



LOMA LINDA  
UNIVERSITY

CHILDREN'S  
HEALTH



# Caring for You & Your Baby



# THANK YOU

for choosing Loma Linda University Children’s Hospital to be part of this exciting and joyful time. We are here to help you feel prepared and confident about caring for yourself and your new baby. The team of doctors, nurses, lactation consultants and educators at LLU Children’s Hospital are here to guide you.

## Helpful Phone Numbers

General Information	800-825-KIDS
San Manuel Maternity Pavilion	909-651-6589
Physician Referral	800-872-1212
Obstetrics - FMO	909-558-2806
Obstetrics - SACH	909-382-7100
Maternal Fetal Medicine	909-558-4771
General Pediatrics	909-558-2828
Neonatal Intensive Care	909-558-4403
Pediatric Intensive Care	909-558-4357
Urgent Care	909-651-6233
Poison Control	800-222-1222

For more information, visit us at [lluch.org/smmp](http://lluch.org/smmp).

This folder contains important information to help you care for yourself and your new baby. Please take it home and bring it with you to your appointments and hospital visits.

The information in this folder is for general reference only and should not be used as a substitute for medical advice or care from your healthcare provider.



Dear Expecting Parents,

We are so honored and thrilled that you have chosen Loma Linda University Children's Hospital to be part of your birth experience!

Spanning the fifth floor of the Children's Hospital, the San Manuel Maternity Pavilion is dedicated to providing you with comfortable, calming and comprehensive maternity care. You and your unborn child are not just a number, but are now a part of our family.

Our obstetrical service is recognized as being one of the finest in the state of California and is a Regional Referral Center for obstetrical and neonatal care. We are on the state honor roll for our low cesarean section rate in first-time mothers. We are one of the few hospitals in the region that offer a trial of labor after cesarean (TOLAC) with high success rates. We routinely offer delayed cord clamping and immediate skin-to-skin and we have a variety of options for women who desire low intervention or unmedicated childbirth. We encourage you to have open communication with your physicians and nurses regarding your desired birthing experience. Most importantly, we want to partner with you to have an incredible and safe journey through childbirth.

Here at LLU Children's Hospital, we are able to provide top notch care for all patients. We have a specialized physician and nursing care team able to provide inpatient obstetrical service for any maternal or fetal issues occurring during your pregnancy or delivery. This means that no matter your condition, LLU Children's Hospital is the right place for you!

We are proud to be an academic institution that trains medical students and resident physicians to become exemplary attending physicians, and we believe they are an important part of improving the care you receive. We are training the next generation of physicians to provide whole-person, high-quality obstetrical care for both low- and high-risk patients.

At LLU Children’s Hospital, approximately 3,000 babies are born each year. Equipped with the highest level neonatal intensive care unit (NICU) available, we have a level of expertise that comes with experience – one that you can count on in an obstetrical or neonatal emergency.

Finally, we are proud to be the first children’s hospital in the nation to earn a Baby-Friendly Hospital designation. We fully support breastfeeding and hope to provide you with the tools and resources you need to achieve your breastfeeding goals.

We look forward to seeing you and your family in the near future and have the pleasure of assisting you with the delivery of your baby. Thank you for including us as part of this incredible occasion. Congratulations!

Sincerely,

Your Maternity Services Family



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# Visitation Guidelines

Welcome! We would like for you to feel comfortable while visiting our units. The guidelines below are designed for the benefit of the mothers and babies in the San Manuel Maternity Pavilion and to help us deliver the best medical care.

## Inpatient visitation is 24 hours a day, 7 days a week, with the following guidelines:

- Visitation is limited to two people at a time for safety.
- All support people should be fully immunized for the protection of the newborn.
- Visitors should have no signs of illness.
- Visitors should follow good hand-washing technique.
- Visitors may be asked to leave when procedures/assessments are being done that necessitate patient privacy, i.e., admission process, examinations, epidurals, etc.
- Children under the age of 18 must be accompanied by an adult and will be allowed two hours of visitation each day. Additional restrictions may be in place to comply with California Department of Public Health orders.
- Visitors are requested to stay in the patient's room or wait in the designated family lounge on the fifth floor or lobby level to ensure patient safety and privacy. Hallways and the nursing station must be kept clear.

## Antepartum and Mother and Baby

- Our San Manuel Maternity Pavilion is a quiet environment where new mothers and babies can spend their postpartum recovery time in private or semi-private rooms.
- Antepartum patients will be allowed visitors between the hours of 8 a.m.-9 p.m.
- Quiet time (a calming period followed by patient rest) is from 2-4 p.m., to promote healing, mother and baby bonding and family bonding. During this time, we encourage limited visitation.
- Visitors may be limited when there are two patients in a room.

## Labor and Delivery

- Complications of pregnancy or labor requiring intensive care may occur. Please be advised that in these circumstances, support people may be asked to leave at the discretion of the medical team.
- After delivery, visitors will be allowed a period of 15 minutes to visit with mother and baby. At the end of 15 minutes, visitors will be asked to leave the patient room to allow mother, baby and significant other to have quiet bonding time until transferred to the postpartum unit.

## Operating Room

Visitation is based on your medical team's discretion. In most cases, one support person will be allowed in the operating room (OR). If general anesthesia is administered, your support person will wait for you to come out of the OR and will be able to be with you while you recover.

## Recovery Area

- Patients may have one designated support person with them during recovery.
- Switching of the support person is at the discretion of clinical staff to ensure safety and privacy of recovering patients.



## Directions to Units

### Visitor Access to OB Triage, Labor and Delivery and Antepartum

- Park in P3 parking garage, check in at the Galleria, at the front entrance of Children's Hospital-East.
- Use elevator to access the fifth floor – San Manuel Maternity Pavilion.

### Maternal Fetal Medicine

- Park in P3 parking garage.
- Use the North elevator on the Loma Linda University Medical Center side of the hospital to the third floor.
- Make a right turn for Maternal Fetal Medicine.

### Visitor Access to Children's Hospital – East Postpartum and NICU

- Park in P3 parking garage.
- Use the dolphin elevator to the third floor.
- Make a left turn, Mother and Baby will be on the left and NICU will be on the right.

# Birth and Beyond Education and Support

## Preparing for Baby

Preparing for a new baby is a special time. LLU Children's Hospital would like to support and inform you throughout your pregnancy, with a wide range of prenatal classes designed to help you prepare mentally, physically and emotionally for your transition into parenthood.

- All About Newborns
- Birth and Beyond Support Group
- Birth Planning Workshop
- Breastfeeding Basics
- Car Seat Safety
- Childbirth Two Day
- Childbirth Five Day
- Infant Safety



## Life with Baby

Babies do not come with instruction manuals. Bringing them home can be both exciting and frightening. LLU Children's Hospital offers a variety of classes and groups to assist you on your journey as new parents. Our goal is to help make your life with baby a more rewarding experience.

### Free-of-Charge Support Groups

- Mother's Breastfeeding Circle
- Moms Joining Moms
  - » Tools for Togetherness
  - » Beautiful Bellies
- Family Yoga

## Free Virtual Maternity Tour

We invite expectant parents to a free virtual tour of our state-of-the-art San Manuel Maternity Pavilion at Loma Linda University Children's Hospital, featuring our private rooms. Learn more about our skin-to-skin bonding program, lactation services, make your own birth wish list, and much more. Register below and receive your virtual tour right to your email.



**[lluch.org/maternity-tour](https://lluch.org/maternity-tour)**

We invite you to our 45-min Zoom tour with a live Specialist, who can answer any questions you may have. Available every Wednesday at 7 p.m., except for holidays.

### Registration

Please visit [lluch.org/classes](https://lluch.org/classes) and select a class. For questions or help registering, call 909-558-3500 or email us at [birthandbeyond@llu.edu](mailto:birthandbeyond@llu.edu).

Most classes are virtual, unless specified on our website.

### Birth and Beyond Education Center

11215 Mountain View Avenue, Suite 179, Loma Linda, CA 92354

# PRENATAL CARE





# Congratulations!

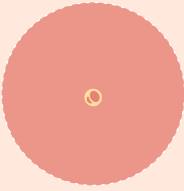
In the coming months, you will experience many mental and physical changes. Whether this is your first or your third pregnancy, each is a unique experience, so some of this will be new information, while other items will be familiar to you. This is designed to be a resource to guide your experience and expectations throughout your pregnancy.

Please attend all of your regular prenatal checkups, and consult with your healthcare provider if you have any questions or concerns.



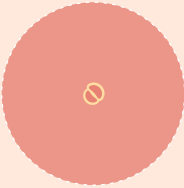
# Embryo Development

## Embryonic Period



### 3 WEEKS

The beginnings of the respiratory, digestive, circulatory, nervous and excretory systems are formed. The heartbeat starts.



### 4 WEEKS

The beginnings of the intestine, liver, kidney and lung are formed. The muscular system, spine and the neural tube develop. Neural tube is completed.



### 5 WEEKS

Organs and systems start to form, as do parts of the brain. The umbilical cord appears. The upper lip and nasal cavity are formed, as are the beginnings of the extremities.



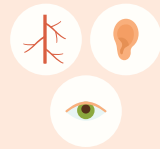
### 6 WEEKS

The brain and its divisions form. The formation of the placenta and the muscles of the face begin. The beginning of the hands and fingers form.



### 7 WEEKS

The uteroplacental circulation starts. The upper limbs are developed. The eyes and ear canals start to form.



### 8 WEEKS

The heart, lungs, brain, urinary and reproductive systems are formed. Eyes, eyelids, nose, ears and lips are developed.



## Fetal Period



### 14 WEEKS

The first hair appears. Bones are easier to see. Changes take place in the genital organs; the prostate gland forms in boys and the ovaries migrate to the pelvic cavity in girls.



### 18 WEEKS

The immune system is created. The modes of sleep and wakefulness begin to take effect. The baby has the ability to distinguish sounds.



### 24 WEEKS

The bone marrow and spleen start to produce blood cells. Taste buds are developed. The face is fully formed, including eyelashes and eyebrows. The brain is rapidly growing and developing.



### 32 WEEKS

The folds start to disappear. Hands and feet become plump. The skin ceases to be red. The endocrine system begins to secrete hormones. The lungs accumulate surfactant.



### 36 WEEKS

Fat develops. The bones of the skull remain soft with gaps (fontanelles). The baby continues to gain weight and grow. Brain development continues.



### 39 WEEKS

The three-dimensional image of the brain can be perceived. The eye can focus at 30 centimeters (the length of your forearm). The fuzz covering the body has disappeared. The baby may have hair on its head. The baby is considered full term and ready for birth.



# Common Experiences

## Congested or Bloody Nose

During pregnancy, the lining of the respiratory tract receives more blood, often making it more congested. This congestion can also cause stuffiness in the nose or nosebleeds. In addition, small blood vessels in the nose are easily damaged due to the increased blood volume, causing nosebleeds. This is common, but speak to your healthcare provider if you experience frequent or severe nosebleeds.

## Morning Sickness

Morning sickness is caused by a rise in hormone levels. Although morning sickness is often limited to the hours soon after rising from bed, it can occur at any time of the day. Women will usually begin to experience morning sickness around four to seven weeks of pregnancy, and it will usually improve or go away by the end of the first trimester (12-13 weeks). Some women may feel nauseated throughout the pregnancy.

### **Tips to help morning sickness symptoms include:**

- Continue resting in bed 15 minutes after waking.
- Eat crackers (or other bland starches) before arising from bed, and eat a small snack before going to bed.
- Eat small, frequent meals (six per day) instead of three large meals. An empty stomach can cause nausea.
- Drink liquids separate from solid foods, and maximize fluid intake when not eating.
- Suck on hard candy, especially those containing ginger.
- Avoid fatty, greasy and spicy foods. Eat carbohydrate and fiber-rich foods.
- Combine salty foods and tart foods/beverages.
- Avoid foods that have a strong smell, or ask someone to cook meals, if smells bother you.
- Wear acupressure bands on wrists. These can be purchased at many local pharmacies.

## Fetal Movement

Most women are able to feel their baby's movements by approximately 20 weeks. Movements may vary in strength, pattern and frequency. You may notice that your baby is more active in the evening or after you eat. Try to pay attention to your baby's movement, so that you notice any change in behavior.

### Kick counts

A great way to create a movement baseline for your baby is by doing kick counts. Talk with your healthcare provider about when and how to do kick counts.

If you notice that your baby is not moving as much as usual or if it takes longer for your baby to move within a certain time frame, lay on your left side and attempt to count 10 movements for baby in a one hour period. Eat a snack or drink some water/juice, and if baby moves less than 10 times in two hours or you haven't noticed any movement from your baby, contact your healthcare provider right away.

## Round Ligament Pain

Round ligament pain is a sharp or jabbing feeling often felt in the lower belly or groin area on one or both sides. It is usually unpredictable and resolves quickly. It is most often felt during the second trimester and is one of the most common complaints during pregnancy. It can be painful and concerning. It usually resolves with sitting or lying down. If you have the pain persistently, even after resting, call your doctor's office.

## Hemorrhoids

Because of increased pressure on the rectum and perineum, the increased blood volume and the increased likelihood of becoming constipated as the pregnancy progresses, hemorrhoids are common in late pregnancy. Avoiding constipation and straining may help to prevent hemorrhoids. Always check with your healthcare provider before using any medicine to treat this condition.

## Constipation

Increased pressure from the pregnancy on the rectum and intestines can interfere with digestion and subsequent bowel movements. In addition, hormone changes may slow down the process of digesting the food you eat. Increasing fluids (like water and prune juice), regular exercise and increasing the fiber in your diet are some of the ways to prevent constipation. Always check with your healthcare provider before taking any medicine for this condition.

## Varicose Veins

Your blood volume will increase during pregnancy, and for some this means that the veins in the legs will swell, causing varicose veins. Sitting or standing in one position for a long period of time may force the veins to work harder to pump blood back to the heart, which worsens varicose veins, so stay active. Compression stockings may help with discomfort and will make varicose veins less noticeable.

## Heartburn and Indigestion

Heartburn and indigestion, caused by pressure on the intestines and stomach (which, in turn, pushes stomach contents back up into the esophagus) is common during pregnancy. It can be prevented or reduced by eating smaller meals throughout the day and by avoiding lying down shortly after eating. Avoid spicy and acidic foods.



## Pica

Pica is a rare craving to eat substances other than food, like dirt, clay or coal. The craving may indicate a nutritional deficiency. Talk to your healthcare provider if you experience pica during your pregnancy.

## Swelling or Fluid Retention

Mild swelling is common during pregnancy, but severe swelling that lasts, worsens or is painful may be a sign of preeclampsia (abnormal condition marked by high blood pressure). Lying on the left side, elevating the legs and wearing support hose and comfortable shoes may help to relieve the swelling. Be sure to notify your healthcare provider about sudden swelling, especially in the hands or face or associated rapid weight gain.

## Skin Changes

Due to fluctuations in hormone levels, including hormones that stimulate pigmentation of the skin, brown, blotchy patches may appear on the face, forehead and/or cheeks. This is often called the mask of pregnancy or chloasma. It often disappears soon after delivery. Using sunscreen when outside can reduce the amount of darkening that happens.

Pigmentation may also increase in the skin surrounding the nipples, called the areola. In addition, a dark line often appears down the middle of the stomach. Freckles may darken and moles may grow. If these skin changes are concerning, please speak to your healthcare provider.

