LAKESIDE DOCTORS
GYNECOLOGY & OBSTETRICS

LAKESIDE DOCTORS
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Congratulations on your pregnancy!

We here at Lakeside Doctors Gynecology and Obstetrics look forward to caring for you during this special time in your life.

Enclosed are several items for your review. Please keep them handy for reference during your pregnancy.

- Visit Schedule / What to Expect During Your Visits
- Contact Information and Call Coverage
- Emergencies and Urgent Situations
- Do's and Don'ts of Pregnancy
- Common Prenatal Screenings
- Medication Safety List
- Listeriosis (and other food concern)
- Exercise in Pregnancy
- Travel in Pregnancy
- Preparing for the Hospital
- Postpartum Warning Signs
- Formula
- Pediatrician List
- Lakeside Women's Hospital Birthing Class & Tour Information
- Recommended Websites
- Additional Handouts

If you have a chronic disease (such as Hypertension, Diabetes or Epilepsy) or if you take a prescription medication, please be sure to discuss this with your provider.

You will meet with our business office about insurance, payments, etc. Please make sure to bring your insurance card to your appointment.

Finally, please come with a full bladder to every visit! We will need a urine sample at each visit and our front desk staff is happy to let you come back and leave your specimen before check-in if needed.

Thank you for choosing us to care for you and your family!

The Physicians and Staff at Lakeside Doctors

# Visit Schedule

- Visit Schedule (approximate) – Every visit involves a urine collection, weight check and blood pressure measurement
    - First two trimesters or up to 28 weeks: every 4 weeks
    - Weeks 28-36: every 2 weeks
    - Weeks 36-delivery: every 1 week

- Labs
    - Initial OB panel typically done prior to 12 weeks includes blood type, antibody screen, Rubella immunity, blood counts, Syphilis, Hepatitis B and HIV screening, and possible additional testing such as herpes screening, thyroid testing, and any indicated genetic testing.
    - 10 weeks and beyond: Optional free fetal DNA screening (See genetic testing information)
    - 11.0-end of 13$^{th}$ week: Optional first trimester screening (See genetic testing information)
    - 15-21 weeks: Optional second trimester screening (See genetic testing information)
    - 19-21 weeks: Anatomy ultrasound
    - 24-28 weeks: Diabetic screening and repeat blood count
    - 30-34 weeks: Growth ultrasound if medically indicated
    - 35-36 weeks: Screening for vaginal group B strep infection
    - 40-41 weeks: Increased fetal surveillance (monitoring heart rate and/or ultrasound

# What to Expect During Your Visits

## Prenatal Care: The First Visit

You and your provider have a lot to discuss! This is also your opportunity to meet your physician's nurse practitioner.

- Medical History – including details about your personal and family medical history, your menstrual cycle and past pregnancies, use of medications.
- Establish an estimated date of delivery (due date) – an ultrasound may be done to measure the size of your baby.
- Lifestyle issues: nutrition, exercise, work, use of medications and smoking
- Genetic screening – your provider will provide information about the various genetic testing options available. Those tests will be scheduled following your first visit if you choose. You can reference the last page of this packet for more information on testing options.
- Physical exam and lab tests – pelvic exam, blood type, screening for infections, and check for anemia.

## Prenatal Care: Other 1st Trimester Visits (Weeks 9-13)

Subsequent visits – following your first visit, you will be scheduled to see your provider every 4 weeks and will be shorter than your first visit.

Each visit your provider will:

- Check your weight
- Monitor blood pressure
- Listen to baby's heartbeat (usually heard with a Doppler between 10-14 weeks)
- Discuss any questions or concerns

***Precautions:** If you experience any bleeding, contact your provider as soon as possible. If your blood type is RH negative, you may require an earlier dose of Rhogam.

## Prenatal Care: Other 2nd Trimester Visits (Weeks 14-27)

You will continue to visit your provider about every 4 weeks.

Each visit your provider will:

- Check weight and blood pressure
- Listen to your baby's heartbeat
- Measure your belly from the top of the uterus to your pubic bone to track baby's growth
- Talk about baby's movements (usually feeling flutters at 20 weeks)
- Discuss any symptoms you may be experiencing or any questions/concerns you are having
- Screening for Gestational Diabetes (24-28 weeks). *This test takes one hour. Please do not eat or drink anything other than water for 2 hours prior to your test. Avoid food/drinks that are high in simple sugars or other simple carbohydrates. *
- Talk about recommended immunizations like flu, COVID, Tdap, RSV.

