start with breastfeeding

- We encourage you to put your baby to breast after birth.
- Keep your baby with you so you can breastfeed often (24-hour rooming-in).
- Breastfeeding provides comfort as well as nutrition to your baby. Offer your breast whenever your baby shows feeding cues such as mouthing, lip smacking, turning toward the breast, sucking on fists. Feeding on cue or on demand will assure good milk supply because baby's nursing drives the milk supply.
- Newborns breastfeed often. The average is eight to 12 feedings per day.
- Breastfeeding is different for every baby and mother. If it is painful, please call for assistance. Oftentimes, the latch is shallow instead of deep.

- The more you breastfeed, the more milk you will make for your baby. Frequent nipple stimulation sends hormones to produce
- Once you and your baby learn how to breastfeed, breastfeeding will be a good time to relax and enjoy each other. more milk.

Where should I breastfeed my baby?

Select a quiet, comfortable place to breastfeed. If you'd like, pour yourself a glass of water or juice to drink while you are breastfeeding your baby.

Choose a chair with arm support and put your feet on a stool to bring your baby closer to you. Or try lying down on your side. Use pillows on your lap or under your arms to support your baby and avoid straining your back.

If you are in pain, take medicine before breastfeeding to help make you more comfortable.

How should I hold my baby?

Hold your baby close to you, tummy to tummy. Your baby's whole body should face your body.

Remove your baby's clothing, except for the diaper. Hold him or her as close to you as possible, skin-to-skin contact is best. Keep your baby's head higher than his or her stomach.

Here are two examples of positions to hold your baby while learning to breastfeed. Choose a position that is comfortable for both you and your baby.

Cross-Cradle Position

During the early weeks, many mothers find



a variation of the cradle position, called the cross-cradle position, to be useful. For this position, your baby is supported on a pillow across your lap to help raise him/her to your nipple level.

Pillows should also support both elbows so your arms don't hold the weight of the baby; they will tire before the feeding is finished.

If you are preparing to breastfeed on the left breast, your left hand supports that breast in a "U" hold. You support your baby with the fingers of your right hand. Do this by gently placing your hand behind your baby's ears and neck with your thumb and index finger behind each ear. Your baby's neck rests in the web between the thumb, index finger and palm of your hand, forming a "second neck" for baby. The palm of your hand is placed between your baby's shoulder blades. As you prepare to latch on your baby, be sure your baby's mouth is very close to your nipple from the start. Aim the nipple toward the nose. When baby opens his/her mouth wide, you push with the palm of your hand from between the shoulder blades. Your baby's mouth will be covering at least a half inch from the base of your nipple.

Clutch or Football Position

This is a good position for a mother who has



had a cesarean birth, as it keeps the baby away from the incision. Most newborns are very comfortable in this position. It also helps when a mother has a forceful milk ejection reflex (let down) because the baby can handle the flow more easily. In the clutch position, you support your baby's head in your hand and his back along your arm beside you.

You support your breast with a "C" hold. Your baby is facing you, with his/her mouth at nipple height.

Your baby's legs and feet are tucked under your arm with his/her hips flexed and his/her legs resting alongside your back rest so the soles of his/her feet are pointed toward the ceiling. (This keeps your baby from being able to push against your chair.) Pillows help bring the baby to the correct height.

How should I position my baby on my breast?

Hold your breast with one hand. Place your thumb on top of your breast and four fingers underneath, away from the dark area around the nipple (areola).

When your baby's mouth is open wide (like a yawn), quickly bring your baby onto your breast, leading with the lower lip and baby's head tilted slightly back.

Check your baby's mouth position to make sure the bottom lip is rolled out. Your baby's chin should be touching your breast. Your baby's mouth will be about one inch behind the nipple and on the areola, not on the nipple.

In this position, place your baby's lower arm around your waist. Your baby's head will rest in the bend of your arm, with your forearm supporting your baby's back, and your hand holding your baby's buttocks. Support your breast with the other hand. Place your hand behind your baby's neck, and rest your baby's back on your forearm. Support your breast with your other hand. You will feel a tugging at your breast.

This should not be painful. If it hurts, break suction (gently slip your finger into the corner of your baby's mouth) and try to latch your baby on your breast again.

How do I know when my baby is getting milk?

Changes in your baby's sucking pattern will help you know when your milk lets down or is released. Your baby will begin with rapid, short sucking motions. Soon after you will notice a slower, steady sucking pattern and will hear your baby swallow. "Kuh" are swallow sounds you may hear.

How often should I breastfeed?

Feed your baby on demand every one to three hours during the day and night. Most newborns need to breastfeed about eight to 12 times per day. Your baby might want to nurse every hour or so for several feedings (this is called cluster feedings).

Let your baby breastfeed for as long as your baby is nursing vigorously longer on the first breast until he or she seems satisfied. There

is no need to limit the length of the feedings unless your nipples are sore. Burp your baby and then offer your other breast.

It is OK if your baby does not feed at both breasts during each feeding.

Start on the other breast at the next feeding.

How do I know if my baby is getting enough milk?

By one week of age, be sure your baby has had at least six to eight wet diapers and three to four large, yellow, seedy stools every 24 hours. The urine should be pale in color after the first week. If your baby is not getting enough milk, the urine will become deep yellow in color and the amount will decrease.

If it's hard to tell if your baby is wet, place a square of toilet paper on top of the diaper. When your baby urinates, the toilet paper will be wet. Some diapers have a line that changes color when there is urine in the diaper.

Breastfed babies have yellow, seedy, loose stools, often with each feeding. Later on, some breastfed babies might only have one stool per week.

To see if your baby is gaining enough weight, weight checks are available at your local breastfeeding support groups or you can call your healthcare provider's office.

Breast care

Wash your hands before breastfeeding. A bath or shower once a day is all you need to keep your nipples clean. Do not use soap or other products when washing your nipples. Use warm water only. Allow your nipples to dry after a feeding.

How can I avoid sore nipples?

Sore nipples are common in the first weeks and are often caused by poor latch or positioning. To avoid sore nipples, follow these guidelines:

- Make sure your baby's mouth is opened wide (like a yawn) before he or she latches onto your breast.
- Change your position for breast feeding.
- Be sure the baby's mouth is latched deeply to prevent soreness.
- Rub colostrum or breast milk into your nipple and areola after each feeding, let air dry.
- If your nipples are sore and dry or cracking, start breastfeeding with the less sore breast first.
- Use acetaminophen (such as Tylenol®), an anti-inflammatory (such as ibuprofen), or other pain medicine, as prescribed by your healthcare provider, for short-term relief.