## Stretch Marks

Pinkish stretch marks may appear on the stomach, breasts, thighs or buttocks. Stretch marks are generally caused by a rapid increase in weight. The marks usually fade after pregnancy but do not usually disappear completely.

## Yeast Infections

Due to hormone changes and increased vaginal discharge, also called leukorrhea, a pregnant woman is more susceptible to yeast infections. Yeast infections are characterized by a thick, whitish discharge from the vagina, burning and itching. Yeast infections are highly treatable. Always talk with your healthcare provider before taking any medicine for this condition.

## Backache

As a woman's weight increases, her balance changes and her center of gravity is pulled forward, straining her back. Pelvic joints that begin to loosen in preparation for childbirth also contribute to this back strain. Proper posture and proper lifting techniques throughout the pregnancy can help reduce the strain on the back. Belly bands and braces may help and are available at most retail stores.

## Dizziness

Dizziness during pregnancy is a common symptom, which may be caused by:

- Low blood pressure due to the uterus compressing major veins
- Low blood sugar
- Low iron
- Quickly moving from a sitting position to a standing position
- Dehydration

To prevent injury from falling during episodes of dizziness, a pregnant woman should stand up slowly and hold on to the walls and other stable structures for support and balance. If you feel as though you might fall, try to sit slowly and lie on your side until the dizziness resolves. If this is persistent, please call your doctor's office.

## Headaches

Hormonal changes may be the cause of headaches during pregnancy, especially during the first trimester. Rest, proper nutrition and adequate fluid intake may help ease headache symptoms. Always talk with your healthcare provider before taking any medicine for this condition. If you have a severe headache or a headache that does not resolve, call your healthcare provider. It may be a sign of something more concerning.

# Complications of Pregnancy

## Gestational Diabetes

Diabetes mellitus (also called “diabetes”) is a condition that causes high levels of glucose in the blood. Glucose is a sugar that is the body’s main source of energy. Health problems can occur when glucose levels are too high.

Gestational diabetes is caused by a change in the way a woman’s body responds to insulin during pregnancy. Insulin is a hormone that moves glucose out of the blood and into the body’s cells where it can be turned into energy. During pregnancy, a woman’s cells naturally become slightly more resistant to insulin’s effects. This change is designed to increase the mother’s blood glucose level to make more nutrients available to the baby. The mother’s body makes more insulin to keep the blood glucose level normal. In a small number of women, even this increase is not enough to keep their blood glucose levels in the normal range. As a result, they develop gestational diabetes.

All pregnant women are screened for gestational diabetes. This test usually is done between 24 weeks and 28 weeks of pregnancy. It may be done earlier if you have risk factors. Some women found to have gestational diabetes actually may have had mild diabetes before pregnancy that was not diagnosed.



## Preeclampsia and High Blood Pressure in Pregnancy

Blood pressure is the pressure of the blood against the blood vessel walls each time the heart contracts (squeezes) to pump the blood through your body. High blood pressure is also called hypertension. During pregnancy, severe or uncontrolled hypertension can cause complications for you and your baby. High blood pressure places extra stress on your heart and kidneys and can increase your risk of heart disease, kidney disease and stroke. Other possible complications include fetal growth restriction, preeclampsia, preterm delivery, placental abruption and cesarean delivery.

Preeclampsia is a serious blood pressure disorder that can affect all of the organs in a woman's body. It is usually diagnosed with high blood pressure and abnormal levels of protein in the urine.

Preeclampsia usually occurs after 20 weeks of pregnancy, typically in the third trimester. When it occurs before 32 weeks of pregnancy, it is called early-onset preeclampsia. It also can occur in the postpartum period.

Preeclampsia can also lead to seizures, a condition called eclampsia. It also can lead to hemolysis, elevated liver enzymes and low platelet count (HELLP) syndrome. In this condition, red blood cells are damaged or destroyed, blood clotting is impaired and the liver can bleed internally, causing chest or abdominal pain. HELLP syndrome is a medical emergency. Women can die from HELLP syndrome or have lifelong health problems as a result.

### **The following are important signs to watch out for:**

- Swelling of face or hands
- A headache that will not go away
- Seeing spots or changes in eyesight
- Pain in the upper abdomen or shoulder
- Nausea and vomiting (in the second half of pregnancy)
- Sudden weight gain
- Difficulty breathing

Prevention of preeclampsia involves identifying whether you have risk factors for preeclampsia and taking steps to address these factors. If you have hypertension and are planning a pregnancy, see your healthcare provider for a pre-pregnancy checkup to find out whether your hypertension is under control and whether it has affected your health. If you are overweight, weight loss usually is advised before pregnancy. If you have a medical condition, such as diabetes, it usually is recommended that your condition be well controlled before you become pregnant.

## Hyperemesis Gravidarum

A few pregnant women have a severe kind of nausea and vomiting called hyperemesis gravidarum. These women lose weight, get dehydrated and may also have changes in the body's chemical processes.

We do not know what causes hyperemesis gravidarum. The condition is more common in women who are pregnant with more than one baby. It's also more common in women with migraines. Women with a family history of the condition or who had the condition in a past pregnancy are more likely to have it with future pregnancies.

### **These are the most common symptoms:**

- Constant nausea, especially during the first trimester.
- Vomiting after eating or drinking.
- Vomiting not related to eating.
- Weight loss. This is especially true if it is five percent or more of what you weighed before pregnancy.
- Signs of dehydration include dry mouth, thirst, small amounts of dark urine and feeling lightheaded.

This condition may require hospitalization, so please speak to your healthcare provider if you feel you are experiencing the symptoms listed or if you have severe abdominal pain with your vomiting.

## Bleeding in Pregnancy

Vaginal bleeding or spotting during pregnancy can have many causes. Some are serious and some are not. Bleeding may occur early or late in pregnancy.

Many women have vaginal spotting or bleeding in the first 12 weeks of pregnancy. Bleeding of the cervix may occur after sex. An infection of the cervix also can cause bleeding. Slight bleeding often stops on its own.

However, bleeding during pregnancy may mean something more serious. You may have a higher chance of going into labor too early (preterm labor), having an infant who is born too small or having a miscarriage. If you experience bleeding in pregnancy, please call your healthcare provider as they may need to do a pelvic exam.

## Breech Baby

In the last few weeks of pregnancy, fetuses usually move so that their heads are positioned to come out of the uterus first during birth. This is called a vertex presentation. A breech presentation occurs when the fetus's buttocks, feet or both are in place to come out first during birth. This happens in three to four percent of full-term births. Sometimes, babies are laying across the uterus which is called transverse presentation.

It is not always known why a fetus is breech. Some factors that may contribute to a fetus being in a breech presentation are twin gestation, uterine anomalies, too much or too little amniotic fluid. Occasionally fetuses with certain birth defects will not turn into the head-down position before birth. However, most fetuses in a breech presentation are otherwise normal.

Your healthcare professional may be able to tell which way your fetus is facing by placing his or her hands at certain points on your abdomen. By feeling where the fetus's head, back and buttocks are, it may be possible to find out what part of the fetus is presenting first. An ultrasound exam may be used to confirm it.

Today, most fetuses that are breech are born by planned cesarean delivery (c-section). A planned vaginal birth of a single breech fetus may be considered in some situations. Both vaginal birth and cesarean birth carry certain risks when a fetus is breech. However, the risk of

complications is higher with a planned vaginal delivery than with a planned cesarean delivery.

In a breech presentation, the body comes out first, leaving the baby's head to be delivered last. The baby's body may not stretch the cervix enough to allow room for the baby's head to come out easily. There is a risk that the baby's head or shoulders may become wedged against the bones of the mother's pelvis. Another problem that can happen during a vaginal breech birth is a prolapsed umbilical cord. It can slip into the vagina before the baby is delivered. If there is pressure put on the cord or it becomes pinched, it can decrease the flow of blood and oxygen through the cord to the baby.

If your fetus is breech, your healthcare professional will review the delivery options in detail.

## **External cephalic version**

External cephalic version (ECV) is an attempt to turn the fetus so that he or she is head down. It can improve your chance of having a vaginal birth. If the fetus is breech and you are between 36 weeks and 38 weeks of pregnancy, your healthcare professional may suggest ECV. An ECV will not be tried if you are carrying more than one fetus, there are concerns about the health of the fetus, you have certain abnormalities of the reproductive system or the placenta is in the wrong place or has detached from the wall of the uterus (placental abruption). The healthcare professional performs ECV by placing his or her hands on your abdomen. Firm pressure is applied to the abdomen so that the fetus rolls into a head-down position. Two people may be needed to perform ECV. Ultrasound also may be used to help guide the turning. The fetus's heart rate is checked with fetal monitoring before and after ECV. If any problems arise with you or the fetus, ECV will be stopped right away. ECV usually is done near a delivery room. If a problem occurs, a cesarean delivery can be performed quickly, if necessary. More than one half of attempts at ECV succeed. However, some fetuses who are successfully turned with ECV move back into a breech presentation. If this happens, ECV may be tried again. ECV tends to be harder to do as the time for birth gets closer. As the fetus grows bigger, there is less room for him or her to move. Overall, the success rate of ECV is 50% and very safe. In most cases, an ECV is recommended if your fetus is breech.

# Diet and Nutrition

What you eat is especially important now because you are eating for two, but this does not mean that you need to eat twice as much. It does mean that you should eat a balanced diet with many nutrient-rich foods. Weight gain in the first trimester is minimal, so early in your pregnancy you should concentrate on making healthy food choices, not increasing your caloric intake. You should strive to eat foods from all of the major food groups. Speak with your doctor about diet and weight gain recommendations

## Vitamins

**Take a prenatal vitamin with DHA daily.** Continue prenatal vitamins while you are breastfeeding. When planning future pregnancies, begin taking your daily vitamins three months before conceiving or as soon as possible.

## Weight Gain in Pregnancy

Being overweight is defined as having a body mass index (BMI) of 25–29.9. Obesity is defined as having a BMI of 30 or greater. Within the general category of obesity, there are three levels that reflect the increasing health risks that go along with increasing BMI:

- Lowest risk is a BMI of 30-34.9
- Medium risk is a BMI of 35.0-39.9
- Highest risk is a BMI of 40 or greater

You can find out your BMI by using an online BMI calculator on a web site such as [nhlbi.nih.gov/health/educational/lose\\_wt/BMI/bmicalc](http://nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc).

Obesity during pregnancy puts you at risk of several serious health problems including gestational diabetes, preeclampsia, sleep apnea, pregnancy loss, birth defects, macrosomia, preterm birth, stillbirth, prolonged labor and cesarean section.

Despite the risks, you can have a healthy pregnancy if you are obese. It takes careful management of your weight, attention to diet and exercise, regular prenatal care to monitor for complications and special considerations for your labor and delivery.

Finding a balance between eating healthy foods and staying at a healthy weight is important for your health as well as your baby's health. In the second and third trimesters, a pregnant woman



needs an average of 300 extra calories a day — about the amount of calories in a glass of skim milk and half of a sandwich. You can get help with planning a healthy diet by talking to a nutrition counselor. Help also can be found at the Choose My Plate website, which has a special section for women who are pregnant or breastfeeding ([choosemyplate.gov/moms-pregnancy-breastfeeding](https://www.choosemyplate.gov/moms-pregnancy-breastfeeding)).

If you have never exercised before, pregnancy is a great time to start. Discuss your exercise plan with your obstetrician to make sure it is safe. Begin with as little as five minutes of exercise a day and add five minutes each week. Your goal is to stay active for 30 minutes on most — preferably all — days of the week. Walking is a good choice if you are new to exercise. Swimming is another good exercise for pregnant women. The water supports your weight so you can avoid injury and muscle strain. It also helps you stay cool. Stop exercising if you develop shortness of breath, chest pain, extreme fatigue, uterine cramping (contractions), dizziness, decreased fetal movement or leaking of fluid from the vagina.

Your weight will be tracked at each prenatal visit. The growth of your baby also will be checked. If you are gaining less than the recommended guidelines, and if your baby is growing well, you do not have to increase your weight gain to catch up to the guidelines. If your baby is not growing well, changes may need to be made to your diet and exercise plan.

## Caffeine

Try to limit your caffeine intake to 100 mg of caffeine per day. This is the equivalent of one cup of coffee or one 20 ounce soda. It is not recommended to exceed 300 mg in one day. Remember, caffeine is found in coffee, tea, soda, chocolate and even some over-the-counter pain medications.

## Seafood and Shellfish

Fish contains omega-3 fatty acids, which are important to many structures of your body (and your baby's), including the brain and eyes. You can safely eat 12 ounces per week of a variety of cooked fish: shellfish, smaller ocean fish or farm-raised fish. A typical serving size of fish is three to six ounces.

A pregnant woman and her unborn baby are at risk if she eats raw or undercooked seafood. Avoid eating raw or undercooked fish (including oysters, clams, mussels and scallops).

Avoid eating large amounts of methylmercury such as swordfish, tilefish (golden bass), etc.



# Prenatal Testing and Screening

## Routine Tests

A number of lab tests are suggested for all women, as part of routine prenatal care. These tests are part of the foundation for your care and give a picture of your overall health. These also help identify and treat conditions that may be harmful to both mom and baby.

The following lab tests may be done early in pregnancy:

- Complete blood count (CBC)
- Blood type and Rh type
- Urinalysis
- Urine culture
- Urine drug test
- Rubella immunity
- Hepatitis B and hepatitis C
- Sexually transmitted diseases (STDs)
- Human immunodeficiency virus (HIV)
- Tuberculosis (TB) if you are at risk
- Papsmear
- Varicella
- Antibody screen
- Second and third trimester prenatal screening

## Group B Streptococcus (GBS)

Group B streptococcus is one of the many types of bacteria that live in the body and usually do not cause serious illness. It is found in the digestive, urinary and reproductive tracts of men and women. In women, it can be found in the vagina and rectum. GBS is not a sexually transmitted infection (STI). Also, although the names are similar, GBS is different from group A streptococcus, the bacteria that causes “strep throat”.

A woman who is colonized with GBS late in her pregnancy can pass it to her baby during labor. GBS can cause a serious and life threatening infection in a newborn.

There are two types of GBS infections in newborns:

- Early-onset infections
- Late-onset infections

GBS testing late in pregnancy and treatment during labor can help prevent early-onset infections. However, it does not prevent late-onset infections.

To help prevent early-onset GBS infection, women are tested for GBS late in pregnancy, between weeks 35 and 37. The test is called a culture. In this test, a swab is used to take a sample from the woman’s vagina and rectum. This procedure is quick and not painful.

If results of the culture test are positive, showing that GBS is present, you most likely will receive treatment with antibiotics during labor to help prevent GBS from being passed to your baby.

## Prenatal Genetic Testing

Prenatal genetic testing gives parents-to-be information about whether their fetus has certain genetic disorders. Genetic disorders are caused by changes in a person’s genes or chromosomes. Aneuploidy is a condition in which there are missing or extra chromosomes.

In a trisomy, there is an extra chromosome. In a monosomy, a chromosome is missing. Inherited disorders are caused by changes in genes called mutations. Inherited disorders include sickle cell disease, cystic fibrosis, Tay–Sachs disease and many others. In most cases, both parents must carry the same gene to have an affected child.

There are two general types of prenatal tests for genetic disorders, prenatal screening tests and prenatal diagnostic tests.

**Prenatal screening tests:** These tests can tell you the chances that your fetus has an aneuploidy and a few additional disorders.