***Precautions:** Call your provider if you experience any bleeding, leaking of fluid, change in discharge from the vagina or more than 4 contractions per hour.

## What to Expect During Your Visits (Cont.)

## Prenatal Care: 3rd Trimester (Weeks 28-40)

During the last month of pregnancy, expect appointments every 2 weeks from 28-35 weeks, and weekly appointments from 36-40 weeks.

- Each visit your provider will:
  - Check weight, blood pressure, baby's heartbeat, growth, and movement.
  - Talk about recommended immunizations like Flu or Tdap. RSV if season.
  - Patients with RH negative blood will receive an injection of Rhogam around 28 weeks.
  - Group B Streptococcus (GBS) will be done between 26-37 weeks. GBS is a common bacterium that is usually harmless in adults. Babies born to mothers not treated with antibiotics prior to delivery can become seriously ill. If your test is positive for GBS, you will receive intravenous (IV) antibiotics during labor to help protect your baby from the bacteria.
  - Near the end of pregnancy, your provider may include pelvic exams to check baby's position and detect cervical changes.

***Precautions:** keep watch for any bleeding, leaking of fluid, vaginal bleeding or more than 4-6 contractions per hour. It is also important to call if baby's movement is less frequent than usual.

## The Post-Partum Visit (6 Weeks After Delivery)

Your provider will:

- Check weight and blood pressure.
- Check vagina, cervix, and uterus to make sure you are healing well.
- Talk about resuming sexual activity, birth control, breastfeeding and adjusting to life with your new baby.

***Precautions:** You must abstain from sexual intercourse 2 weeks prior to your visit if you desire an IUD, Nexplanon, or Depo-Provera. If you do not abstain, you may be scheduled for a different appointment to place your birth control.

Contact Information and Call Coverage

- Our clinic phone number: 405-936-1000
    - The office phone is answered Monday through Thursday 9:00 AM – 4:00 PM and Friday 9:00 AM – 2:30 PM. The phones are off for lunch from 12-1 daily. Physician hours vary, but your nurse can be reached during those hours. Non-emergent questions are usually answered during lunch hours or at the end of the day. Emergencies will be addressed promptly.
- Patient portal can be accessed on our website: http://www.lakesidedoctors.com/
    - The front desk can help you set up your online patient portal. Please do not register yourself for the patient portal! This creates duplicate charts for you and confusion for everyone. We will send you an invitation to join the portal.
    - Portal is the BEST way to get a hold of us during business hours. *The portal is not monitored during non-business hours including weekends and holidays*.
    - Your lab results will be on here for you to review, and we can message each other securely.
    - Please do not use the patient portal for urgent or emergent issues.
- **After Hours EMERGENCY answering service:** 405-359-4229
    - A provider is always on-call for **emergencies.** Calls regarding prescriptions, appointments, lab results, etc. should be handled during business hours. No pain medications will be called in after hours.
    - If you are unsure if your issue is emergent, you can contact labor and delivery and speak to a nurse. The labor and delivery nurses can answer many questions and often advise you if it is appropriate to come into the hospital or call your physician either immediately or during business hours. The nurses also like to know when you are coming in for evaluation so they can be best prepared for your arrival!
        - **Lakeside Women's Hospital is our primary delivery site** and its phone number is: 405-936-1550
        - If you and your physician have decided you are delivering at Baptist Medical Center, it can be reached at: 405-949-3401
        - We do not maintain privileges at any other INTEGRIS facilities.
- Call Coverage
    - The physicians of OKC GYN/OB like to deliver as many of our own patients' babies as possible. However, there are occasions when we are not available. To ensure that our patients have access to the best care possible, we work together to provide safe after-hours patient care. This is fairly common for OB/GYN practices and is in place to make sure you have the care you need, when you need it. All doctors in our call group are MDs and board certified/eligible OB/GYNs. We feel this is the ideal call group, and you will always be in expert hands.
    - On the next page you will find the list of our providers