If your nipples remain sore or are painful, call a lactation consultant.

When can I introduce bottles?

Do not introduce bottles until you and your baby are comfortable with breastfeeding. In fact, some families never use bottles at all. After the first three to four weeks, once you and your baby have become comfortable with breastfeeding, bottles can be introduced. It might help if someone other than you feeds your baby the first bottle.

You might choose to pump your breasts and use this breast milk for an occasional or regular bottle feeding. The American Academy of Pediatrics recommends exclusive breast milk feeding for the first six months of life, continuing with complementary food through the first two years of life and beyond.

If you will be returning to work, call a lactation consultant or breastfeeding medicine physician two to four weeks before you return to work to discuss your options. You may also find information at [womenshealth.gov/breastfeeding](https://www.womenshealth.gov/breastfeeding).

Are supplements necessary?

There is no need for supplements in the first weeks for healthy, full-term babies, unless recommended by your provider. In fact, avoid supplements, as they will decrease your milk supply. Frequent emptying of the breast is important to establish your milk supply.

Avoid artificial nipples, pacifiers and bottles for the first four weeks, as they might decrease your milk supply.

Your baby controls your milk supply by feeding often. As your baby grows, there will be times when he or she breastfeeds more than usual, and this will increase your milk supply.

How can I take care of myself the first weeks after delivery?

Get enough rest. Whenever the baby is sleeping, you should rest, too. Let your family and friends help with older children and house chores. Your job during the first weeks is to get to know your new baby.

Good nutrition remains important. Follow the same guidelines for healthy eating as you did during pregnancy. Remember, eating well keeps you healthy. Your healthcare provider might recommend that you continue to take a prenatal vitamin while you are breastfeeding.

If you are uncomfortable from delivery, take the pain medicines as directed by your healthcare provider. Pain can make breastfeeding more difficult, since it can interfere with your milk letting down. Pain medicines prescribed by your healthcare provider will not harm your baby.

Ask your healthcare provider or lactation consultant about the safety of any medicine you might need to take while breastfeeding. Most prescription drugs or over-the-counter medicines are safe to take while breastfeeding.

Common concerns about breastfeeding

Are my breasts too small to breastfeed?

Breast size does not affect your ability to breastfeed. The amount of milk your breasts make mostly depends on the amount your baby feeds as well as certain medical conditions and the amount of glandular tissue you have. If you have any questions about your risk factors for low supply or have a history of low supply, talk to your OB, a lactation consultant, or one of our breastfeeding medicine specialists.

Will breastfeeding hurt?

Breastfeeding should not hurt if your baby is latched onto your breast well. Your healthcare provider can help you learn how to hold your baby when you breastfeed for the first time. Your breasts might be tender the first few days, but this soreness should go away as you continue to breastfeed.

Is breastfeeding hard to do?

Breastfeeding is a learned skill and takes practice, but the health benefits you are gaining for you and your baby are worth it. Help with breastfeeding is available. There are many ways for you to learn about breastfeeding. Many hospitals offer breastfeeding classes that you can attend during pregnancy. In most cases, nurses and lactation consultants are also available to give you information and support. Talking to other breastfeeding moms might be helpful and make you feel more comfortable.

I am shy and think breastfeeding might embarrass me.

You can choose to feed your baby in private. Or, you can breastfeed in front of others without them seeing anything. You can wear shirts that pull up from the bottom, just enough for your baby to reach your breast. You can put a blanket over your shoulder or around your baby so no one can see your breast.

Do I have to drink milk if I choose to breastfeed?

No, you do not have to drink milk to make breast milk. Other sources of calcium-rich foods include yogurt, cheese, tofu, salmon, almonds, calcium-enriched fruit juice, corn tortillas, leafy green vegetables, broccoli, and dried beans and peas. Eat four servings of calcium-rich foods every day to provide proper nutrition for you and your baby.

What if I need to go out?

If you can take your baby with you, your baby can eat when he or she is hungry. If you need to be away from your baby, you can learn to pump or “express” your milk and store it so that someone else can feed your baby.

How can I breastfeed when I go back to work?

When you return to work, you can learn to pump or “express” your milk and store it so that someone else can feed your milk to your baby while you’re at work.

For more information on breastfeeding for working mothers, go to:
<https://www.womenshealth.gov/supporting-nursing-moms-work/what-law-says-about-breastfeeding-and-work>.

Will breastfeeding take too much time?

Feeding your baby takes time, no matter which method you choose. Your choice to breastfeed is a personal one. We encourage you to discuss your concerns with your healthcare provider or a lactation consultant.

How can the dad or partner bond with the baby if I am breastfeeding?

Dad or partner can provide skin-to-skin contact, which is a loving way to bond and to give the new mother some time for herself.

Dad or partner can also take the baby for a walk in a front carrier or a sling and help with basic baby care.

Over-the-Counter Medicines and Breastfeeding

Is it safe to take over-the-counter medicines while I am breastfeeding my baby? The answer is usually “yes.” To provide some simple background information about this topic, briefly, here are some known facts about medicine and breast milk:



- Nearly all medicines taken by a mother pass into human milk, but only in very small amounts—usually less than 1% of the dosage taken by the mother.
- Because only a very small amount even passes into milk, there are very few drugs that shouldn't be taken by a nursing mother.
- In most cases, nursing mothers do not need to interrupt breastfeeding to take prescription or over-the-counter medicines. In the rare situation when you should not take a drug, you may try an alternative drug, a non-drug, or a procedure.

Two simple general rules of thumb that can help you determine if it is safe to take a medicine during breastfeeding are as follows:

- If a drug is commonly prescribed for infants, it is likely safe to take while nursing, since the baby would generally receive a lower dose from breast milk than from taking the drug directly.
- Drugs considered safe to take during pregnancy are, with few exceptions, safe to take while nursing.

Are there any additional safety measures to consider while breastfeeding?