**Prenatal diagnostic tests:** These tests can tell you whether your fetus actually has certain disorders. These tests are done on cells from the fetus or placenta obtained through amniocentesis or chorionic villus sampling (CVS).

Both screening and diagnostic testing are offered to all pregnant women. Screening tests can tell you your risk of having a baby with certain disorders.

First-trimester screening includes a test of the pregnant woman's blood and an ultrasound exam. Both tests usually are performed together and are done between 10 weeks and 13 weeks of pregnancy. Second-trimester screening includes a blood test. The results from first- and second-trimester tests give a risk assessment.

There is another test, called cell-free DNA. The cell-free DNA screening test works best for and is offered only to women who already have an increased risk of having a baby with a chromosome disorder.

A positive screening test result means that your fetus is at higher risk of having the disorder compared with the general population. It does not mean that your fetus definitely has the disorder. A negative result means that your fetus is at lower risk of having the disorder compared with the general population. It does not rule out the possibility that your fetus has a disorder.

Diagnostic testing with CVS or amniocentesis that gives a more definite result is an option for all pregnant women. Your obstetrician or other healthcare professional, such as a genetic counselor, will discuss what your screening test results mean and help you decide the next steps.

It can be helpful to think about how you would use the results of prenatal screening tests in your pregnancy care. Remember that a positive screening test tells you only that you are at higher risk of having a baby with down syndrome or another aneuploidy. A diagnostic test would need to be done if you want to know a more certain result. Some parents want to know beforehand that their baby will

be born with a genetic disorder. This knowledge gives parents time to learn about the disorder and plan for the medical care that the child may need. Some parents may decide to end the pregnancy in certain situations.

Other parents do not want to know this information before the child is born. In this case, you may decide not to have follow-up diagnostic testing if a screening test result is positive. Or you may decide not to have any testing at all. There is no right or wrong answer.

## Rh Status in Pregnancy

Just as there are different major blood groups, such as type A, B and O, there also is an Rh factor. The Rh factor is a protein that can be present on the surface of red blood cells. Most people have the Rh factor — they are Rh positive. Others do not have the Rh factor — they are Rh negative.

The Rh factor is inherited — passed down through parents' genes to their children. The baby will inherit either the mother's genes or the father's genes. If the mother is Rh negative and the father is Rh positive, the baby could be either Rh negative (like mother) or Rh positive (like father). If the mother and father are both Rh negative, the baby will also be Rh negative.

If you are Rh negative, you will be given a shot of Rh immunoglobulin (Rhlg). Rhlg also known as Rhogam, is made from donated blood. When given to a nonsensitized Rh-negative person, it targets any Rh-positive cells in the bloodstream and prevents the production of Rh antibodies. When given to an Rh-negative woman who has not yet made antibodies against the Rh factor, Rhlg can prevent fetal hemolytic anemia in a later pregnancy.

Rhlg is given to Rh-negative women in the following situations:

- At around the 28th week of pregnancy to prevent Rh sensitization for the rest of the pregnancy.
- Within 72 hours after the delivery of an Rh-positive infant.
- After a miscarriage, abortion or ectopic pregnancy.
- After amniocentesis or chorionic villus sampling.

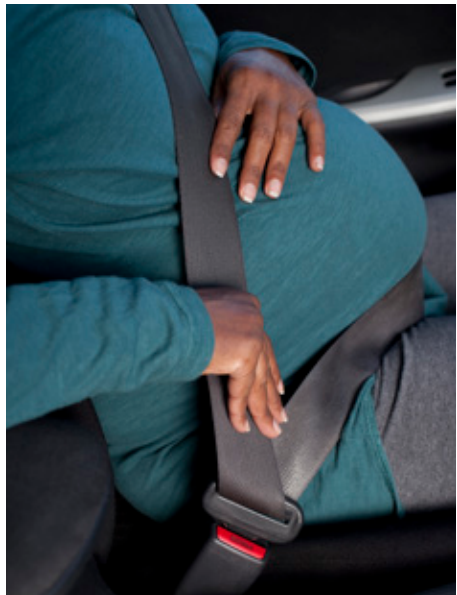
# Protecting Yourself and Your Baby

## Car Safety in Pregnancy

Although the baby is protected inside your body, you should wear a lap and shoulder belt every time you travel while you are pregnant for the best protection — even in the final weeks of pregnancy. You and your baby are much more likely to survive a car crash if you are buckled in.

### When wearing a seat belt, follow these rules:

- Buckle the lap belt below your belly so that it fits snugly across your hips and pelvic bone.
- Place the shoulder belt across your chest (between your breasts) and over the mid-portion of your collar bone (away from your neck).
- Never place the shoulder belt under your arm or behind your back.
- Pull any slack (looseness) out of the belt.



## Listeria

It is recommended to avoid unpasteurized soft cheeses (e.g. feta, blue cheese, brie, gorgonzola) and precooked deli meats because these can rarely contain bacteria called listeria. Wash all fresh produce and heat up prepackaged meats to reduce your risk of exposure.

## Toxoplasmosis

Toxoplasmosis is an infection caused by a parasite that can seriously harm an unborn baby. Avoid eating undercooked meat, handling cat litter and be sure to wear gloves when gardening. Frequent hand-washing can also prevent the development of infection by toxoplasmosis, other viruses or bacteria if you are exposed.

## Sexually Transmitted Diseases (STDs) in Pregnancy

Screening for sexually transmitted diseases is part of routine pregnancy care. STDs can be contracted during vaginal, anal or oral sex. You are at increased risk for a STD if you or your partner have multiple sexual partners, if you have sex without a condom, or if your partner has a STD. If you are at a higher risk you will be tested again in the third trimester so that treatment can be started before delivery. Having an active or untreated infection during pregnancy may be harmful to the baby and increases the risk of the baby contracting the infection at delivery.

## Vaccinations

The safety of vaccines used during pregnancy is a critical concern for OB-GYNs and their patients. The American College of Obstetricians and Gynecologists (ACOG) monitors pregnancy-related vaccine safety information through its collaborations with the National Vaccine Advisory Committee (NVAC) through the U.S. Department of Health & Human Services (HHS) and with the Advisory Committee on Immunizations Practices (ACIP) through the Centers for Disease Control and Prevention (CDC). In following the current guidelines for vaccination during pregnancy, our practice offers two vaccines that are important in pregnancy; these are the Tdap vaccine and the influenza vaccine.

Some vaccines cannot be safely given during pregnancy because they contain live viruses. The most pertinent to pregnancy are the rubella and varicella viruses. These vaccines, if needed, will be offered to you postpartum.

Rubella is a virus that can cause serious concerns and fetal malformations if contracted during pregnancy. For this reason, when you are not pregnant anymore, the MMR vaccine will be offered to protect you and any future babies. The varicella virus (chicken pox) can be very serious and even deadly to mothers and babies. If you are not immune to varicella, you will be offered this vaccine to protect you and any future babies. If you know you are not immune to rubella and or varicella, and think you may have been exposed to these viruses, call your doctor right away.

We hope you will be appropriately vaccinated during pregnancy and if necessary, after you deliver. We sincerely hope that you will vaccinate

your children, because vaccines are safe, effective, well studied and prevent disease. If you have concerns about vaccine safety, please talk to your healthcare provider.

## Influenza (Flu)

Pregnant women are at high risk for complications of influenza including serious illness, hospitalization and death due to significant and necessary changes in the women's body to grow a baby. Maternal influenza vaccination has been shown to decrease the risk of influenza and its complications among pregnant women and their infants in the first six months of life. For many years, ACOG and the CDC have recommended that every pregnant woman receive a flu shot during any trimester. Multiple published studies, as well as clinical experience, have supported this position that the flu vaccine is safe and effective during pregnancy. Our department and physicians stand by the CDC and ACOG recommendations for the administration of the flu vaccine, and you will be offered this vaccine during flu season.

## Tdap (Tetanus, Diphtheria, Pertussis)

The overwhelming majority of illness and death attributable to pertussis infection occurs in infants who are three months and younger. Infants do not begin their own vaccine series against pertussis until approximately two months of age. Because of this gap, there is a window of significant vulnerability for newborns, many of whom contract serious pertussis infections from family members and caregivers, especially their mothers, or older siblings or both. Since 2013, there has been a recommendation that a dose of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) should be administered during each pregnancy, irrespective of the prior history of receiving Tdap. The recommended timing for maternal Tdap vaccination is between 27 weeks and 36 weeks of gestation. To maximize the maternal antibody response and passive antibody transfer and levels in the newborn, vaccination as early as possible in the 27-36 weeks-of-gestation window is recommended. However, the Tdap vaccine may be safely given at any time during pregnancy. There is no evidence of adverse fetal effects from vaccinating pregnant women with an inactivated virus or bacterial vaccine or toxoid, and a growing body of robust data demonstrate safety of such use. Family members who will be in close contact with your baby should also receive a Tdap vaccine. Our department and physicians stand by the CDC and ACOG recommendations for administration of the Tdap vaccine, and you will be offered this vaccine from 27-36 weeks gestation.

# Caring for Yourself

## Dental Care

Gums may become more spongy as blood flow increases during pregnancy. This causes them to bleed easily. A pregnant woman should continue to take care of her teeth and gums and go to the dentist for regular checkups. This symptom usually disappears after pregnancy.

Most dental procedures are safe during pregnancy. In fact, if you have a toothache or loose filling it is recommended that you see your dentist before the problem becomes worse. If possible, have dental work completed after the first trimester of pregnancy. For routine fillings, crowns and root canals, a local anesthetic injection such as lidocaine, is safe.

Cosmetic or elective dental procedures should be postponed until after delivery, if possible.

## Saunas and Hot Tubs

Prolonged exposure to very hot water and steam can harm your baby by raising your temperature. Therefore, you should avoid hot tubs and saunas while you are pregnant.

## Alcohol

Avoid alcohol while you are pregnant. Drinking alcohol during pregnancy can cause birth defects and has been shown to cause learning disabilities, behavioral problems and mental retardation. The effects of even small amounts of alcohol on the unborn baby are not clear, so it is safest to avoid any alcohol during your pregnancy.

## Smoking and Vaping

Avoid smoking and vaping while you are pregnant. If you are still smoking, we can offer you resources to help you to reduce or stop smoking for the sake of your baby's health and your own.

## Hair Dyes, Permanent Curling and Straightening

It is safe to have your hair colored, permed or straightened during pregnancy. If you color your hair at home, be sure to wear gloves and work in a well-ventilated area.

## Proper Hydration

Your body needs at least eight to 10 glasses of water per day. Low-fat milk, juices containing 100% fruit juice and low-sodium vegetable juices are good sources of fluids as well.



## Medicines and Pregnancy

All prescription and over-the-counter medications, including herbs and dietary supplements, need to be discussed with your healthcare provider. Those that take medicine for preexisting medical conditions should speak with their healthcare provider about safe dosages and possible alternatives that are safe during pregnancy. Do not change or discontinue your medication without speaking with your healthcare provider.

Many over-the-counter medications are considered safe to take during pregnancy. If you experience any of the common ailments below, you may consider taking these common medications:

- **Allergies** - Claritin, Zyrtec, Benadryl, Chlor-Trimeton.
- **Congestion** - Sudafed (not in the first trimester), Benadryl, Mucinex.
- **Cough** - Robitussin.
- **Diarrhea** - Imodium AD.
- **Gas** - Simethicone.
- **Heartburn/Acid Reflux** - Maalox, Tums, Mylanta, Zantac.
- **Hemorrhoids** - Anusol HC, Preparation H, Tucks.
- **Insomnia** - Benadryl, Unisom.
- **Constipation** - Prevention: Metamucil, Fibercon, Docusate Sodium, Colace; Treatment: Milk of Magnesia, Miralax.
- **Nausea/Vomiting** - Benadryl, Unisom (25mg at bedtime), Vitamin B6 (25mg every eight hours).
- **Pain** - Tylenol.
- **Skin Irritations** - Cortaid cream or ointment, Benadryl cream, Calamine or Caladryl loction, aloe vera lotions or gels.

Although there is a low risk of causing any issues, keep in mind that nothing has been proven to be 100% safe in pregnancy.

## Sex in Pregnancy

Sex is usually safe during pregnancy. Talk to your healthcare provider if you have a history of pre-term labor or a history of miscarriages, are experiencing pregnancy-related vaginal bleeding, or for any other concerns. Avoid intercourse if you suspect that your membranes have ruptured. If you have certain conditions related to your cervix, or placenta, you may be advised to avoid intercourse.

## Smoking and Pregnancy

Smoking has been shown to affect both mother and baby, before and after birth. Complications during pregnancy include placental issues, preterm labor/birth, increased risk of infections in the uterus and an increased risk of stillbirth. Babies can also be affected by an increased risk of birth defects, poor lung development, increased risk of sudden infant death syndrome (SIDS), as well as slow growth. Quitting early in pregnancy increases the chances of having a healthy baby. Remember that passive, or second hand, smoking is shown to be just as harmful, so include your partner in your plans to quit.

## Substance Abuse or Chemical Dependence

It is extremely important to discuss any and all drugs, legal or illegal, with your healthcare provider. These include alcohol, marijuana, methamphetamine, cocaine, opiates, anabolic steroids, hallucinogens, inhalants and prescription drugs such as pain pills, stimulants or anxiety pills. While all are harmful, some drugs reach your developing baby easier, increasing the negative effects. To get the most from your healthcare provider, we suggest you do the following:

- Write down the names and dosage of any chemical or drug you are currently using and bring the list with you to your appointments.
- Write down a list of questions and concerns you may have prior to your appointment.
- Consider inpatient or outpatient treatment and discuss options with your healthcare provider.



## Depression and Anxiety in Pregnancy

If you have a history of depression or anxiety disorders at any time in your life or if you are taking an antidepressant, tell your healthcare provider early in your prenatal care. It is not advised you discontinue most medications related to depression and anxiety. Please call your healthcare provider before you stop medications. Ideally, you should tell your healthcare provider before you become pregnant. If you were taking antidepressants before pregnancy, your healthcare provider can assess your situation and help you decide whether to continue taking medication during your pregnancy. Women with a history of depression and anxiety disorders are at much higher risk for worsening depression during and after the pregnancy. Because mental health in women who are planning to become pregnant or are pregnant is so important, you will likely be screened for depression and anxiety at prenatal visits and after your delivery. Your healthcare provider may suggest that you begin treatment right after you give birth to prevent postpartum depression.

# LABOR AND DELIVERY

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## What You Can Expect From Us

Your birthing experience will take place in one of our ten private labor, delivery and recovery (LDR) suites. Each suite is equipped with the supplies and equipment needed to provide a safe delivery, even in the event of any complications. Our birthing bed allows you to deliver in the position that makes you most comfortable. We know that the birth of a baby is one of life's most precious miracles. Our expert obstetrical team will provide the highest quality of care for mom and baby. Your nurses are specialists in childbirth and will provide you with competent, compassionate care to assist you in making the birth of your child a positive and safe experience.

Your coach is encouraged to be with you as much as possible. In addition, you may choose an additional person to be present to support you during your labor and the birth of your baby.

We have anesthesiologists in the hospital at all times for patients desiring an epidural anesthesia and to provide anesthesia in case the need arises for a cesarean delivery.

Because the first hour after birth is such a special time for mothers and babies, we call this time the sacred hour. We protect this time by keeping mother and baby together in uninterrupted skin-to-skin contact until after the first breastfeeding whenever possible.