# Call Providers

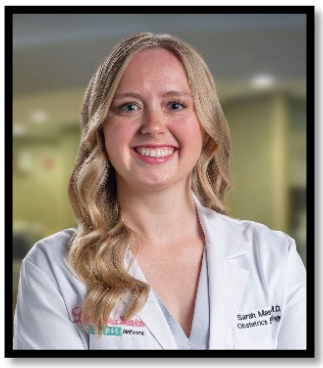
Dr. Aaron Armstrong

Dr. Whitney Driver
Regina Webber, NP

Dr. D. Nelson Fong
Ali Wilke, NP

Dr. BreeAnna Gibson
Halea Plumlee, NP

Dr. Crista MacAllister



Dr. Sarah Mashburn

Dr. Lacy Parker
Halea Plumlee, NP

Dr. Elizabeth Pinard
Amber Medico, NP

Dr. Donna Seres
Regina Webber, NP

The biographies of our physicians may be found at

www.lakesidedoctors.com or www.lakeside-wh.com

Dr. Harris is primarily located at INTEGRIS Health Baptist Medical Center Portland Avenue and shares weekend/holiday call with our group. Lakeside Women's Hospital Laborist/Hospitals is Dr. Armstrong and Dr. Robinett

Scan me

# Emergencies and Urgent Situations

Lakeside Women's Hospital on the 1st floor will treat all pregnant patients greater than 20 weeks gestation and up to 6 weeks postpartum.

Patients who are less than 20 weeks gestation or greater than 6 weeks postpartum should contact the clinic or go to Baptist Medical Center or the closest ER.

**Lakeside Women's Hospital**
**11200 N Portland Ave, 1st Floor**
**Oklahoma City, Ok 73120**
**405-936-1550**

## Reasons to go to the ER

- Decrease in baby's movement (less than 10 movements in 1 - 2 hours)
- Leaking of watery fluid from the vagina
- Vaginal bleeding
- Headache that won't go away with Tylenol, rest, food, and water
- Sharp abdominal pain
- Thoughts of harming yourself or others, hallucinations or feeling as though you are not fit to take care of your baby
- A general feeling that something is not right
- Chest pain or shortness of breath
- If less than 37 weeks: contractions more than four to five times per hour-may be felt as lower back pain, belly tightening, or period-like cramping
- If less than 37 weeks: pressure like the baby is going to "fallout"
- If 37 weeks or greater: contractions occurring every five minutes or more frequently, lasting 1 minute, and continuing for 1 hour

## Warning Signs

- Vaginal bleeding or spotting not associated with recent intercourse or vaginal exams
- Abdominal pain
- Persistent vomiting or diarrhea lasting 24 hours or longer
- Temperature of 100.4 degrees or higher
- Loss of fluid from the vagina
- Decreased fetal movement (see below)

# Emergencies and Urgent Situations (Cont.)

## Decreased Fetal Movement *(after* 28 weeks)

After 28 weeks gestation, if you are concerned regarding a decrease in fetal movement, you can monitor fetal kick counts. Begin in a sitting or side lying position and count fetal movement (all movements will count). The baby does not have to "kick". As the baby grows, perceived movements could be less brisk. When there are 10 movements perceived within the two hours, you may stop counting. This is reassuring. If 10 movements are NOT perceived within two hours, come to Lakeside Women's Hospital, 1st floor for further evaluation.

## Symptoms of Pre-eclampsia

- Headache not relieved by Tylenol, rest, food, or fluids.
- New visual changes
- Pain in the upper right part of your abdomen
- If you are experiencing any of these symptoms, call the clinic or go to Lakeside ER

## Other Important ER Information

- Bring your ID and insurance card.
- Expect to spend at least 2-4 hours in the Lakeside ER to allow for assessment, physician consultation, fetal monitoring, and lab results.
- In case surgery of any kind is indicated, please do not eat or drink anything once you arrive unless advised by your medical providers.
- Because this is an emergency department, patients will be seen by the physician based on acuity.