Even though most medicines are safe to take during breastfeeding, some additional safeguards to lower any potential risk even further include:

- Take the lowest possible dose for the shortest possible time.
- Avoid extra-strength formulas. Also avoid “sustained-release” preparations and medicines taken only once or twice a day. These are considered long-acting drugs and remain in the mother's blood stream and milk supply much longer than drugs that need to be taken more frequently.
- When possible, use single ingredient preparations rather than multi-symptom formulas.
- Watch for signs of a possible drug reaction in your baby such as sleepiness, rashes, diarrhea or colic. Although such reactions rarely occur, call your healthcare provider if you see such changes.
- Finally, always read the medicine labeling and package insert for any precautions or warnings about taking the drug while breastfeeding. Never hesitate to call your doctor, the baby's pediatrician, a lactation consultant or your pharmacist if you have any concerns about taking a medicine while you are breastfeeding.

Which medicines are not safe to take while breastfeeding?

Some of the medicines that require temporary weaning are those that contain radioactive compounds and drugs used to treat cancer. Most of the drugs that raise any concern at all are prescription drugs, not over-the-counter medicines.

For more information on unsafe medications that are geared to nursing mothers, please visit the United States National Library of Medicine, LactMed, which contains over 450 drug records. <https://www.nlm.nih.gov/databases/download/lactmed.html>.

If I am a smoker, can I continue to smoke and breastfeed?

Not smoking would be the best choice for your personal health and the health of your baby. However, if you can't quit, try to cut down. If you smoke less than a half a pack a day, the risks to the baby are small. Of course, the fewer cigarettes you smoke, the smaller the chance of encountering problems. Nicotine in large doses can cause low milk supply, a poor letdown reflex, and GI upset in some babies (for example, resulting in nausea/ vomiting, abdominal cramps and diarrhea).

If you must smoke:

- Don't smoke around the baby, and smoke after you nurse.
- Wash your hands and face after smoking.
- Cover your hair and change your clothes.
- Do not smoke indoors.

Can I safely drink alcohol while breastfeeding?

Occasional or light drinking—such as a glass of wine or a beer—has not been found to be harmful to a breastfeeding baby. Erring on the conservative side, wait at least two hours for every drink you consume before nursing your baby. Or alternatively, use expressed milk to feed your baby after consuming alcohol.

Also, consider choosing drinks low in alcoholic content or that are diluted with water or juice.

Moderate-to-heavy alcohol consumption by a breastfeeding mother has been shown to interfere with the let-down reflex, inhibit milk intake, affect the baby's motor skill development, slow weight gain, inhibit growth and cause drowsiness in the baby.

Can I safely drink coffee while breastfeeding?

Drinking up to two 5-ounce cups of coffee per day does not appear to cause any problems for a mother and nursing baby. Drinking more than this amount can result in an irritable or fussy baby and a baby with poor sleeping habits. Some babies are sensitive to any amount of caffeine.



Remember to consider the amount of caffeine you drink from all of your beverages, including coffees, teas, colas and even chocolate. Consider cutting back or switching to decaffeinated beverages.

Please consult your healthcare provider for advice.

What are common misconceptions parents have about breastfeeding?

1. That it's easy or natural.

Learning to breastfeed is often a skill that takes practice for both mom and baby but the learning process can be made easier with support.

2. I'm not making enough milk for my baby because my baby is feeding every hour.

It is very common for babies to cry for reasons other than hunger. It is important to look for hunger signs and rule out other reasons for crying. It is also normal for babies to cluster feed and feed frequently (every hour in the first weeks of life). It's important to follow with your pediatrician to determine if baby is growing appropriately.

3. My full milk supply will come in right away and baby needs large volumes of milk right away.

Milk initially comes in as colostrum - a thick yellow substance, complete with a number of infection-fighting cells in smaller amounts and increases in volume as your infant's stomach increases in size. In most normal milk physiology, milk will come in on days 3-5 but may be affected by other factors, such as parity, c-section, preeclampsia, etc.

4. If I can't fully breastfeed right away I should just quit.

We encourage moms to seek support from their pediatrician, lactation consultants, or breastfeeding medicine experts. We can often help you overcome initial challenges that are common in the early weeks and eventually reach your breastfeeding goals.

Is there any way I may know before delivery if I am at increased risk of breastfeeding challenges and how should I prepare?

Women with the following risk factors are encouraged to make an appointment with a lactation consultant or breastfeeding medicine specialist prenatally to better prepare for their breastfeeding journey:

History of:

- Difficulties with breastfeeding with previous child.
- Low or loss of milk production.
- Oversupply.
- Breast surgeries.
- Maternal diagnoses that may interfere with breastfeeding (thyroid disorders, breast cancer, polycystic ovarian syndrome (PCOS), high blood pressure, diabetes, obesity).

Currently:

- Pregnant with multiples.
- Maternal medications that may affect milk supply/production and mother/baby.
- Anticipated infant diagnoses that may hinder breastfeeding (facial defects, Down Syndrome, congenital heart defects).
- Wide-spaced breasts, conical shaped breasts, or signs of insufficient glandular tissue.

What resources does Cleveland Clinic offer for support before delivery and once I get home?

We offer a variety of breastfeeding medicine and lactation services support to fit your needs. We offer in-person and virtual one-on-one visits with lactation consultants. We also offer in-person and virtual one-on-one visits with our physician breastfeeding medicine specialists. We also offer prenatal classes related to breastfeeding and a number of in person and virtual support group options.

Please visit

www.clevelandclinicchildrens.org/breastfeeding to find the most up-to date offerings and information on how to schedule.



Breastfeeding resources in Florida:

Cleveland Clinic Martin Health

Lactation consultants:

772.223.5945, ext. 11665

Breastfeeding Support Groups:

772.345.8188

Baby Café:

772.223.5945, ext. 11665

Cleveland Clinic Indian River Hospital

Healthy Start lactation consultants:

772.567.4311, ext. 1277 or 1278

Indian River County

Health Start Coalition classes:

www.irhealthystartcoalition.org/events

Contraception During Breastfeeding

I've heard that you can't get pregnant while you breastfeed. Is that true?

Not necessarily. During breastfeeding, the chance of getting pregnant is lower. However, women can still get pregnant.

When should I start using contraception?

It's a good idea to discuss contraception with your clinician before you give birth. Breastfeeding women have many birth control options.

Non-hormonal methods of contraception

- **Condoms and spermicides:** These can be used with no impact on breastfeeding. The vagina of the nursing mother might be dryer than normal, which can make condoms irritating. If this is a problem, use additional lubrication.
- **Barrier methods:** These methods, such as the diaphragm and cervical cap with spermicides, have no effect on breastfeeding. Check with your clinician to refit the device because you might need a larger device after having a child.
- **The intrauterine device (IUD) non hormonal:** This type of IUD is a copper-containing device (ParaGard®). The IUD does not affect the quality and quantity of breast milk. ParaGard IUD is safe and effective for 10 years.
- **Tubal sterilization:** This is a surgical, permanent form of birth control, known as having your tubes tied that only affects breastfeeding if general anesthesia is required. (That means you are put to sleep for the operation.) Anesthetic medicine can pass through the breast milk.