After vaginal deliveries, stable babies are immediately placed on mother's bare chest and dried with a warm towel. Mother and baby are covered with a blanket (except for baby's head) and baby is allowed to rest and then find his/her own way to the breast for baby's first breastfeeding.

After planned or non-emergent cesarean deliveries, babies are dried and briefly assessed. Baby is then brought to his/her mother in the OR and placed on her chest to experience the sacred hour together in the OR and recovery room if both mother and baby remain stable. Our goal is to keep mothers and babies together whenever possible.

After delivery, visitors will be allowed a period of 15 minutes to visit with mother and baby. At the end of 15 minutes, visitors will be asked to leave your room to allow mother, baby and one support person to have quiet bonding time until transferred to the mother baby unit. During this time you will be encouraged to keep your baby in uninterrupted skin-to-skin contact until after the first breastfeeding. Your nurse will assist you with breastfeeding as needed.

Most babies are born healthy but you can rest assured that should any complications arise, our neonatal team will respond immediately to provide specialized care for your baby.

# Packing and Preparing for the Hospital

## For the Hospital

- Photo ID and insurance card.
- This book with all of your hospital paperwork.
- Birth plan.
- Bathrobe, nightgown, slippers or socks. Anything that makes you comfortable is important to bring with you!
- Anything that helps you relax, such as your own pillow, music, a picture of a loved one or something to read or watch.
- Please bring battery powered electronic equipment rather than items that need to be plugged in.
- Camera, charged batteries and a memory card.
- Toiletries.
- Snacks.
- Money (credit card or cash).

## Essentials for You After Delivery

- A fresh set of pajamas
- Maternity underpants
- A going home outfit
- Journal
- Nursing bra

## Essentials for Your New Baby

- Car seat
- Going home outfit
- Blanket
- Infant fingernail clippers

# Recommended Birthing Plan

## Birth Preferences Worksheet

Keep in mind your birth preferences are guidelines, but labor is unpredictable. At LLU Children's Hospital, we want to honor your wishes and give you and your family a wonderful experience as you celebrate the birth of your child. We assure you that the health of you and your baby is our highest priority. If this means we cannot follow your birth preferences exactly, we promise to communicate with you and make recommendations based on guidelines developed through evidence-based practice.

**Name:** \_\_\_\_\_

### Attendant(s)

I would like the following people to be present during labor and/or birth:

Partner: \_\_\_\_\_

Friend(s): \_\_\_\_\_

Relative(s): \_\_\_\_\_

Doula: \_\_\_\_\_

Children: \_\_\_\_\_

Important things to know about me (cultural, religious preferences, fun facts): \_\_\_\_\_  
\_\_\_\_\_

Name of baby (if you have a name chosen): \_\_\_\_\_  
\_\_\_\_\_

## Amenities

I would like to:

- Bring music.
- Dim the lights.
- Wear my own clothes during labor and delivery.
- Take pictures during labor and delivery.
- Bring aromatherapy.
- Other: \_\_\_\_\_.

## Hospital Admission and Procedures

I would like the option of returning home if I'm not in active labor.

Once I'm admitted, I would like:

- My partner to be allowed to stay whenever possible.
- To wear my contact lenses, as long as I don't need a cesarean delivery.
- To eat if I wish (to be discussed with physician on call and anesthesia).
- To stay hydrated by drinking clear fluids and have a saline lock for emergencies.
- To walk and move around as I choose.
- Other: \_\_\_\_\_.

## Other Interventions

As long as the baby and I are doing fine, I would like to:

- Have intermittent, rather than continuous, electronic fetal monitoring per LLU Children's Hospital policy (discuss with your healthcare provider).
- Be allowed to progress naturally and have my labor augmented only if necessary.
- Have wireless fetal monitoring if I am a candidate.
- Other: \_\_\_\_\_.

## Labor Props

If available, I would like to try a:

- Birthing ball
- Peanut ball
- Squatting bar

I'd like to bring the following equipment with me:

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## Pain Relief

I would like to try the following pain-management techniques:

- Acupressure.
- Shower.
- Breathing techniques/distraction.
- Hot/cold therapy.
- Self-hypnosis.
- Massage.
- Medication.
- Please do not offer me pain medication. I will request it if I need it.
- Other: \_\_\_\_\_.

If I decide I want medicinal pain relief, I would prefer:

- Regional analgesia (an epidural and/or spinal block).
- Systemic medication.

## Labor Interventions

Interventions in labor can be a way to help achieve a vaginal delivery. When used appropriately, they are excellent tools to help women in labor.

- I would like an explanation for all interventions recommended.
- I am OK with and understand the idea of the doctors “breaking my bag of water” if it is warranted.
- I would like to avoid pitocin but will consider the idea if recommended by the physicians, as necessary.
- Other: \_\_\_\_\_.

## Pushing

When it’s time to push, I would like to:

- Do so instinctively.
- Be coached on when to push and for how long.
- Be allowed to progress naturally as long as my baby and I are doing fine.

I would like to try the following positions for pushing (and birth):

- Semi-reclining.
- Side-lying position.
- Squatting.
- Hands and knees.
- Whatever feels right at the time.
- Recognize that with an epidural, pushing in the above positions may not be possible.
- Other: \_\_\_\_\_.

## Vaginal Birth

During delivery, I would like:

- To view the birth using a mirror.
- To touch my baby's head as it crowns.
- The room to be as quiet as possible.
- To give birth without an episiotomy (these are very rarely done at LLU Children's Hospital, and we will discuss if it is necessary).
- Other: \_\_\_\_\_.

Postpartum pitocin is routinely given to prevent postpartum hemorrhage; please discuss if you have concerns with this.

I understand that operative vaginal delivery is a possible way to help me avoid a c-section, and if it is offered, I will be given information regarding the reason along with the risks, benefits and alternatives.

After birth, I would like:

- Delayed cord clamping.
- My partner to cut the umbilical cord.
- My baby placed skin-to-skin on my chest immediately after birth if baby and I are both stable.
- To keep my baby in uninterrupted skin-to-skin contact on my chest until after the first breastfeeding, putting off any procedures that are not urgent.
- To breastfeed as soon as possible (we are a Baby-Friendly Hospital).
- Other: \_\_\_\_\_.

## Cesarean Delivery

If I have a cesarean section, I would like:

- My partner present at all times during the operation.
- The screen lowered or clear drapes used so I can see my baby being delivered.
- My baby placed skin-to-skin on my chest in the OR as soon as possible if baby and I are both stable.
- To keep my baby in uninterrupted skin-to-skin contact on my chest until after the first breastfeeding.
- My baby given to my partner to hold as soon as possible after birth.
- Other: \_\_\_\_\_

## Cord Blood Banking

I am planning to:

- Donate cord blood to a public bank.
- Bank cord blood privately.
- Neither.

## Postpartum

After delivery, I would like:

- All newborn procedures to take place in my presence when possible.
- My partner to stay with the baby at all times if I can't be there.
- Other: \_\_\_\_\_

## Feeding

I plan to:

- Breastfeed exclusively.
- Formula feed exclusively.
- Both breastfeed and give formula.

## Lactation Consultation

I would like the help of a lactation consultant:

- As soon as possible.
- Before I go home.
- As needed.

## Circumcision

If my baby is a boy:

- I want him to be circumcised at the hospital.
- I will have him circumcised later.
- I do not want him circumcised.

## Discharge

I would like to:

- Be discharged from the hospital with my baby as soon as possible.
- Stay at the hospital as long as possible.
- Wait and see how I feel before deciding about the timing of hospital discharge.



# Labor Induction

Labor induction is the use of medications or other methods to bring on (induce) labor. Labor is induced to stimulate contractions of the uterus in an effort to have a vaginal birth. Labor induction may be recommended if the health of the mother or baby is at risk.

The healthcare professionals at LLU Children’s Hospital recommend that unless there is a valid health reason or labor starts on its own, delivery should not occur before at least 39 weeks. If you have a cesarean delivery or labor induction for a medical reason, it means that the benefits of having the baby early outweigh the potential risks. But when they are done for a nonmedical reason, the risks – both to you and to the baby – may outweigh the benefits. When your pregnancy is normal and healthy, it should continue for at least 39 weeks, and it is preferable for labor to start on its own.

A normal pregnancy lasts about 40 weeks. It was once thought that babies born a few weeks early — between 37 weeks and 39 weeks — were just as healthy as babies born after 39 weeks. Experts now know that babies grow throughout the entire 40 weeks of pregnancy.

The lungs, brain and liver are among the last organs to fully develop during pregnancy. The brain develops at its fastest rate at the end of pregnancy — it grows by one third just between week 35 and week 39. Also during these last weeks, layers of fat are added underneath the baby’s skin. This fat helps keep the baby warm after birth.

## Medications and techniques to induce and/or augment labor

Sometimes patients have a medical reason requiring induction of labor. Women in labor may have a medical indication for augmentation of labor. In these cases, medications and techniques can be used to complete these processes.

**Ripening the cervix** is a process that helps the cervix soften and thin out in preparation for labor. Medications or devices may be used to soften the cervix so it will stretch (dilate) for labor.

Ripening of the cervix can be done with prostaglandins (cytotec/misoprostol) or with special devices like a foley balloon. Prostaglandins can be inserted into the vagina or taken by mouth. Prostaglandins are not used in women who have had a previous cesarean delivery or



other uterine surgery to avoid increasing the possible risk of uterine rupture (tearing). A foley balloon is a catheter (small tube) with an inflatable balloon on the end which also can be inserted to widen the cervix.

**Rupturing the amniotic sac** can start or strengthen contractions, just like if your water broke on its own. Having the physician break your water also can make contractions stronger if they have already begun. The healthcare professional makes a small hole in the amniotic sac with a special tool. This procedure, called an amniotomy, may cause some discomfort. This may need to be done urgently sometimes if there is concern for fetal distress.

**Oxytocin or pitocin** is a hormone that causes contractions of the uterus. It can be used to start labor or to speed up labor that began on its own. Contractions usually start in about 30 minutes after oxytocin is given. We only use low doses of this medication and monitor you closely if it is needed.

## **The risks associated with labor induction**

With some methods, the uterus can be over stimulated, causing it to contract too frequently. Too many contractions may lead to changes in the fetal heart rate, umbilical cord problems and other problems. Medical problems that were present before pregnancy or occurred during pregnancy may contribute to complications.

## **Is labor induction always effective?**

Sometimes labor induction does not work. A failed attempt at induction may mean that you will need to try another induction or have a cesarean delivery. The chance of having a cesarean delivery is slightly increased for first-time mothers who have labor induction, especially if the cervix is not ready for labor. This is why cervical ripening or preparing the cervix is a critical yet long step in the induction process. Patience is key while undergoing induction for the patient, families and providers.

## **Difference between an elective delivery and a medically indicated delivery**

An elective delivery is performed for a nonmedical reason. Some nonmedical reasons include wanting to schedule the birth of the baby on a specific date or living far away from the hospital. Some women request delivery because they are uncomfortable in the last weeks of pregnancy.

A medically indicated delivery is done for a medical reason. These reasons may be the woman's medical condition or a problem with the baby.

## **When would an induction of labor be offered?**

In general, we offer late-term induction of labor from 39-41 weeks gestation, depending on the clinical scenario and patient needs. If you desire to wait past 41 weeks gestation, you will need non-stress test monitoring and fluid checks during that week. We strongly recommend inductions for those that reach 42 weeks gestation, a recommendation that is supported by ACOG due to a significant increase in risks for you and your baby.

## The Risks for Babies Born Before 39 Weeks

Babies who are born before 39 weeks may not be as developed as those who are born after 39 weeks. Because they may be less developed, they may have an increased risk of short-term and long-term health problems. Some of these problems can have lasting effects.

The closer to full-term a baby is when born, the less chance the baby has of problems due to prematurity. The following are health problems that are possible for babies who are born too early:

- Breathing problems due to immature lungs (may need respiratory support with oxygen or even a breathing machine).
- Temperature problems due to inability to keep warm (may need a warmer or incubator).
- Feeding problems due to immature sucking and swallowing patterns (may need a feeding tube or help with feeding).
- Jaundice due to high levels of bilirubin (may need phototherapy with special lights).
- Vision or hearing problems due to immature development (will have hearing tested and may have eyes tested if born at less than 31 weeks of gestation).
- Muscular problems due to immature development (may need physical therapy).
- Learning and behavior problems due to immature development (may need special education and therapy).

We do not offer elective delivery before 39 weeks, it is important to discuss the potential risks and benefits with your healthcare provider, as well as your reasons for requesting this type of delivery. If discomfort is a reason, it may help to know that it is normal to feel uncomfortable at the end of pregnancy. Your healthcare provider may be able to suggest ways to help you feel better. If you live far away from the hospital, you might want to stay with someone who lives closer.

You also may be able to set out for the hospital when you are in early labor. Talk to your healthcare provider to get other suggestions and advice.

# Signs That You Are Approaching Labor

Sign	What It Is	When It Happens
Feeling as if the baby has dropped lower	Lightening - This is known as the “baby dropping.” The baby has settled deep into your pelvis.	From a few weeks to a few hours before labor begins.
Increase in vaginal discharge (clear, pink or slightly bloody)	Show - A thick mucus plug has accumulated at the cervix during pregnancy. When the cervix begins to dilate, the plug is pushed into the vagina.	Several days, sometimes weeks, before labor begins or at the onset of labor.

As labor begins, the cervix thins (effaces) and opens (dilates). The uterus, which contains muscle, contracts at regular intervals. When it contracts, the abdomen becomes hard. Between the contractions, the uterus relaxes and becomes soft. Up to the start of labor and during early labor, the baby will continue to move.

In some women, their water may break prior to the onset of contractions. Your medical team may refer to this as rupture of membranes, meaning that the amniotic sac surrounding your baby breaks. This can feel differently in each pregnancy, some signs are:

- A sudden gush of fluid from your vagina.
- Slow, consistent leaking of fluid from your vagina.
- A feeling of wetness in your underwear.

You will need to be evaluated by a healthcare provider and should not wait for contractions to begin before heading to the hospital.

# How To Tell When Labor Begins

## Preterm Labor

Preterm labor is defined as regular contractions of the uterus resulting in changes in the cervix that start before 37 weeks of pregnancy. Changes in the cervix include effacement (the cervix thins out) and dilation (the cervix opens so that the fetus can enter the birth canal).

When birth occurs between 20 weeks of pregnancy and 37 weeks of pregnancy, it is called preterm birth.

## How to Tell When Labor Begins

Your uterus may contract off and on before “true” labor begins. These irregular contractions are called false labor, or Braxton Hicks contractions. They are normal but can be uncomfortable at times. You might notice them more at the end of the day.

### Differences between false labor and true labor

Type of Change	False Labor	True Labor
Timing of contractions	Braxton Hicks contractions are often irregular and do not get closer together.	Come at regular intervals and, as time goes on, get closer together. Each lasts about 30-70 seconds.
Change with movement	Contractions may stop when you walk, rest or with a change of position.	Contractions continue, despite movement.
Strength of contractions	Usually weak (may be strong and then weak).	Increase in strength steadily.
Pain of contractions	Usually felt only in the front.	Starts in the back and moves to the front.

Usually false labor contractions are less regular and not as strong as true labor. Sometimes the only way to tell the difference is by having a vaginal exam to look for changes in your cervix that signal the onset of labor.