Hormonal methods of contraception

- Progestin-only oral contraceptives, or The Mini-Pill, contain only progestin (a female hormone). The method, when used daily, is highly effective for breastfeeding women. This method of contraception has a slightly higher failure rate than oral contraceptives (OCs) containing both estrogen and progestin. During breastfeeding, however, women are not as fertile. A small amount of hormone passes into the breast milk but has no known bad effects on the infant. Indeed, some studies have suggested a good effect on the quantity and quality of breast milk. When the woman stops breastfeeding the baby, or when menses returns, some clinicians suggest switching to combination OCs, which have a slightly higher effectiveness.
- Combination oral contraceptives, or The Pill contain both estrogen and progestin. The American Academy of Pediatrics has approved the use of low-dose OCs in breastfeeding women once milk production is well established.
- NuvaRing® contains estrogen and progestin, but with a lower systemic absorption than OCs.
- **The intrauterine device (IUD) hormonal:** This type of IUD is a progesterone-containing device. The IUD (Mirena®) releases a very small amount of hormone into the uterus, where it works locally. This IUD does not affect the quality and quantity of breast milk. The Mirena IUD is safe and effective for five years.
- **Medroxyprogesterone:** This is an injection or shot that can be safely used during breastfeeding and does not suppress milk production.

- **Nexplanon:** This is a hormone-releasing implant that is placed under the skin. Nexplanon is effective for three years.

Remember. If you are at risk for a sexually transmitted infection (STI), use condoms to protect yourself.

Sexually transmitted infections can happen to anyone who is sexually active, even during breastfeeding. Don't stop taking or using your birth control method on your own. Always call your clinician to talk things over.

7. Baby Care

- › Safe sleep
- › Newborn care in hospital
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Safe sleep

Safe sleep for your baby

- › Always place your baby on his or her back to sleep, for naps and at night, to reduce the risk of Sudden Infant Death Syndrome (SIDS).
- › Use a firm sleep surface, covered by a fitted sheet, to reduce the risk of SIDS and other sleep-related causes of infant death.
- › Your baby should not sleep in an adult bed, on a couch, or on a chair alone, with you or with anyone else.
- › Keep soft objects, toys and loose bedding out of your baby's sleep area to reduce the risk of SIDS and other sleep-related causes of infant death.
- › To reduce the risk of SIDS, women should:
 - › Get regular health care during pregnancy, and
 - › Not drink alcohol or use illegal drugs during pregnancy or after the baby is born.
- › To reduce the risk of SIDS, do not smoke during pregnancy, and do not smoke or allow smoking around your baby.
- › Breastfeed your baby to reduce the risk of SIDS.
- › Offer a pacifier, not attached to a string, at nap and sleep time once breastfeeding is established.
- › Do not let your baby get too hot during sleep.
- › Follow health care provider guidance on your baby's vaccines and regular health checkups.
- › Avoid products that claim to reduce the risk of SIDS and other sleep-related causes of infant death.
- › Do not use home heart or breathing monitors to reduce the risk of SIDS.
- › Give your baby plenty of tummy time when he or she is awake and when someone is watching.



Remember Tummy Time!

Place babies on their stomachs when they are awake and when someone is watching. Tummy time helps your baby's head, neck and shoulder muscles get stronger and helps to prevent flat spots on the head.

www.SafeSleep.Ohio.gov

A

Alone.

Always put me in my crib alone. I shouldn't sleep in your bed or have anyone else in mine.

B

Back.

Always put me on my back to sleep – at night or even when I'm just napping.

C

Crib.

Always make sure the only thing on my firm mattress is a fitted sheet. No blankets. No stuffed animals.

Ohio Department of Health

What Does a Safe Sleep Environment Look Like?

Reduce the Risk of Sudden Infant Death Syndrome (SIDS) and Other Sleep-Related Causes of Infant Death

Use a firm sleep surface, such as a mattress in a safety-approved* crib, covered by a fitted sheet.

Do not use pillows, blankets, sheepskins or crib bumpers anywhere in your baby's sleep area.

Keep soft objects, toys and loose bedding out of your baby's sleep area.

Do not smoke or let anyone smoke around your baby.



Make sure nothing covers the baby's head.

Always place your baby on his or her back to sleep, for naps and at night.

Dress your baby in light sleep clothing, such as a one-piece sleeper, and do not use a blanket.

Baby should not sleep in an adult bed, on a couch, or on a chair alone, with you or with anyone else.

* For more information on crib safety guidelines, contact the Consumer Product Safety Commission at 1.800.638.2772 or www.cpsc.gov.

www.SafeSleep.Ohio.gov

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Crib.

Always make sure the only thing on my firm mattress is a fitted sheet. No blankets. No stuffed animals.

Ohio Department of Health

Newborn Care in the Hospital

After your baby is born, a doctor or nurse will perform a series of tests to determine your baby's physical condition. A routine evaluation, called the Apgar test, is used to identify whether your baby needs urgent medical care. After delivery, your baby will also receive a vitamin K shot, eye drops, hearing test and newborn screening tests. Your baby may also receive a hepatitis B vaccine, with your permission.

What happens during an Apgar test?

During an Apgar test, your baby's heart rate, breathing, reflex response, muscle tone, and skin coloration are measured. These five signs are evaluated at one minute after birth and at five minutes after birth. Each test is given a score between zero and two, and the results are added together to make up the Apgar score.

What does the Apgar score mean?

If your baby has an Apgar score of seven or more, he or she is probably in good physical condition. A baby rarely scores a perfect 10, because his or her skin color may be slightly blue until he or she warms up. A low Apgar score may indicate problems with your baby's heart or lungs. It may also be the result of a difficult labor. Your baby may be in good physical condition, but have a low score immediately after birth. Premature babies may score low because of immature development in the womb. Keep in mind that your baby's Apgar score does not predict his or her future health.

Why does my baby need a vitamin K shot?

Your baby will typically have low levels of vitamin K when he or she is born. Vitamin K is needed for blood clotting, so your baby will usually receive a vitamin K shot immediately

after birth. This will help prevent a rare but serious bleeding problem known as hemorrhagic disease of the newborn.

Why does my baby need eye drops?

Your baby will receive antibiotic eye ointment or eye drops to prevent bacterial infections that he or she may pick up at birth.

What are newborn screening tests?

All newborns are screened for certain conditions. With early detection, these conditions can be prevented or treated. Your baby's heel will be pricked and a sample of blood taken to test for many different conditions.

See the handout, "Why Must My Baby be Screened?" by the Ohio Newborn Screening Program at <https://odh.ohio.gov/wps/portal/gov/odh/know-our-programs/Newborn-Screening/Program-Details/>.

For information on Florida newborn screening, visit www.floridanewbornscreening.com.

Why does a newborn need a hearing test?

A hearing screen of all newborns is the gold standard of care across the United States. Early treatment of hearing loss can prevent future speech and language problems. A small earphone or microphone will be placed in your baby's ears to see how your baby's brain responds to sounds. Your baby needs to be asleep for this test to be accurate. If your baby does not pass, it does not mean he or she has hearing loss, but the test will be repeated.

What is newborn screening for critical congenital heart disease (CCHD)?

Critical congenital heart disease is a group of heart or vascular problems present at birth.

Approximately 11 out of 10,000 babies are born with CCHD. CCHD may be life threatening and may require intervention in infancy. It is not always detected prenatally or upon exam in the nursery. To improve the early detection of CCHD, it is recommended the screening be added to the newborn screening before discharge to home. A pulse oximeter designed for newborns is used to screen for CCHD. A sensor is wrapped around the hand and another sensor is placed on either foot. Pulse oximetry newborn screening can identify some infants with CCHD before they show signs of the condition.

Why does a newborn need a hepatitis B vaccine?

The hepatitis B vaccine protects against the hepatitis B virus, which causes liver damage. The hepatitis B vaccine is a series of three shots. Your baby will usually receive the first shot after delivery, and the next two shots by 18 months of age.

Why is it important to lie my baby on his or her back to sleep?

Prevention of sudden infant death syndrome (SIDS) begins in the newborn nursery. Placing infants on their backs to sleep has reduced the rate of SIDS almost 50% in the last 12 years.

Newborn Appearance

Talk with your healthcare provider about some of the things you should expect about the appearance of your new baby. This list might help set your mind at ease, especially after the birth of your first child.

You can expect:

- The umbilical cord stump to remain for the first 10 to 14 days, but it might not fall off until the third week.
- Baby's skin to appear dry and peeling.
- Fine hair on baby's body. Some fine hair might cover certain parts of baby's body, such as the shoulders, back, temples, or ears. This hair protects your baby in the uterus and is usually shed within the first week after baby's birth.
- Your baby's breasts to be swollen for two to four weeks. This happens in boys and girls and is caused by estrogen in the mother's placenta.
- Your baby's head to be swollen, either on top or as a smaller lump in different places on the skull. This is caused either from fluid forced into the scalp at birth or from the baby rubbing up against the mother's pelvic bones. Swelling at the top of the head should go down within a few days, while swelling from friction will go down within two to three months. Call your doctor if swelling increases or lasts longer than normal.
- Your baby's legs to be bowed or feet turned up. This is caused by being held tightly in the womb. Your baby's legs will straighten out within six to 12 months.
- Swollen genitals in both boys and girls. Boys might have swollen scrotums, lasting six to 12 months, or the hymen in girls might be swollen, disappearing within two to four weeks.
- An undescended testicle. A small percentage of boys might have an undescended testicle. They will more than likely need surgery later to correct this.
- A shiny and red penis. If your son was circumcised (the foreskin on the penis was removed), the glans of his penis will appear shiny and red, and might ooze some yellowish fluid. The glans should heal within seven to 10 days.
- Vaginal discharge. Baby girls might have a vaginal discharge that is clear, white or pink that lasts for three to 10 days. This is normal and is caused by the estrogen passed to the baby from your womb.
- Eye appearance. Sometimes a blood vessel in the white of the eye will break during birth. This is not uncommon and should heal within two to three weeks. A baby's tear duct can become blocked, making the eye continuously water. This will usually clear up within the first year of life, but be sure to ask your child's doctor at the next visit, or call the doctor immediately if the eye looks infected or has pus or a yellow drainage.

Newborn Behavior

Many new parents might not know what is considered normal newborn behavior. Babies develop at different rates, but they still display many of the same behaviors. Don't be alarmed if your baby seems a little behind. It is important to know what kind of behaviors to expect from your newborn so that you can tell if there is a problem.

If your baby was born prematurely, don't compare his or her development to that of full-term newborns. Premature babies are often developmentally behind full-term babies. If your baby was born two months early, then he or she might be two months behind a full-term baby. Your doctor will follow the developmental progress of your premature baby. Contact your doctor if you think your baby is developing at an unusually delayed rate.

Sleeping

Newborn babies usually sleep 20 minutes to four hours at a time, up to 20 hours a day. Their stomachs are too small to keep them full for long, so they need to be fed every few hours. Babies have different sleeping habits, but at three months most babies sleep six to eight hours a night.

Crying

Newborns might cry for several hours a day. It is their way of telling you they need something or that something is wrong. Newborns cry when they:

- Are hungry.
- Are tired.
- Are too cold or too hot.
- Need their diaper changed.

- Need to be comforted.
- Have gas.
- Are over-stimulated.
- Are sick.

It is also common for newborns to hiccup, sneeze, yawn, spit up, burp and gurgle. Sometimes newborns cry for no reason at all. If this happens, try comforting your baby by rocking, singing, talking softly, or wrapping him or her in a blanket. Soon you will be able to tell what your baby needs by how he or she cries.

You might not always be able to comfort your newborn. This is not your fault. Try to be patient and remain calm when your newborn does not stop crying. If necessary, have someone else stay with your baby while you take a break. Never shake your baby under any circumstance. Shaking your baby can cause serious brain damage, known as shaken baby syndrome, resulting in lifelong disabilities.

Contact your doctor if your newborn cries more than usual, cries at a different time of day than usual, or if the crying sounds different than usual. These might be signs that your newborn is sick.

Reflexes

During their first few weeks, newborns maintain the position they had in the womb (fetal position): clenched fists; bent elbows, hips, and knees; arms and legs close to the front of the body. This will change when your baby develops more control over his or her movements.