One good way to tell the difference is to time the contractions. Note how long it is from the start of one contraction to the start of the next one. Keep a record for an hour. It may be hard to time labor pains accurately if the contractions are slight.

If you are term, 37 weeks or greater, and are experiencing contractions every 5-10 minutes for an hour that are getting stronger, even after rest and hydration, you should contact your healthcare provider or be evaluated in labor and delivery. If you are less than 37 weeks and are having more than four contractions in an hour, then you should call your healthcare provider or be evaluated in labor and delivery.



# Pain Control

All laboring patients are entitled to pain control and our team of anesthesiologists will work with you to find the best option for you. We support women who choose a medicated or unmedicated birth approach.

Our anesthesiologists are available 24 hours a day and seven days a week. Anesthesia will be administered upon your request, however, be aware that you may need to wait if there are several patients requesting pain control at the same time or if another patient is experiencing an emergency. We suggest that you ask to speak with an anesthesia provider when you are admitted to ensure that your pain control needs are met in a timely manner.

## Pain Control Options

### Systemic analgesics

Systemic analgesics act on the whole nervous system, rather than a specific area, to lessen pain. They will not cause you to lose consciousness. These medications often are used during early labor to allow you to rest.

Systemic analgesics usually are given as a shot. Depending on the type of medication, the shot is given into either a muscle or a vein. Systemic pain medicine can have side effects, such as nausea, feeling drowsy, or having trouble concentrating. Sometimes another drug is given along with a systemic analgesic to relieve nausea. Systemic analgesics can affect the baby's heart rate temporarily.

### Regional analgesia

#### *Spinal block*

A spinal block – like an epidural block – is a form of regional pain relief. A small amount of medication is injected into the spinal fluid. It starts to relieve pain quickly, and it lasts for a few hours. This is the most common method used for cesarean deliveries as it allows you to remain awake but causes a loss of sensation in the lower half of your body. You will be numb after receiving a spinal block and should not feel any pain, however, you may experience a feeling of pressure during your delivery. You will not be able to walk around when a spinal is in effect.

## ***Epidural block***

An epidural block (sometimes referred to as “an epidural”) is the most common type of pain relief used during labor and delivery in the United States and the best way of managing pain in labor. In an epidural block, medication is given through a tube placed into the lower back.

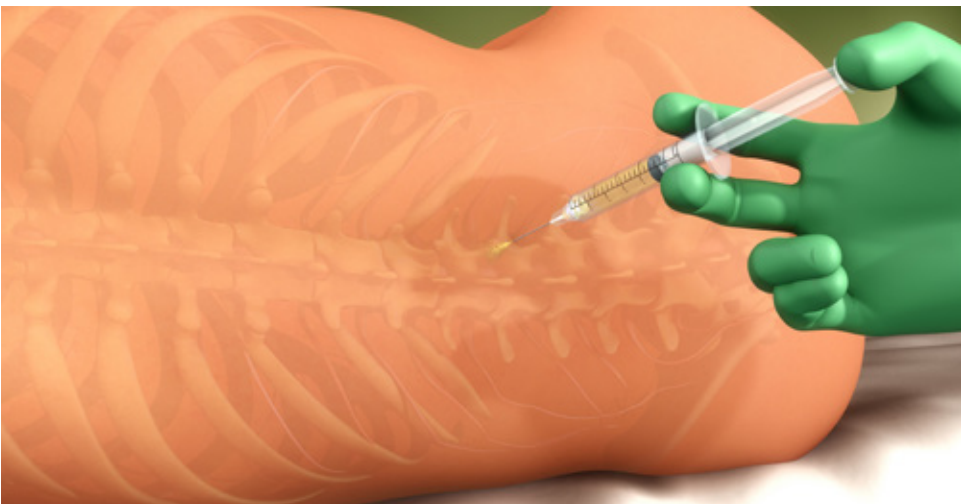
An epidural block can be used during labor and for a vaginal delivery or cesarean delivery. For labor and vaginal delivery, a combination of analgesics and anesthetics may be used. This combination of drugs causes some loss of feeling in the lower areas of your body, but you remain awake and alert. You should be able to bear down and push your baby through the birth canal. An epidural also can be used for postpartum sterilization.

Because the medication needs to be absorbed into several nerves, it may take a short time for it to take effect. Pain relief should begin within 10-20 minutes after the medication has been injected.

You can move with an epidural, but you will not be able to walk around. Although an epidural block will make you more comfortable, you still may be aware of your contractions. You also may feel your healthcare provider’s exams as labor progresses.

An epidural block can cause the following side effects:

- Decrease in blood pressure.
- Fever.
- Headache.
- Soreness.



# Anesthesia Options

## General anesthesia

General anesthesia causes you to lose consciousness so that you do not feel pain. It usually is used for emergency situations during childbirth or may be needed for certain high-risk conditions. It is given through an IV line or through a mask. Your care team will discuss risks and side effects with you in detail if the need for general anesthesia arises.

## Local anesthesia

Local anesthesia is the use of drugs that affect only a small area of the body. Local anesthetics provide relief from pain in a specific area. Local anesthetics are injected into the area around the nerves that carry feeling to the vagina, vulva and perineum. The drugs are given just before delivery. They also are used when an episiotomy needs to be done or when any vaginal tears that happened during birth are repaired.

# Vaginal Delivery

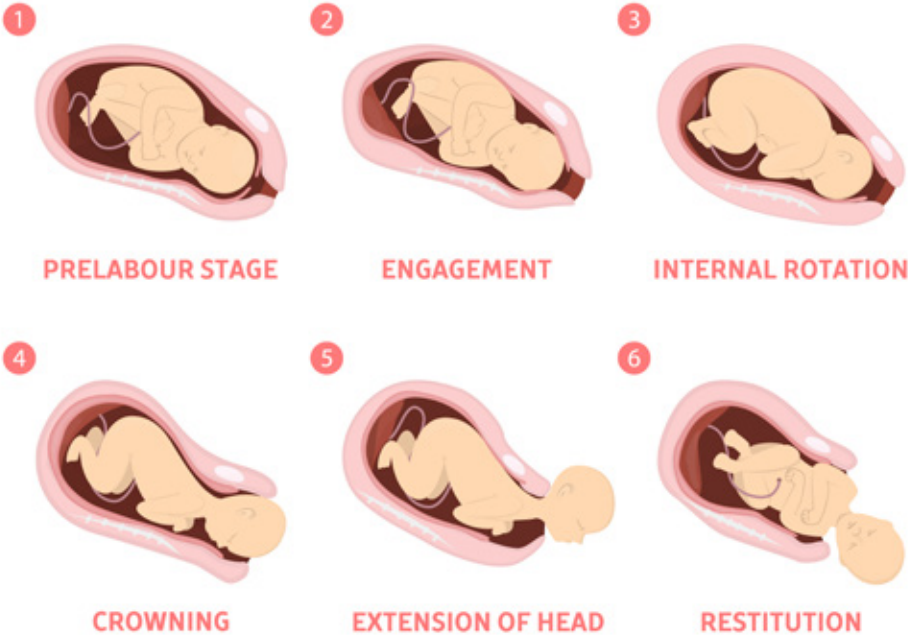
During a vaginal delivery, the healthcare provider will assist the baby's head and chin when it becomes visible. Once the head is delivered, the healthcare provider applies gentle downward traction on the head to deliver the shoulder, followed by the rest of the body.

Positions for delivery may vary from squatting, sitting to semi-sitting positions (between lying down and sitting up). With semi-sitting positions, gravity can help the mother push the baby through the birth canal. The type of position for delivery depends on the preference of both the mother and the healthcare provider, as well as the health of the fetus.

During the delivery process, the medical personnel will continue to keep an eye on the mother's vital signs, like blood pressure and pulse and the fetal heart rate. The healthcare provider will examine the cervical opening to determine the position of the baby's head and will continue to support and guide the mother in her pushing efforts.

After delivery of the baby, the mother is asked to continue to push during the next few uterine contractions to deliver the placenta. After delivery, the mother is usually given oxytocin. This is a medicine that is given either by an injection into the muscles or intravenously to contract the uterus. The uterus is then massaged to help it contract, and to help prevent excessive bleeding from happening. Any tears may be repaired before or after delivery of the placenta.

## STAGES OF BIRTH IN VAGINAL DELIVERY



### Episiotomy

In rare cases, it may be necessary to perform an episiotomy. This is a small cut through the vaginal wall and the perineum. In order to increase the size of the vaginal opening to help deliver the baby. Episiotomies are not needed for every delivery and are not routinely performed.

# Labor Complications

## Fetal meconium

When the amniotic sac ruptures, the normal color of the amniotic fluid is clear. However, if the amniotic fluid is greenish or brown in color, it may show fetal meconium, which is normally passed after birth as the baby's first bowel movement. Meconium in the amniotic fluid may be associated with fetal distress. If your water breaks at home take note of the time, color and smell of the fluid and head to the hospital.

## Abnormal fetal heart rate

The fetal heart rate during labor is a sign of how the fetus is handling the contractions of labor. The heart rate is usually electronically monitored during labor. The normal range varies between 120 and 160 beats per minute. If a fetus appears to be in distress, immediate action can be taken. The mother can be given oxygen, increase fluids or change her position.

## Abnormal position of the fetus

The normal position for the fetus during birth is head-down, facing the mother's back. However, sometimes a fetus is not in the right position, making delivery more difficult through the birth canal. Depending on the position, a healthcare provider may try to deliver the fetus as it presents itself, attempt to turn the fetus before delivery, or perform a cesarean delivery.

## Obstetric Emergencies

Although obstetric emergencies are rare, they do happen. Our team is prepared to care for you and your baby if an emergency arises. The following information is intended to make you aware of what types of emergencies can happen in pregnancy, and what may happen if one of these conditions is suspected or occurring.

Examples of obstetric emergencies include the following:

- Umbilical cord prolapse (the umbilical cord falls out into the vagina, and reduces or stops oxygen and blood flow to the baby).
- Placental abruption (the placenta tears off the uterus and reduces or stops oxygen and blood flow to the baby).
- Uterine rupture (the uterus tears open, and reduces or stops oxygen and blood flow to the baby).
- Unresolved fetal bradycardia (the baby's heart rate stays really low, which can cause low oxygen, brain injury or death).
- Severe high blood pressure (which can cause stroke, heart attacks and damage to the kidneys).
- Amniotic fluid embolus (collapse of the heart, lungs, organs, thought to be a severe allergic reaction).
- Eclampsia (seizures related to preeclampsia and high blood pressure).
- Shoulder dystocia (the baby's shoulder gets stuck behind the pubic bone).
- Postpartum hemorrhage (too much bleeding after delivery).

If an emergency happens, you may feel overwhelmed by all the people that come into the room to try to help. It can be extremely scary to have nurses and doctors come into your room. We want you to know that we have protocols and training to be prepared as a team for an emergency. Everyone has a role and we all know what to do to keep you and your baby safe. Someone will be talking to you and your family, as best as we can, while the situation is happening and certainly will speak with you and your family after the situation has happened.

Sometimes, these conditions do require an emergency cesarean section. If this were to happen, you would urgently be taken back to the operating room and prepared for a cesarean section. If you have an epidural in place, this could be used to make you numb enough for a surgery. You would feel pressure but not pain. It may still be very uncomfortable. If the epidural did not work, you would likely need general anesthesia. This is where you would be put to sleep with IV medications and have a tube placed in your trachea to breathe for you while under anesthesia. The neonatal ICU team will be at the delivery and evaluate your baby immediately after delivery. After the surgery, you will wake up and may feel groggy. This will improve and hopefully you will be reunited quickly with your baby and family.



# Cesarean Delivery

Cesarean section, c-section, or cesarean birth is the surgical delivery of a baby through a cut (incision) made in the mother's abdomen and uterus.

The incision made in the skin may be:

**Across from side-to-side (horizontal).** This incision extends across the pubic hairline. It is used most often, because it heals well and there is less bleeding.

**Up-and-down (vertical).** This incision usually extends from the belly button to the pubic hairline.

A cesarean delivery is major surgery. Like all surgical procedures, it has risks, including infection, hemorrhage and problems related to the anesthesia used. An elective cesarean delivery may pose additional risks if you plan to have more children. With each cesarean delivery, the chance that you will have a serious complication – including uterine rupture and needing a hysterectomy at the time of delivery – increases.

Your healthcare provider will explain the procedure to you and you can ask questions. You will be asked to sign a consent form that gives your permission to do the procedure. Read the form carefully and ask questions if something is unclear. You will be asked when you last had anything to eat or drink. If your c-section is planned and requires general, spinal or epidural anesthesia, you will be asked to not eat or drink anything for eight hours before the procedure. Tell your healthcare provider if you are sensitive to or are allergic to any medicine, latex, iodine, tape or anesthesia. Tell your healthcare provider of all medicines (prescription and over-the-counter), vitamins, herbs and supplements that you are taking.

Tell your healthcare provider if you have a history of bleeding disorders or if you are taking any blood-thinning medicines (anticoagulants), aspirin or other medicines that affect blood clotting. You may be told to stop these medicines before the procedure. You may be given medicine to decrease the acid in your stomach. These also help dry the secretions in your mouth and breathing passages. Plan to have someone stay with you after a c-section. You will have pain in the first few days and may need help with the baby. Follow any other instructions your provider gives you to help get ready.

## **Reasons for a cesarean delivery**

- Abnormal fetal heart rate
- Abnormal position of the fetus during birth
- Labor that fails to progress or does not progress the way it should
- Size of the fetus
- Placenta previa, accreta or abruption
- HIV infection
- Active herpes sores in the mother's vagina or cervix
- Twins or other multiples
- Previous c-section

# POSTPARTUM CARE







## What to Expect

Postpartum is the first six weeks following the birth of your baby and is also known as the fourth trimester. In the weeks after birth, you will be adapting to multiple physical, social and psychological changes. Your body is gradually returning to its pre-pregnancy state during this period and your healthcare team will be part of this recovery period. During your postpartum care visit your healthcare team will discuss any complications you experienced as well as your reproductive life plans, including future pregnancies and contraception.

# Physical Changes After Birth

## Fundus

The top of the uterus is known as the fundus. Right after birth you will feel a grapefruit size ball just below your bellybutton. After birth you will feel a lot of cramping as your uterus is contracting to prevent excessive bleeding and begin shrinking back to its pre-pregnancy size. The fundus will begin to shrink in size and by two weeks you may not be able to feel it all. It is important to try and empty your bladder every 3-4 hours while in the hospital to prevent your bladder from becoming too full and pushing on your uterus.

## Lochia (Vaginal Discharge)

Lochia is the drainage from the vagina following birth. Lochia is present even in women who have had a cesarean birth. There is often an odor described as “musty” or “earthy” but the smell should not be bad. As the lining of the uterus heals you may notice that the amount and color of the lochia changes. You may experience some cramping and passing of small clots which is normal, but if you are soaking through one pad per hour or have blood clots the size of an egg or bigger contact your healthcare provider.

- Day 1: Dark red similar to menstrual flow
- Days 2-4: Pink or brown-tinged becomes more watery and pale
- Days 10-14: White or yellowish
- Weeks 2-4: Very little but can vary among mothers.

## Hemorrhoids

A hemorrhoid is a swollen blood vessel under the skin and can be found inside the rectum or outside on the anus. They can range in size and can be as large as a grape. Common symptoms are pain/discomfort, irritation, itching, small amounts of bleeding and swelling around the anus. Hemorrhoids are not usually serious and can be common in pregnancy and in the postpartum period.