Newborns have several natural reflexes. Understanding these reflexes will help you understand the cause of some of your newborn's behaviors.

Newborn reflexes include the following:

- **The rooting reflex:** The newborn turns in the direction of food and is ready to suck. Stroking a newborn's cheek will cause this response.
- **The sucking reflex:** If you place an object in a baby's mouth, the baby naturally begins to suck.
- **The startle response:** The baby throws out his or her arms and legs and then curls them in when startled. This response often includes crying.
- **The tonic neck reflex:** The baby turns his or her head to one side and holds out the arm on the same side.
- **The grasp reflex:** The baby's fingers close tightly around an object placed in his or her palm.
- **The stepping reflex:** The baby's feet imitate a stepping action when he or she is held upright with the feet touching a hard surface.
- **Note:** A baby's arms, legs, and chin might tremble, especially when crying. This occurs because newborns' nervous systems are not fully developed.

Breathing

It is not uncommon for newborns to experience irregular breathing. This is when newborns stop breathing for five to 10 seconds and then immediately begin breathing again on their own. This is normal. However, you should call your doctor or take your baby to the emergency room if he or she stops breathing for longer than 10 seconds or begins to turn blue.

Vision

Newborns can see, but their eyes might be crossed because it is hard for them to focus at first. Newborns can see movement and the contrast between black and white objects. For the first couple of months, it is easier for them to look at things at an angle. By two to three months, babies have more control of their eye muscles and are able to focus their eyes on one thing. They can also follow objects with their eyes.

Hearing

Newborns can distinguish between different sounds. They recognize familiar voices, so you should talk to your baby often. You might soon find that your baby turns toward the sound of your voice. To newborns, language sounds like music with different tones and rhythms.

Your Baby: When to Call the Doctor

During your baby's first year, you will make many trips to the pediatrician's office. Most of these visits are routine, but there may be times when your baby needs immediate medical attention. Questions about minor problems such as a small cough, occasional diarrhea, and fussiness can usually wait until normal office hours. However, if your baby is acting unusually, do not hesitate to call your doctor immediately. Trust your instincts, because they are usually right.

It is very important to get medical advice from your doctor because something as simple as diarrhea may turn into a dangerous condition. Before your baby is born, be sure to find out your doctor's office hours, on-call hours, and how to deal with an after-hours emergency. This will make it easier to deal with any problems that may come up.



Before calling your doctor, make sure to have a pen and paper to write down any instructions he or she might give. When you call, have the following information on hand:

- Your baby's immunization records.
- The names and doses of any medications, prescriptions and over-the-counter products your baby takes.
- Any medical problems your baby may have.
- His or her temperature.

Call 911 or find the nearest emergency department immediately if your baby:

- Has difficulty breathing.
- Is limp or not able to move.
- Will not wake up.
- Has blood in his or her vomit or stool.
- Has a seizure.
- Has any type of poisoning.
- Has bleeding that you cannot stop.

When should I call the doctor?

Call your doctor's office quickly if your baby:

- Has a rectal temperature of 100.4 degrees Fahrenheit or higher.
- Has yellow skin or eyes.
- Sleeps more than usual.
- Refuses to feed for several feedings in a row.
- Has vomiting or diarrhea more than usual.
- Shows signs of dehydration (decreased number of wet diapers - should have six to eight per day; does not shed tears when crying; or the soft spot on top of his or her head is sunken).
- Has a cold that does not improve over several days, or gets worse.
- Has ear drainage.
- Will not stop crying.

Remember that you know your baby best. If you are extremely concerned about your baby, always call your doctor or 911 and/or take your baby to the emergency room.

Umbilical Cord Appearance and Care

What is the umbilical cord?

The umbilical cord is the baby's lifeline to the mother during pregnancy. The cord transports nutrients to the baby and also carries away the baby's waste products. It is made up of two arteries and one vein.

What does the umbilical cord look like?

The umbilical cord is a flexible, tube-like structure that has a spongy appearance. The cord is surrounded in a jelly-like substance. After birth, the cord is clamped and then cut, leaving a stump behind. In about a week, the stump withers and falls off. The stump changes in color from yellowish-green to brown to black before falling off.

How do I take care of my newborn's umbilical cord?

It is important to keep the cord clean in order to prevent infection. Bathing the cord in water does not increase the rate of infection or make the stump take longer to fall off. Allow the cord to dry naturally. There is no need to apply topical substances such as alcohol.

Some additional tips

When diapering the baby, make sure to fold the edge of the diaper down so that the cord can dry. Some newborn diapers have a special cut-out cord area.

Allow the stump to fall off on its own. Never try to pull off the stump, even if it seems to be dangling or hanging. Pulling off the stump may result in unnecessary bleeding and harm to your baby.

Watch for signs of infection, which may include redness and inflammation. In some cases, there may be colored discharge or bleeding. Call your baby's doctor right away if you suspect an infection.

Circumcision

What is circumcision?

Circumcision is the surgical removal of the foreskin, the sheath of tissue covering the head of the penis. It is an ancient practice that has its origin in religious rites. Today, many parents have their sons circumcised for religious or other reasons.

How is circumcision done?

During a circumcision, the foreskin is freed from the head of the penis (glans), and the excess foreskin is clipped off. If performed on a newborn, the procedure takes about five to 10 minutes. Adult circumcision takes about one hour. The circumcision generally heals in five to seven days.

When is circumcision done?

If circumcision is chosen to be done in the hospital, it's usually performed on the first or second day after birth.

Is circumcision necessary?

The use of circumcision for medical or health reasons is an issue that continues to be debated. The American Academy of Pediatrics (AAP) believes that circumcision has potential medical benefits and advantages, as well as risks. The procedure is not essential to a child's current well-being. AAP recommends that the decision to circumcise is one best made by parents in consultation with their pediatrician, taking into account what is in the best interests of the child, including medical, religious, cultural and ethnic traditions. Parents should talk with their doctors about the benefits and risks of the procedure before making a decision regarding circumcision of their sons.

What are the benefits of circumcision?

There is some evidence that circumcision has medical benefits, including:

- A slightly decreased risk of urinary tract infections.
- A slightly reduced risk of sexually transmitted infections (STIs) in men.
- Possible protection against penile cancer and a reduced risk of cervical cancer in female sex partners.
- Prevention of balanoposthitis (inflammation of the glans and foreskin).
- Prevention of phimosis (the inability to retract the foreskin) and paraphimosis (the inability to return the retracted foreskin to its original location).
- Circumcision also makes it easier to keep the end of the penis clean.

What are the risks of circumcision?

- Bleeding.
- Infection.
- Injury to head of penis.

Note: Some studies show that good hygiene can help prevent certain problems with the penis, including infections and swelling, even if the penis is not circumcised.

In addition, practicing safe sex is an important factor in reducing the risk of STIs and other infections.

Childhood Immunizations

What is immunization?

Immunization is a way to protect your child from getting a number of illnesses. Many of these illnesses are easily spread from child to child and can cause serious health problems. They can even cause death.

During their first two years of life, children should be given vaccines (medicines) to protect them from:

COVID-19
Diphtheria
Haemophilus influenzae type B (Hib disease)
Hepatitis A
Hepatitis B
Influenza (flu)
Mumps
Pertussis (whooping cough)
Pneumococcal disease
Polio
Rotavirus
Rubella (German measles)
Rubeola (measles)
Tetanus (lockjaw)
Varicella (Chickenpox)

These vaccines are very safe and have saved thousands of children from getting sick. For more information and a parent's guide to Childhood Immunization, visit the Centers for Disease Control and Prevention (CDC), at www.cdc.gov/vaccines.

When should my child get immunized?

Children should get immunized during their first two years of life. Your child must get several doses of the vaccines to be fully protected. For example, healthcare providers recommend that children receive their first dose of MMR (measles, mumps, rubella) vaccination at 12 months of age or older and a second dose prior to elementary school

entry (around four to six years of age). Children can get the vaccines at regularly scheduled well visits.

How are the vaccines given?

Most vaccines are given as shots.

Are the vaccines safe?

Yes. Vaccines for childhood diseases are very safe. Sometimes, a vaccine will cause mild side effects such as a sore arm or leg, or low fever.

A bad side effect is not likely to happen. Childhood diseases are a greater health risk to children than the vaccines. Ask your healthcare provider to tell you about risks and side effects.

When should a child not be vaccinated?

In a few cases, it's better to wait to get a vaccine. Some children who are very sick should not get a vaccine at all. Reasons that you should wait or not get a vaccine might include:

- Being sick with something more serious than a cold.
- Having a bad reaction after the first dose of a vaccine.
- Having a convulsion (sudden jerky body movements) that is thought to be caused by a vaccine.

If my child is over two years old, can my child still be vaccinated?

Yes. Vaccines can be given to older children and adults. Children are vaccinated early in life so they have less chance of getting sick. The types of vaccines might be different for older children. Talk to your healthcare provider about how you and your child can be vaccinated.

Should I get vaccinated if I plan to get pregnant?

If you don't know if you have ever had German measles (rubella) or varicella (chickenpox) or if you were not vaccinated for these, talk to your healthcare provider about getting the vaccines. If a pregnant woman gets German measles or varicella during pregnancy, her baby can be born with birth defects. However, you should not get these vaccines if you plan to get pregnant within the next month or if you are already pregnant. They can instead be given after you deliver, sometimes even during your postpartum hospital stay.

Why should I bother with vaccines?

Thanks to vaccines, childhood diseases are less common. But these diseases can still be caught, and they can be deadly. Children still suffer from choking, brain damage, paralysis (being unable to move parts the body), heart problems, blindness and other health problems because of childhood diseases.

In most states, children must be immunized from childhood diseases before they can enter school. It is very important to keep a record of your child's immunizations. This record is an important part of his or her health history.

Where can I get more information?

National Immunization Program Centers for Disease Control and Prevention

1.800.CDC.INFO 1.800.232.4636 or go to:
www.cdc.gov/vaccines.

Or, call your local public health department.

Adding Your Baby to Your Insurance Policy

What You Need to Know

Having a child is a qualifying life event that allows you to add him or her as a dependent on your health plan. To add your baby to your health plan, take these steps to ensure your child is covered:

Step 1. Enroll in MyChart if you haven't already done so to review and manage your account. To learn more, visit clevelandclinic.org/MyChart.

Quickly after your baby is born, you will receive a proof-of-birth letter in your MyChart account. This letter serves as the documentation required for most newborn events (like health insurance coverage, beginning FMLA, and etc.) until a birth certificate is later available. You will be able to download and print or email this letter as needed soon after birth.

Step 2. Contact your employer or your health plan as soon as possible - within 30 days - to add your child to your policy.

If the child is being added to both parents' insurance plans, both insurance companies must be informed of the child's eligibility under multiple plans. This is known as *Coordination of Benefits*.

When a child is covered under both parents' plans, the plan of the parent whose birthday comes first in the calendar year is the **primary** insurance coverage. The other parent's insurance is considered secondary. For example, if mom's birthday is April 2nd and dad's birthday is November 17th, mom's plan is primary and dad's plan is secondary. This is known as the *Birthdate Rule*.

Step 3. Contact Cleveland Clinic Customer Service at 216.445.6249 to provide your child's insurance information once your child is covered so we can update our records.

Step 4. Bring a copy of the insurance card to your child's next visit or email a copy to insurancecard@ccf.org.

Step 5. Enroll in MyChart as your child's proxy to view and manage their account. To learn more, visit clevelandclinic.org/MyChart.

Don't have insurance through your employer? Speak with a Patient Financial Advocate to learn about your options. Visit clevelandclinic.org/PFAcallback or call 855.831.1284.

If your plan requests hospital documentation to add the child to your policy, please contact Health Information Management:

- Akron General - himakronopsfax@ccf.org
- Hillcrest and Fairview Hospital - 216.444.5580

Someone will be available during your postpartum stay to answer any questions and offer assistance.

If you have commercial insurance and deliver in one of our Florida hospitals, please call your insurer's member services number to add your baby to your insurance plan. If you have Medicaid, our patient access team members will help you start the process before you are discharged.

For questions about adding your baby to your insurance policy after discharge, please call the Patient Access Office at these hospitals:

For Cleveland Clinic Martin North Hospital or Cleveland Clinic Tradition Hospital: 772.345.8105.

For Cleveland Clinic Indian River Hospital: 772.567.4311, ext. 2450.

Are you looking for a pediatrician?

Not sure where to start looking?

Don't sweat it.

We'll help you find the right one for you and your family.

Visit our **"Find a Doctor"** tool:

(Scan with your mobile phone's camera)



It's easy to search our **100+** pediatricians at **40+** convenient locations throughout Northeast Ohio.