Treating hemorrhoids:

- Avoid sitting or standing for long periods of time
- Avoid straining during bowel movements
- Take stool softener and eat fiber rich foods (do not resist the urge)

- Use cold compresses
- Warm sitz baths
- Use pre-moistened wipes instead of dry toilet paper
- Topical creams, suppositories and pain medication as directed by your healthcare provider.

## Pain Management

The pain you may experience after birth depends on several factors such as the type of birth, the length of your labor and your own personal pain tolerance. Afterbirth pains are caused because the muscle fibers contract as the uterus shrinks back to pre-pregnancy size. These mild contractions are most notable the first few days following birth and are stronger when you are breastfeeding due to the hormone release during feeding. Pain can also present around the perineum (the area around the rectum and vagina) and may be worse if you had a tear or episotomy. If you had a c-section your pain may also be present around the incision, the site on your abdomen where the opening was made to deliver the baby.

Be sure to tell your nurse or healthcare provider if your pain is:

- A headache with any vision changes
- Located in the right upper area of your abdomen or just below your breastbone
- Worse than it was before
- Constant
- Unusual

There are different methods to manage pain, you may not be completely pain-free after delivery, but you can use different methods to bring your pain to a tolerable level. Below are some suggestion for pain, be sure to talk to your nurse or healthcare provider for guidance.

### ***Comfort measures***

- Deep breathing
- Music
- Massage
- Ice packs the first 24-48 hours
- Warm pad for abdominal cramps
- Warm sitz baths

## Medication

- Topical creams or sprays
- Prescription medications
- Over-the-counter medications

\*Check with your healthcare provider before taking over-the-counter or prescription medication. Some medications may not be compatible with breastfeeding.

## Perineal Care

- Wash your hands often and carefully before and after changing sanitary pads
- Wash your perineum with mild soap and water using a squeeze bottle or sitz bath
- Rinse with lukewarm water after urination and bowel movements
- Wash and wipe from front to back
- Check the amount and color of your lochia with each pad change
- Change your pad after urinating or having bowel movements
- Dry the perineum using a patting motion, instead of wiping
- If you have sutures it may take four weeks to heal and the sutures will dissolve on their own



## Cesarean Birth Incision

There are different options for closure and coverage of your cesarean incision. Some options are a negative pressure bandage, a skin glue, small band aids called steri-strips, and a few others. You will receive instructions on how to care for your wound and bandage type. You may shower after the first day as long as you are up to it. Be sure you are able to stand and walk without getting dizzy or lightheaded. Use a standing shower to bathe, do not scrub the incision site, use soap on the upper part of our body and allow it to rinse down over your incision. Tub baths are not recommended the first few weeks.

**Be sure to tell your nurse or healthcare provider if your incision becomes:**

- Red
- Swollen
- Separated
- Warm to the touch
- Draining discharge
- Has a bad smell
- Severe tenderness or pain

## Resuming Sex

You may not be as interested in having sex as you were before pregnancy because of fatigue and the time demand by the baby. You can expect some reduced vaginal lubrication and vaginal dryness due to hormones of pregnancy and can use water-based cream or jelly lubricant. You may also have concerns about discomfort and some tears and incisions can take up to six weeks to heal. If you experience difficulty with sexual intercourse be sure to communicate with your partner to rebuild a satisfying sex life.

## Birth control information

### *Contraception*

Ideally you would have at least 18 months in between pregnancies to give you time to heal, return to your normal pre-pregnancy weight, and breastfeed if you choose to do so. Part of ensuring this may include using contraception in between pregnancies. If you are done having children, you could consider permanent sterilization, which is a surgical procedure, or asking your partner have a vasectomy. If you desire permanent sterilization, you will need to sign a consent form prior to the delivery of your infant.

Currently there are many choices available for contraception. You will need to talk to your doctor about what type is right for you. You should not take any estrogen containing birth control for at least three weeks postpartum due to increased risks of blood clots, and in reality, you should not initiate sexual intercourse until at least six weeks postpartum.

If you are breastfeeding, a progesterone-only contraceptive is preferred. You need to take this type of birth control at the same time daily, and remember to take it, for it to work properly. If you are not breastfeeding or your milk supply is well established, and you do not have a contraindication to estrogen, you can take combined estrogen and progesterone oral-contraceptive pills or use the vaginal ring.

LARC methods (long-acting reversible contraception) include intrauterine systems and devices and an implant in the arm. These are as effective as permanent sterilization but are reversible in that when they are removed, you return to normal fertility. These are the most highly recommended contraceptive choices due to the low failure rates and ease of use.

### **To choose the right birth control method for you, consider the following:**

- How well it prevents pregnancy
- How easy it is to use
- Whether you need a prescription to get it
- Whether it protects against sexually transmitted diseases (STDs)
- Whether you have any health problems

Please discuss your options with your physician.

Most birth control methods will not prevent the transmission of STDs.

# Contraception methods

## SUPER EFFECTIVE

99%\*



The Implant  
3-5 years



IUS  
Hormonal  
Intrauterine System  
3-7 years



IUD  
Cooper  
Intrauterine Device  
5-10 years



Sterilization  
Forever

## HIGHLY EFFECTIVE

91-94%\*



The Pill  
3-5 years



The Patch  
Every Week



Vaginal Ring  
Every Month



Injection  
1-3 Months

## LESS EFFECTIVE

72-82%\*



Withdrawal  
Every Time



Cervical Cap,  
Diaphragm  
and Sponge  
Every Time



Fertility  
Awareness  
Every Day



Spermicides  
Every Time



Female and  
Male Condoms  
Single Use

\*At Typical Use

# Emotional Changes

Many women experience feelings of sadness and irritability after giving birth. Emotional changes can be normal and can range from postpartum blues, to clinical depression, to psychotic depression. The difference lies on the nature and intensity of these feelings as well as the length of time they last. Women are more likely to develop these problems following the birth of their baby than at any other time in their lives.

## Postpartum Blues

Usually begin around the third or fourth day after birth and can last from a few hours to a week. You may experience feelings of:

- Have trouble concentrating or sleeping
- Overwhelmed or exhausted
- Anxious
- Tearful or crying easily
- Irritable

These feelings occur in nine out of 10 women who have given birth, regardless if this is their first or they have had other children. Usually these feelings are not long term and disappear without any treatment.

Because we care about your emotional and mental health we screen all patients for postpartum depression.

Postpartum blues, also known as “baby blues”, occurs in 50-85% of women and can be normal, but postpartum depression is more severe and can affect your ability to take care of yourself and your baby.

The Edinburgh Postnatal Depression Scale (EPDS) is a set of 10 questions that can help us get a better sense of how you’re feeling.

For each question, select the statement that is closest to how you have felt in the past seven days.

Please avoid discussing your answers with anyone and be as honest as possible.

What happens next?

- Your responses will help us provide you with a score.
- Based on this score, your nurse will tell you whether you are at a higher risk for postpartum depression
- We'll help you take the next step by giving you more information and if necessary set up consultations and appointments

**Let us know if you have any questions.**

**More information about postpartum depression can be found at:**

[www.postpartum.net](http://www.postpartum.net)

<http://iemmh.org>

<https://www.acog.org/Patients/FAQs/Postpartum-Depression>

<https://211sb.org/maternal-health/>

## After-Pregnancy Blues: Cause for Concern?

Up to four in five new moms feel sad, anxious, overwhelmed or just plain tired after giving birth. It's no wonder so many new mothers get the "baby blues." Even if delivery went well, mothers are bound to be short on sleep and long on responsibilities.

Most women get the baby blues within a few days of giving birth. These feelings usually disappear three to five days after they start.

### When the blues stick around

If a new mother's blues persist longer than two weeks, she may have a more serious condition called postpartum depression (PPD). It's also possible to develop PPD during pregnancy or up to a year after childbirth.

The following signs may indicate PPD:

- Crying more often than usual (or for no apparent reason)
- Losing interest or pleasure in activities that are usually enjoyable
- Eating too little or too much
- Feeling moody, irritable, restless or angry
- Having no energy or motivation
- Oversleeping or being unable to fall asleep

- Having a lack of interest in the baby
- Constantly doubting ability to care for the baby
- Trouble concentrating or making decisions
- Feeling worthlessness, hopeless or guilty
- Thinking about hurting oneself or the baby

PPD affects one in nine new mothers. It can make it hard for women to get through the day and undermine the confidence they need to care for their baby. Untreated, PPD could even interfere with the baby's development.

## Pinpointing PPD

PPD can be easy to ignore. After all, tiredness and other symptoms may result from sleep loss. A healthcare provider can determine whether symptoms are springing from another health condition. Anemia, for example, can make you feel tired and irritable. Thyroid disorders can also cause symptoms similar to PPD.

## Who is at risk?

Any new mother can get PPD. But a woman's health history and current circumstances can influence her odds.

Factors that increase the risk for PPD include having:

- Medical complications during childbirth
- Personal history of depression or bipolar disorder
- Relationship or money problems
- Stressful life events during pregnancy or right after giving birth
- Little social support

## What to do about PPD

PPD can be treated with talk therapy, medicine or both. Your provider can help you choose the right treatment.

If you suffer from PPD, the following coping strategies may also help:

- Find a trusted friend or family member to talk with.
- Seek help with childcare, household chores and errands.
- Take time each day to do something special for yourself.
- Rest as much as you can — sleep when the baby does.
- Join a support group for mothers with PPD.

# Save Your Life

## Get care for these POST-BIRTH warning signs

Most women who give birth recover without problems. But any woman can have complications after giving birth. Learning to recognize these POST-BIRTH warning signs and knowing what to do can save your life.

### These post-birth warning signs can become life-threatening if you don't receive medical care right away because:

- **Pain in chest**, obstructed breathing or shortness of breath (trouble catching your breath) may mean you have a blood clot in your lung or a heart problem
- **Seizures** may mean you have a condition called eclampsia
- **Thoughts or feelings of wanting to hurt yourself or someone else** may mean you have postpartum depression
- **Bleeding (heavy)**, soaking more than one pad in an hour or passing an egg-sized clot or bigger may mean you have an obstetric hemorrhage
- **Incision that is not healing, increased redness or any pus** from episiotomy or c-section site may mean you have an infection
- **Redness, swelling, warmth, or pain** in the calf area of your leg may mean you have a blood clot
- **Temperature of 100.4°F or higher, bad smelling vaginal blood or discharge** may mean you have an infection
- **Headache (very painful), vision changes, or pain in the upper right area of your belly** may mean you have high blood pressure or post birth preeclampsia

## Get Help

My healthcare provider/clinic \_\_\_\_\_

Phone number \_\_\_\_\_

Hospital closest to me \_\_\_\_\_

# Post Birth Warning Signs

## Call 911 if you have:

- Pain in chest
- Obstructed breathing or shortness of breath
- Seizures
- Thoughts of hurting yourself or someone else

## Call your healthcare provider if you have:

(if you can't reach your healthcare provider, call 911 or go to an emergency room)

- Bleeding, soaking through one pad/hour, or blood clots, the size of an egg or bigger
- Incision that is not healing
- Red or swollen leg, that is painful or warm to touch
- Temperature of 100.4°F or higher
- Headache that does not get better, even after taking medicine, or bad headache with vision changes

## Trust your instincts.

Always get medical care if you are not feeling well or have questions or concerns.

## Tell 911 or your healthcare provider:

"I gave birth on \_\_\_\_\_ (date) and I am having \_\_\_\_\_ (specific warning signs)."



This program is supported by funding from Merck, through Merck for Mothers, the company's 10-year, \$500 million initiative to help create a world where no woman dies giving life. Merck for Mothers is known as MSD for Mothers outside the United States and Canada.

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# NEWBORN CARE







The birth of a baby is one of life's most wondrous moments. Few experiences compare to this event. Newborn babies have amazing abilities, such as being able to recognize their own mother's voice and know her unique scent, yet they are dependent on others for feeding, warmth and comfort.

Amazing physical changes occur with birth. When the baby is delivered, the umbilical cord is cut and clamped near the navel. This ends the baby's dependence on the placenta for oxygen and nutrition. The baby's blood flow changes so more blood now goes to his/her lungs to support breathing and oxygenation. Mother's milk is now the most optimal source of nutrition and your breasts will produce colostrum to give a nutrient-rich first meal within the first hour after birth.

A newborn baby is wet from the amniotic fluid and can easily become cold. Drying the baby and placing a baby skin-to-skin on the mother's chest or abdomen is the best way to keep the baby stable and warm. This early skin-to-skin contact also reduces crying, improves mother-infant bonding and helps mothers and babies be more successful at breastfeeding. If a baby cannot be skin-to-skin with mother or father, a warm blanket or a heat lamp will be used to provide warmth.

## Immediate Care for the Newborn

Health assessments of the new baby start right away. One of the first checks is the Apgar score. The Apgar score is a way to evaluate the condition of the newborn at one minute and five minutes after birth. The healthcare providers present at the birth will evaluate the following signs and assign a point value:

- Muscle tone
- Heart rate
- Reflex; responsiveness
- Skin color (pink/blue)
- Respiration

## Physical Exam of the Newborn in the Delivery Room

A brief, physical exam is done to check for obvious signs that the baby is healthy. Other procedures will be done over the next hours. These may be done in the delivery room or later in the mother's postpartum room, depending on the condition of the baby. Some of these procedures include:

### ID bracelets

Before a baby leaves the delivery area, ID bracelets with matching numbers are placed on the baby, mother and father. Babies often have two, on the wrist and ankle. These should be checked each time the baby comes or goes from your room.

### Birth weight

A baby's birth weight is an important marker of health. The average weight for full-term babies is about seven pounds (3.2 kg). Newborn babies may lose 5% of their birth weight in the first few days of life before they begin to gain weight.

## Care for the Newborn After Delivery

Healthy babies are usually able to be placed immediately in skin-to-skin contact on their mother's chest.

In the first hour or two after birth, most babies are alert and wide awake. A baby will turn to the familiar sound of a voice and is best able to see about eight to 12 inches, just the distance to a caregiver holding him/her.

This first hour or two after birth is the best time to start breastfeeding. Babies have a natural ability to start nursing within the first hour after birth. This first feeding helps to stimulate breast milk production. It's the perfect nutrition for the baby and passes on antibodies from mother to baby to help prevent some infections. It also causes contraction of the mother's uterus which can help prevent excessive bleeding.



## When a Baby Has Trouble After Birth

All the baby's body systems must work together in a new way after birth. If there are signs the baby is not doing well, treatment can be given right in the delivery room. The doctor and other members of the healthcare team work together to help the baby.

Newborn babies who need intensive medical care are often admitted into a special area of the hospital called the Neonatal Intensive Care Unit (NICU). The NICU combines advanced technology and trained health professionals to give specialized care for the tiniest and sickest babies.

The medical team will work together with you to support your baby's quickest and healthiest recovery.

### Proper bathing and skin care for your newborn

#### *In the hospital:*

A newborn's skin is soft and delicate. Usually the first hair wash is given in the mother's postpartum room after the baby is at least 24 hours old. This gives the baby and mother time to recover from birth, leaves the protective vernix on the baby's skin for a few more hours, and protects the baby from stress, cold and low glucose levels.

#### *At home:*

Most babies do not need a bath every single day. With all the diaper changes and wiping of the mouth and nose after feedings, most babies may only need to be bathed two or three times a week.