BUSY? (OF COURSE YOU ARE!)

You can also schedule instantly online by selecting a pediatrician at clevelandclinicchildrens.org/pediatricians, or if you already have a pediatrician through **MyChart**[®].

Can't get to the doctor's office? Our pediatricians also offer virtual visits. Something a little more urgent? Make an on demand virtual visit with MyClevelandClinic for minor illnesses, such as pink eye, rashes or coughs/colds. Download the mobile app today! clevelandclinic.org/app.

Download our "What to Expect from Your Pediatrician Guide" at clevelandclinicchildrens.org/pedsguide.

SUBSCRIBE TO OUR eNEWSLETTER

For useful, trustworthy tips for you and your family from Cleveland Clinic Children's, visit clevelandclinicchildrens.org/Henews.



clevelandclinicchildrens.org
216.444.KIDS

Choosing a car seat

Why is it important to choose the right car seat?

Choosing a car seat for your newborn is one of the most important things you'll do before your baby arrives. By law, you will need to have a properly installed car seat in your car before you can take your baby home. There are many brands and types of car seats available, and it will take time and effort to decide which is suitable for your child. Here are some things to consider.

What should I look for in a child car seat?

You should look for a car seat that best fits your child and your vehicle. Not all car seats are the same and they don't all work in every type of car. The car seat that you choose should be based on the height and weight of your child. To determine this, you should test the seat to make sure it fits your baby and your vehicle properly. To ensure that you are properly installing the car seat, read the manufacturer's instructions carefully or contact a certified car seat technician in your neighborhood.

Is a more expensive car seat better?

Cost should not be your only guide in choosing a seat. All seats meet the same safety standards and are required to pass the same crash tests. A more expensive car seat usually has extra features, but this doesn't necessarily make it safer or easier to use.

Can I buy a used car seat?

Car seat safety regulations change often, so you should not buy a used car seat if at all possible. You should never use a seat that has been in a crash, has missing parts, or is damaged in any way. It is also difficult to tell

if a seat has been stored improperly or has been involved in an accident, so purchasing a used seat without knowing its history is not recommended.

No matter what seat you buy, you should carefully read the instructions from the manufacturer. You can obtain user instructions online or from the seat manufacturer. You should also register your seat with the manufacturer and have the seat checked for recalls.

How should the car seat fit my child?

Infant and young child car seats should have a five-point harness seat belt for safety, with each point being a spot where the belt attaches to the car seat. There are two points of attachment at the shoulder (one at each shoulder), two points at the hips (one at each hip), and one point where the harness buckles between the legs. For shoulder straps, the point of attachment to the car seat should always be at or just below your baby or child's shoulder height (most car seats allow you to adjust the height of the car seat back in order to create the proper shoulder belt height). Shoulder harness straps should also have a harness (retainer) clip that holds the shoulder straps in place across the chest. This harness clip should be fastened across the chest at armpit level and be adjusted to remain in this position once the straps are tightened. The remaining clips buckle into the portion of the buckle between baby's legs. Once all clips are buckled into place, the straps should be tightened so that you are not able to "pinch" any loose belt between your fingers when attempting to do so by positioning one finger at just above and the other finger just below the collar-bone level.

What types of car seats are available?

There are four types of child car seats, including:

- Rear-facing or infant-only.
- Convertible.
- Combination.
- Booster.

There are also seats and harnesses made specifically for special needs children.

Each type of seat has specific features that work for the stage of life your child is currently in. Different seats also have different weight restrictions and limits. Make sure you always look at the manufacturer's information that comes with the seat before purchasing a car seat. These instructions will help you know what seat is best for your child at any stage of life.

- **Infant-only seat:** Infant-only seats are also known as rear-facing seats. A rear-facing position is the safest position for infants and young children. For the best possible protection, keep your child rear-facing in the back seat of the vehicle for as long as possible. It's recommended that children remain rear-facing up to 3 years of age. The seat should recline at about a 45 degree angle and should never be placed in front of an air bag. Harness strap height should be at the child's shoulder level or just below. Most infant seats are manufactured with a higher end rear-facing weight limit. Do not exceed the maximum height or weight of your rear-facing seat. If your child exceeds the limits, you will need to move the child to a convertible seat in the rear-facing position.
- **Convertible seat:** Convertible seats are essentially two car seats in one. They are placed in the back seat and should be rear-facing until your child is about 3 years of

age and at least 20 pounds (though many of these seats allow for much higher rear-facing weights). Following that, the seats are turned around to face the front of the car. Once the seat is made forward-facing, shoulder strap heights should be set to just above your child's shoulder level.

- **Combination seat:** Combination seats are placed in the back seat and face the front of the car. These are intended for children who are at least one year older and weigh approximately 20 to 40 pounds. These seats can also convert into a belt-positioning booster seat when your child weighs at least 40 pounds or more and is at least four years of age. These seats should not be used rear-facing.
- **Booster seat:** Booster seats are intended for children who are four to eight years old and are at least 4' 9". Your child should start using a booster seat when he or she grows out of his or her car seat (when his or her ears are higher than the back of the car seat, and his or her shoulders are higher than the top strap slots), or when the weight limit for the seat is reached. Booster seats are usually used until your child is at least eight years old and 4' 9" tall. They are then ready to use a regular seat belt sitting in the back seat of the car.

Do you have to have a car seat?

While many state laws are different and some don't require children over age four to ride in a child restraint system, your child is safest when using a car seat. Young children who don't ride in some kind of restraint system are unprotected from serious injury. The general rule is to keep children in an appropriate car seat until the child is 4'9".

When can my child use a seat belt?

Your child is ready to use a standard car seat belt when he or she has met several criteria, including:

- Exceeding the weight limit on the booster seat (about 80 pounds).
- Sitting with his or her back against the seatback.
- Being able to sit with his or her legs bent at the knee over the front of the seat.

Children under the age of 13 should ride in the back seat of a vehicle. Everyone should always wear a seat belt in the car.

Where can I find more information about child car seats?

To learn more about car seats and help you find the right one for your family, visit the National Highway Traffic Safety Administration website (www.nhtsa.gov). This resource has a helpful tool that can help you pinpoint safe car seat options for your child. The car seat finder asks you to enter your child's birth date, height and weight. It then identifies options that could work. You can find this tool at <https://www.nhtsa.gov/equipment/car-seats-and-booster-seats#car-seat-finder>.

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