To prevent infection, bathing in a tub of water should not be done until the baby's umbilical cord falls off and a baby boy's circumcision heals. When doing a sponge bath keep the baby covered except for the area you are cleaning, this will help the baby stay warm.

Be sure to check the temperature of the water to make sure it is not too hot or too cold. Be sure your hot water heater is turned down to 120 degrees Fahrenheit to prevent burn injuries.

You can wash your baby's hair by wetting and then gently washing with shampoo, stimulating the entire scalp; this will help to prevent cradle cap. Cradle cap is a build up of dead skin which can happen easily in babies. Consult your pediatrician if your baby develops noticeable cradle cap.

**NEVER** leave your baby alone in the tub or near water, even to answer the phone or doorbell.

# Basics About Your Newborn Baby's Body

## Fingernails and toenails

Babies are born with thin soft fingernails that can be long and can scratch their delicate skin. Use an emery board or a nail clipper with care, as it can be difficult to tell where the skin begins and the nail ends.

## Diaper change

Change baby's diaper when they are wet or have had a bowel movement using warm water or a wipe to clean the skin. You can apply diaper cream or petroleum jelly to clean skin to provide additional protection or if you notice any redness.

- Always keep a hand on your baby to prevent rolling
- Clean from front to back with a wipe or washcloth
- Fasten the diaper below the umbilical cord to keep the scab area clean and dry

## Skin care

Babies can have blemishes and rashes on their sensitive skin. You may notice newborn acne which is caused by hormones and will resolve in the first weeks. Dry and peeling skin is also common in a newborn baby and will resolve in the first couple of weeks. Some babies have tiny white bumps under their skin called milia, this will resolve with time. If you have any concern about your baby's skin be sure to talk with your pediatrician. If you notice redness on the skin around their umbilical cord stump, talk to your pediatrician immediately as this can be a sign of a serious infection.



## Jaundice

Your baby has additional red blood cells in their body for the birth process. After birth these cells break down they can cause some yellowing of the skin. This is called jaundice and is common and harmless in small amounts. While in the hospital the baby will be tested to make sure the jaundice causing chemical called bilirubin is not too high. Some babies need help from a special light to decrease the level of bilirubin in their bodies.

Let your healthcare provider know if you see:

- Yellow skin worse than before
- Yellow in the eyes
- Poor nursing
- Fewer wet diapers
- Unusual or more fussy behavior

## Teething

Most babies will begin to teethe at six to seven months but some will begin as early as two months and on rare occasions some babies are born with a few teeth.

## Birthmarks

These common spots and marks may be present at birth and are usually harmless. Many eventually disappear on their own. Common types are:

**Stork bite** (nevus flammeus); This is seen on the forehead, eyelids or on the back of the neck. This mark almost always disappears as the child grows.

**Mongolian spot** (congenital dermal melanocytosis); This is a birthmark that may look like a bruise. It appears over the lower back and upper buttocks on darker pigmented babies. This spot frequently disappears by age five or six years.

## Blood

It is not uncommon to see a tiny bit of blood in your daughter's diaper for the first couple of weeks. This tiny bit of vaginal bleeding happens when the baby adjusts to the lack of mother's hormones once she's out of the womb.

## Soft spots of the head

The two soft areas on your baby's head are known as fontanelles. They will be there until the bones in the skull fuse together in several months. When your child cries, they may bulge. The soft spots may pulse along with the baby's heartbeat.

## Eye care

Bacteria in the birth canal can infect a baby's eyes. Your baby will be given antibiotic ointment either right after delivery or later to prevent eye infection.

## Bowel function

Your baby's first poop will be very dark black, which is called meconium. As they eat and poop, the poop will go from dark to brown, then green/yellow. If you ever see red or white in the stool, contact your pediatrician.

## Nose and mouth secretions

It is common for babies to have excess secretions that cause them to gag for the first few days of life. If this happens, it can be helpful to turn baby to the side and firmly pat their back as if to vigorously burp your baby. If your baby continues to gag, a bulb syringe can be used. Always squeeze the bulb syringe before inserting it into your baby's mouth or nose to create a vacuum. You can use a compressed bulb syringe to gently suction out mucus of the lower cheek area, the back of the throat, or the nose. Keep the bulb syringe near your baby's bed so it can be used quickly.



## Umbilical Cord Care

Your baby's umbilical cord will look like a scab as it dries. There may be a small amount of blood when the cord falls off. Do not try to remove the cord. It will fall off on its own. Your pediatrician will give you instructions on how to care for your baby's umbilical cord.

You should:

- Keep it dry
- Give baby sponge baths (keeping the cord dry) until it falls off
- Let your healthcare provider know if it has not fallen off by one month of age
- Fold the baby's diaper down so the cord is not covered. Some diapers have special cut-outs for the cord area. Call your baby's healthcare provider if there is:
  - » Bleeding from the end of the cord or the area near the skin
  - » An unusual odor and/or discharge from it
  - » Swelling or redness of the skin around the navel
  - » Signs that the navel area is painful to your baby

## Circumcision

New parents are encouraged to discuss the risks and benefits of circumcision with their healthcare providers. The choice of circumcision is a personal one and each set of parents is able to make the decision for what is best for their son and their family.

### ***Benefits of circumcision:***

- Easier hygiene
- Decreased risk of urinary tract infections
- Decreased risk of sexually transmitted infections
- Decreased risk of penile cancer

### ***Risks of circumcision:***

- Bleeding and infection
- Pain
- Side effects from anesthesia
- Foreskin might be cut too short or too long
- The foreskin might fail to heal properly
- The remaining foreskin might reattach to the end of the penis, requiring minor surgical repair

If you choose to have your son circumcised, the procedure usually takes place before you and your baby are discharged from the hospital. The nursing staff will observe the site closely for signs of bleeding. Different techniques are used for circumcision, your nurse will go over how to care for the site before you are discharged home with baby. Usually, petroleum jelly or another ointment is applied to the tip of the penis with each diaper change. This will provide a barrier from the site and the diaper as healing takes place. You may notice a yellow crust form at the site, do not remove this, it is part of the natural healing process. If you notice any swelling, oozing or bleeding, call your healthcare provider.

## Crying

Babies cry as a way to communicate a need. These needs could include hunger, pain, need to suck, need for comfort or need for rest.

Here are a few tips to remember when your baby just won't seem to stop crying:

- Make sure the baby is fed and dry
- Feed the baby slowly
- Burp the baby often
- Rock the baby gently or go for a walk
- Take the baby for a ride in a stroller or car
- Swaddle the baby
- Try a “shushing” sound or white noise machine
- Wear your baby in a baby carrier



## Safety

It can be astounding to learn the number of household items that can be harmful. The best way to protect your baby is to anticipate risks ahead of time. Some safety measures you can implement are:

- Never leave an infant alone (even while sleeping) on a bed, table or surface where they could fall
- Make sure baby's sleeping area is free of strings on sleepwear and bedding. Pillows, comforters or sheepskins should not be used under the baby
- Keep soft objects, toys and loose bedding away from your baby
- Keep small objects or small things that can become loose out of reach
- Keep all plastic bags out of reach
- Install gates at stairwell entrances
- Use safety plugs on all unused wall sockets
- Always double check the temperature of the bath water to be sure it not too hot and never leave baby alone at bath time
- Do not hold baby while cooking as hot liquid or food could splash on the baby or a hot pan could touch baby's skin
- Anchor furniture to the wall or floor to avoid tipping or falling
- Place and anchor TVs on low sturdy bases to prevent injury as well as keeping cable cords out of reach
- Space heaters, radiators, fireplaces and other appliances that produce heat should be off limits to babies and toddlers
- Select a high chair with a sturdy base that cannot tip over
- Sharp objects should be kept in child-proof containers out of reach
- Safety locks should be installed on all doors
- Keep guns locked away, unloaded and out of baby's reach
- Hot ashes from cigarettes can burn baby's skin and smoke can be harmful to baby's lungs
- Avoid prolonged direct sun exposure
- Always turn pot handles inward when cooking on the stove
- Never leave a baby alone in the car as it is illegal in many states; on hot days, the temperature can rise fast on the inside of a car and your child could suffer heatstroke



## Car seat

By law, your baby needs to ride in a child safety seat every time they ride in a car. An infant child seat should state that it complies with the Federal Motor Vehicle Safety Standard 213. California law requires infants ride in a rear-facing child safety seat until at least two years of age. Children are five times safer rear-facing even after turning two and can stay rear facing until they meet the height and/or weight recommendations for your particular model to transition to forward facing. Never place a rear-facing car seat in the front seat, the air bag could cause injury or death to young children. The safest place for all children younger than 13 years to ride is in the back seat.

Be sure to review your vehicle's owner manual instructions for where they allow you to place the child safety seat within the vehicle and how to use either lower anchors or seatbelt systems. For more information, visit [healthychildren.org](http://healthychildren.org).

## Sudden Infant Death Syndrome (SIDS)

SIDS is the leading cause of death for infants under one year old, especially from birth to four months. The CDC estimates that nearly 3,500 infants die suddenly and unexpectedly each year in the United States.

One of the best ways to reduce the risk of SIDS is to place healthy infants on their backs when putting them down to sleep at nighttime or naptime.

The safest place for your baby to sleep is on a separate surface designed for babies, close to the parents' bed (room-sharing without bed-sharing). Babies should sleep in their parent's room for at least six months but ideally one year.

Other safety points:

- Always place baby on their back to sleep, never their side or stomach.
- Always use a firm sleep surface. Car seats and other sitting devices are not recommended for routine sleep.
- Always return baby to the crib or bassinet. Do not feed your baby on a sofa or cushioned chair, in case you fall asleep.
- Keep soft objects, loose bedding and toys out of the crib. Bumper pads should not be used in cribs. There is no evidence that bumper pads prevent injuries and there is a potential risk of suffocation.
- Devices designed to maintain sleep position or to reduce the risk of rebreathing such as wedges and positioners, are not recommended since many have not been tested sufficiently for safety.
- Do not smoke during pregnancy or after birth and do not allow others to smoke around your infant.
- Avoid alcohol and illicit drugs during pregnancy and after birth.
- Breastfeeding is recommended and is associated with a reduced risk of SIDS.



- Consider using a pacifier at naptime and bedtime. Breastfed infants should wait until breastfeeding is established. For all babies, offer a pacifier when putting down to sleep. Do not force a baby to take a pacifier. Do not put any sweet solution on the pacifier.
- Infants should be immunized. Evidence suggests that immunization reduces the risk of SIDS by 50%.
- Make sure any other caregivers are aware of safe sleep practices.

## Warning Signs

Even experienced parents may feel worried as they adjust to a new baby's habits, needs and personality. If you have concerns you can call your child's healthcare provider or take your baby to the nearest urgent care. Call 911 immediately if your child's lip color is blue.

The following are of concern. If you notice these symptoms in your baby you should call your healthcare provider:

- Blue or pale colored skin
- Yellow skin or eyes
- White patches in baby's mouth
- Redness, discharge or foul odor from umbilical cord
- Axillary (under arm) temperature of 100.4 degrees F or more
- Difficulty breathing
- Listlessness or is hard to wake up
- Crying excessively with no known cause or an unusual or high-pitched cry
- Very fussy
- An unusual or severe rash

## Dehydration

Dehydration can be serious. Babies are more likely to become dehydrated if they have a fever, have been vomiting or having diarrhea, or been exposed to prolonged sun exposure. More advanced signs of dehydration include sunken eyes, sunken fontanelle (soft spot), increased sleepiness or irritability, weight loss. If you notice these signs in your baby you should call your child's healthcare provider or go to the nearest urgent care.

# INFANT NUTRITION

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# Breastfeeding in the First Week After Birth

Breastfeeding is the best source of nutrition for your baby and there are many benefits for both mom and baby. Breast milk contains all the nutrients your baby needs as well as antibodies that will help protect your baby from viruses and bacteria. Below are some of the benefits of breastfeeding:

## For mom

- Reduces risk of breast, endometrial, uterine and ovarian cancer
- Lowers risk of osteoporosis later in life
- Helps the uterus return to pre-pregnancy size and reduces bleeding after delivery
- Helps develop a sense of bonding and stabilizes mother's emotions due to hormonal changes after delivery
- Saves time, money and effort in the long run

## For baby

- Decreases risk of childhood cancers
- Decreases childhood obesity
- Lowers the risk of Sudden Infant Death Syndrome
- Protects against allergies
- Lowers risk of insulin-dependent diabetes




## Breastfeeding 101

Breastfeeding may be “natural” but that does not mean it always comes so naturally. If you are in some need of breastfeeding 101, you have come to the right place!

- Newborns have a natural instinct to find the breast. This instinct is triggered when a newborn is positioned skin-to-skin so let your baby have as much skin-to-skin contact as possible, especially during feedings.
- Watch your baby, not the clock. Feed your baby whenever you see feeding behaviors, such as mouthing movements, lip smacking, sucking on fingers. Crying is a late sign of hunger.

- Your baby should eat at least eight to 12 times in 24 hours.
- Wake your baby if it has been more than three hours between feeds for the first two weeks.
- Avoid pacifiers for at least the first three to four weeks until breastfeeding is well established.
- Your baby may cluster feed. When a baby cluster feeds, the baby eats frequently, often less than an hour between feedings. Cluster feeding is common in the first three days and during the late afternoon or during the night and is also common during a “growth spurt.”
- Growth spurts often begin in the second or third week and repeat every four to six weeks. Feeding more frequently (cluster feeding) for two to four days signals a mother’s breasts to make more milk volume for a growing baby. This is normal and does not mean that your baby is not getting enough milk as long as there are at least six wet diapers a day.
- Allow your baby to eat as long as desired on the breast. Sometimes a baby only eats on one side at a feeding, which is okay. A feeding ends when baby falls asleep at the breast, pulls off spontaneously and their hands are relaxed.
- Exclusive breastfeeding is recommended for the first six months, and breastfeeding continues to be important after six months when other foods are given.

## Newborn stomach size

DAY 1	DAY 2	DAY 3
<p><b>Size of a grape</b> 5-7 mL 0.1-0.2 ounce</p> 	<p><b>Size of a walnut</b> 22-27 mL 0.8-1 ounce</p> 	<p><b>Size of an apricot</b> 45-60 mL 1.5-2 ounces</p> 

## Signs That Breastfeeding is Going Well

- You hear your baby swallowing
- Your latch should be pain-free after the first few seconds. If persistent pain continues for more than 20-30 seconds, the latch needs to be adjusted. If adjusting the latch does not help, see a lactation consultant for evaluation
- Your baby seems satisfied after most feedings (baby's body and hands are relaxed)
- Your baby is feeding at least eight times in 24 hours
- Your baby has met the daily diaper goals (one wet and one dirty per day of life and at least six wet and four dirty a day after the first week)
- Your baby's weight is increasing daily once your transitional milk comes in, usually around three to five days and your baby has regained birth weight by about two weeks
- Your baby is receiving only breast milk

### Newborn wet and dry diapers

Baby's Age	Day 1	Day 2	Day 3	Day 4	Day 5 and on
<b>Wet Diapers*</b>					 heavy wet with pale yellow or clear urine
<b>Soiled Diapers*</b>	 black or dark green	 brown, green or yellow	 large, soft and seedy yellow		

\*per day, at least.

## What Are Hunger Cues?

These are signs in baby behavior that tell you when your baby is hungry and ready to feed.

### Early hunger cues

- Smacking or licking lips
- Opening and closing mouth
- Sucking on lips, tongue, hands, fingers, toes, toys or clothing

### Active hunger cues

- Rooting-open mouth searching from side-to-side for the breast
- Trying to position for nursing, either by lying back or pulling on your clothes
- Fidgeting or squirming around a lot
- Hitting you on the arm or chest repeatedly
- Fussing or breathing fast

### Late hunger cues

- Frantic movement
- Crying



Lip smacking



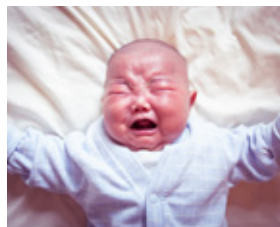
Rooting: Baby's open mouth searching side to side for breast



Hands to mouth and stretching



Tongue thrusting and fidgeting



Crying (late cue) frantic movement

# Nourish Your Bundle of Joy

## Elements of Successful Breastfeeding

- Skin-to-skin
- Early hand expression
- Deep latch
- Feeding on demand

## Skin-to-Skin

- Calms baby
- Helps baby adjust to new environment
- Promotes bonding
- Increases prolactin and oxytocin (important hormones for making milk and breastfeeding)

**Hand Expression** within the first hour after birth may help milk production increase by up to 130%.



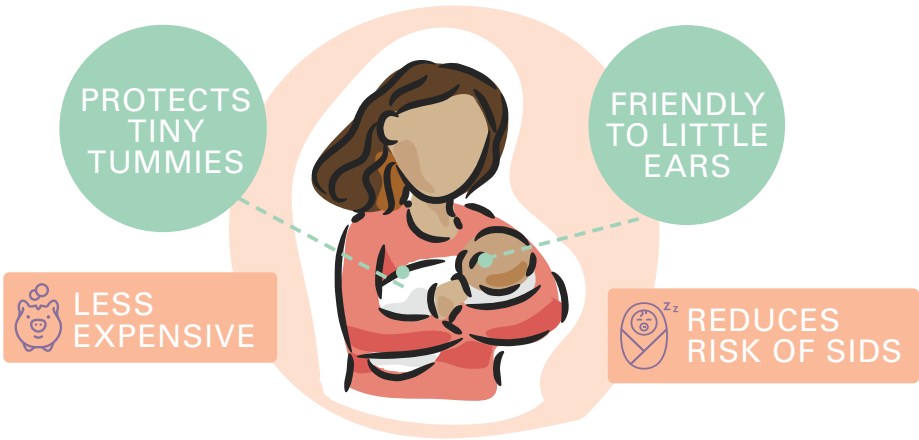
# Benefits of Breastfeeding

Your custom-designed milk protects your baby's health.

- Breastfeeding your baby early and often tells your body to produce more milk.
- It increases your bond with your baby and supports optimal development.
- Breastfeeding reduces your baby's risk of getting respiratory, gastrointestinal and ear infections, and also protects from Crohn's disease, Type 1 diabetes and even childhood cancers.
- Breastfeeding for at least two months reduces the risk of sudden infant death syndrome (SIDS) by 50%.

Providing breast milk protects your health as well as baby's health.

Making milk (lactation) reduces mother's risk of breast and ovarian cancer, and also reduces her risk of developing obesity, hypertension, cardiovascular disease and Type 2 diabetes later in life.



**Colostrum** is the first milk that your breasts produce. This highly concentrated milk is the perfect first food for your baby and provides the first immune protection.

# Latch

A “latch” is the way a baby attaches to the breast to suckle. A good latch is important to help your baby transfer the milk, to help your breasts to make more milk and to prevent painful nipples.

- Find a comfortable position with lots of support. Snuggle your baby in close to you.
- Line up baby’s nose with your nipple. Baby’s head can then tilt. Let baby’s chin and lower lip touch the breast first and when their mouth opens wide, guide the open mouth up and over your nipple. A wide open mouth helps baby to get more of the dark skin around your nipple (areola) in baby’s mouth (not just the nipple).
- Once on the breast, baby’s chin will be pushed in against the breast.
- Keep the tip of baby’s nose touching your breast but be sure you can see the baby’s nostrils so he can breath.



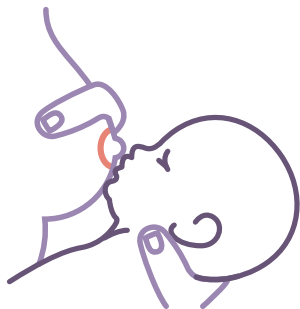
## Deep Latch

1. Find a comfortable position
2. Support baby
3. Bring baby to you
4. Point nipple to roof of mouth
5. Align nose to nipple
6. Dig chin into the breast
7. Roll baby on from bottom lip to top lip

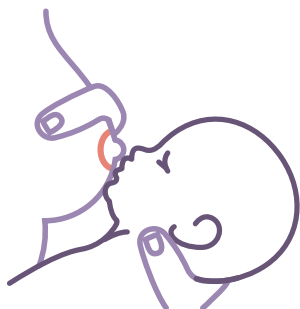
## You can tell your baby is latched on well and getting milk if:

- Lips are curled out wide
- Cheeks are rounded
- You can hear or see baby swallowing
- You do not feel pain while breastfeeding

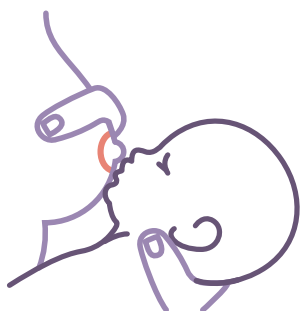
## Steps to a Good Latch



Tickle your baby's lips with your nipple. This will help baby open their mouth wide.



Aim your nipple just above your baby's top lip. Make sure your baby's chin isn't tucked into their chest.



Aim your baby's lower lip away from the base of your nipple. Baby's lips should be turned outward like a fish. Your baby should lead into the breast chin first and then latch onto your breast. Your baby's tongue should be extended, and your breast should fill your baby's mouth.

If your baby latches just on the tip of your nipple or it hurts, gently put a clean finger in your baby's mouth to break the latch, then try again.

## Breastfeeding Positioning

There are different positions you can use when breastfeeding. Good positioning and latch are the keys to a successful breastfeeding. Below are some examples of common positions.

### Tips for

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



Cradle



Cross-cradle



Side-lying



Football/clutch

## How much does your baby eat?



Breastfeeds every 1-3 hours



Breastfeeds every 3-4 hours



Breastfeeds every 4-5 hours  
Introduce solid foods around 6 months



Breastfeeds 4-5 times  
Eats solid foods 3-5 times

## Pumping Instructions

If you are unable to breastfeed temporarily, indefinitely or if you will be returning to work, pumping is a way to provide breast milk for your baby.

### Frequency

- Pump at least eight times in 24 hours
- Pump at each breastfeeding session if you are trying to increase your milk supply

### Duration

- Pump for no more than 20 minutes
- Once your milk supply has increased, pump until two minutes after milk slows down

### Sides

- Pump on both sides at the same time (double pump)
- Pump on the side opposite where baby nursed

Massage the breasts before and during pumping to maximize output and prevent plugged ducts. Set the suction as high as is comfortable. Wash pump parts in warm soapy water between each use. Sterilize once a day in the dishwasher or in a microwave-steaming bag.

## Pumping Tips

- If pumping causes pain, you may need a larger size breast shield. For more comfort, lubricate with coconut/olive oil.
- You get what you pay for with pumps. Invest in a high-quality pump (or rent one) if you will be pumping often. Check with your insurance provider, they may be able to provide a breast pump at low or no cost.
- To make double-pumping more convenient, you may purchase a hands-free pumping bra or make your own by cutting quarter-sized holes in a sports bra.

## How Long is Milk Good for?

- Frozen milk must be used within **24 hours** of thawing
- Reheat milk in warm water, **never** use the microwave
- Throw out any leftover milk after feeding is completed, do not reuse

## Human milk storage guidelines

TYPES OF BREAST MILK	STORAGE LOCATIONS AND TEMPERATURES		
	Countertop	Refrigerator	Freezer
	77°F (25°C) or colder (room temperature)	40°F (4°C)	0°F (-18°C) or colder
<b>Freshly expressed or pumped</b>	up to <b>four hours</b>	up to <b>four days</b>	within <b>six months</b> is best, up to 12 months is acceptable
<b>Thawed, previously frozen</b>	<b>one to two hours</b>	up to <b>one day</b> (24 hours)	<b>NEVER</b> refreeze human milk after it has been thawed
<b>Leftover from a feeding</b> (baby did not finish bottle)	use within <b>two hours</b> after the baby is finished feeding		

## Helpful Tips to Reduce Breast Discomfort

Breast discomfort can be common in the beginning of your breastfeeding journey. We recommend the following:

- Allow infant to completely drain your breast and alternate with every feeding.
- Do feed often and use massage during the feeding to help the milk flow.
- Do wear a supportive (but not tight) bra. Choose clothing that is less likely to show wet spots if you leak and wear nursing pads to absorb leaking milk.



- Do use ice packs (covered with a thin cloth) on your breasts 20 minutes on, 20 minutes off. May repeat as needed and avoid placing ice packs directly on the nipple to help with engorgement and swelling.
- Do talk to your doctor about using an anti-inflammatory and pain relieving medication such as Ibuprofen, that will reduce the pain and swelling.
- Do turn your back when taking a shower as the hot water will stimulate you to make more milk.

### **Myth**

- » Restricting fluids and decreasing salt intake will not decrease your milk supply.
- » Do not bind your breasts. This is not recommended because it can make you very uncomfortable and may cause plugged ducts and mastitis.

### **Observe carefully for**

- Blocked ducts (tender and painful breast lumps)
- Mastitis or breast infection (tender and reddened area in the breast, fever, chills, headache, body aching, etc.)
- Contact your physician or breastfeeding support person if either of these conditions develops

# Formula Feeding

Although breast milk is the best possible nutrition your baby can receive, you may choose to use infant formula instead of or in combination with breast milk. It is important that you know how to safely prepare, handle, store and feed infant formula. Powder formula may contain harmful bacteria that can make your baby sick, the steps below outline the safest way to prepare infant feedings.

## Ready to feed formula

This is the easiest type of formula to prepare and can be stored at room temperature. However this can also be the most expensive.

1. Wash your hands with soap and water and dry them using a clean towel or disposable napkin.
2. Open the bottle and screw on the cap.
3. Warm to feeding temperature if desired.
4. Feed immediately or refrigerate for up to 48 hours.

## Preparing powder formula

1. Clean and disinfect the area you will be using to prepare the formula.
2. Wash your hands with soap and water and dry them using a clean towel or disposable napkin.
3. Heat clean and safe water until the water comes to a rolling boil.
4. Carefully pour the appropriate amount of boiled water into a clean and sterilized feeding cup or bottle. Do not allow the water to cool to less than 158°F/ 70°C. The water should be cooled for no more than 30 minutes after boiling to prevent bacterial growth.
5. To the measured water, add the exact amount of formula as instructed on the label. Adding more or less powder than instructed could make the infant ill.
6. Taking care to avoid burns, shake or swirl the mixture gently until the contents are thoroughly mixed.
7. Immediately after preparation, quickly cool the formula to feeding temperature by holding the bottle or feeding cup under running tap water, or placing in a container of iced or cold water. Do not allow the cooling water to touch the top of the feeding cup or the lid of the bottle.

- Carefully check the feeding to ensure it has reached a safe temperature to avoid burns in the baby's mouth.
- Throw away any formula that has not been consumed within two hours.
- If storing formula feed for later use, store in a refrigerator (40°F/ 4°C) immediately after cooling; throw out any formula not used within 24 hours of preparation.



## Tips when feeding a baby

- **Always hold your baby when feeding**
- Never prop a bottle
- Do not put the baby to bed with a bottle
- Infant should be held at a 45 degree angle when feeding
- Infants should be held upright for 15 minutes after a feeding
- Always discard any milk left in the bottle at the end of a feeding
- Observe your baby for signs of too fast or too slow milk flow

## Burping

Babies can get air in their stomachs and it is important that you burp your baby after every feeding.

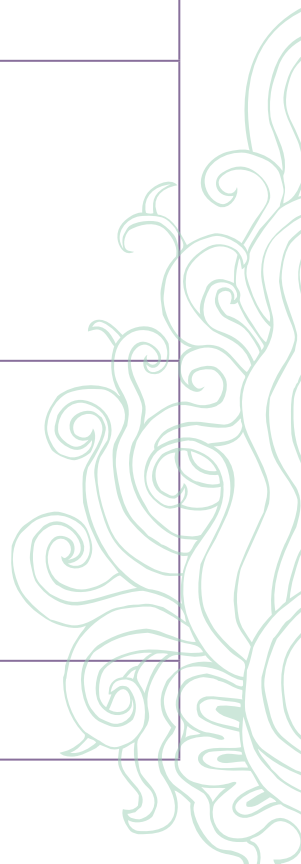
To burp the baby, pat the back gently or stroke the back with an upward motion. You may not always hear a burp but it is important to try after every feeding.

# Doctor Visit



OB Name:

Date	Age of Gestation	Blood Pressure
Weight	Fundal Height	Fetal Heart Rate
Symptoms to Discuss		
Questions to Ask the Doctor		
Notes		
		Next Appointment

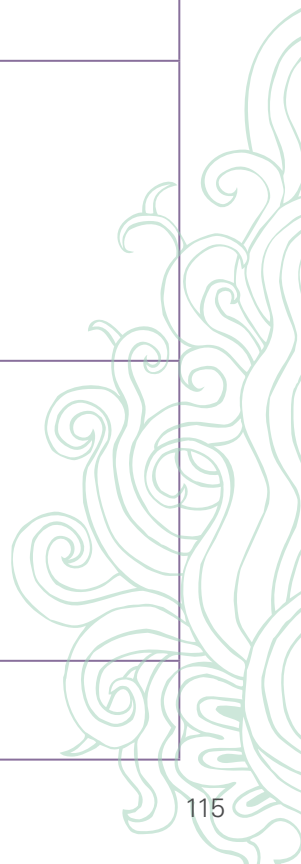


# Doctor Visit



OB Name:

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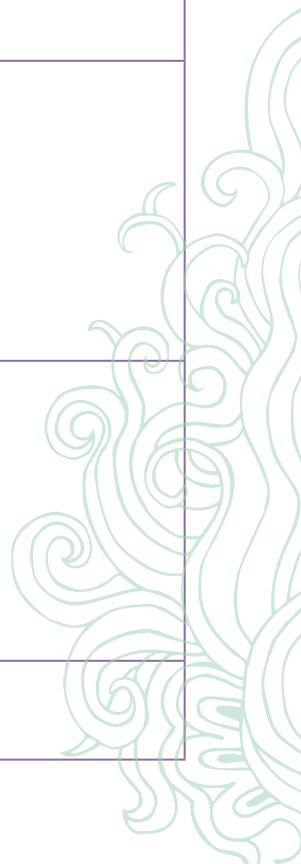


# Doctor Visit



OB Name:

Date	Age of Gestation	Blood Pressure
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# Doctor Visit



OB Name:

Date	Age of Gestation	Blood Pressure
Weight	Fundal Height	Fetal Heart Rate
Symptoms to Discuss		
Questions to Ask the Doctor		
Notes		
		Next Appointment

# Notes



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# Notes



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