# Common Do's and Don'ts of Pregnancy

- Household
  - When using bleach or other cleaning products be sure to have good ventilation.
  - Painting should be deferred until the second trimester, involve only latex paints, and should always be in a well-ventilated space.
  - You may have your house sprayed for insects/pests but should delay return to your home for 2-4 hours.
- Beauty Care
  - Artificial nails, polish, and polish remover are fine during pregnancy; although, their odor may add to first trimester nausea.
  - Hair color is safe throughout pregnancy.
  - Spray tans/lotions are safe throughout pregnancy. Tanning in a bed is also safe but discouraged for risks of UV exposure.
- Dental Work
  - Maintaining routine dental hygiene is important for the safety of your pregnancy. You should keep all routine appointments as scheduled.
  - Local anesthesia is permissible, if required, during pregnancy.
  - X-rays are safe with the abdomen shielded by a lead drape.
  - If you require dental procedures, beyond cleaning, we recommend delaying it until after your first trimester. If your dentist requires a release from our office, please give us 2-3 days' notice and a fax number to complete this request.
- Douching
  - Douching should be avoided during pregnancy unless your physician instructs you to do otherwise.
  - Increased vaginal secretions are normal in pregnancy. You should alert your physician during business hours if you notice discharge with yellow/green color, foul odor, or accompanied by itching.
- Childbirth Classes
  - If you are interested in taking classes, Lakeside Women's Hospital offers a variety of classes. Information regarding times, costs, etc. is given to you at the billing office when you sign your contract.
  - You can also find the list online at http://lakeside-wh.com/seminars-classes
  - You should consider taking classes in your third trimester if are planning on taking one.
- Family
  - Your husband/significant other is always welcome to attend your prenatal visits and encouraged to be with you at delivery.
  - Your children are welcome at prenatal visits as well.
- Ultrasound
  - Most patients have two routine ultrasounds; one in the first trimester to establish the due date and one in the second trimester to examine anatomy and determine gender (19-20 weeks). Any additional ultrasounds will be ordered at your provider's discretion as indicated.
  - Ultrasounds are done at Lakeside Women's Imaging in a separate building or other off-site location. We do not routinely ultrasound in the office.

# Common Do's and Don'ts of Pregnancy Continued

- Sexual Activity
  - Sexual intercourse and intimacy with your partner is thought to be safe throughout uncomplicated pregnancy. Your physician will alert you if there is a medical reason to abstain.
- Smoking, alcohol, and drugs
  - These can all be very dangerous to you and your baby. Many of these substances are associated with miscarriage or severe growth issues for your baby.
  - Smoking (cigarettes, cigars, e-cigs, vapes, etc.) and alcohol should be stopped immediately.
  - Illicit or street drugs should be stopped, and your physician should be notified of any potential exposures in pregnancy so follow up can be arranged.
  - Narcotics, including prescription medications, should not be abruptly stopped. Please notify your physician immediately if you are on any daily narcotics, prescribed or otherwise.

- Work
  - In most cases, it is possible to work into late pregnancy and even up to labor.
  - If you have concerns about heavy lifting or dangerous chemicals, discuss this with your physician.
- FMLA Paperwork
  - Leave any FMLA forms with the front desk staff. There is a fee of $36 to complete. We will return it to you or fax it to your employer within 7-10 business days.
- Hot Tubs, Saunas, Baths
  - In the first trimester, you should avoid any hot tub or sauna exposure. As pregnancy progresses, some brief use of hot tubs is permissible, but you want to avoid raising your core body temperature (staying in so long you are sweaty).
  - Baths are permissible throughout pregnancy as long as the temperature is warm, not hot, and you don't feel you are overheating.
  - You should never use a sauna during pregnancy.
- Weight Gain
  - Recommendations are based on your starting weight/BMI. If you are unsure of your target, please feel free to clarify with your physician. You can also look up your starting BMI as www.bmi-calculator.net
    - Starting BMI <18.5: Recommended range of total weight gain is 28-40 lbs
    - Starting BMI 18.5-24.9: Recommended range of total weight gain is 25-35 lbs
    - Starting BMI 25-29.9: Recommended range of total weight gain is 15-25 lbs
    - Starting BMI >30: Recommended range of total weight gain is 11-20 lbs
  - Your doctor will follow your weight at each visit and discuss any abnormal gains/losses.
  - Many women see weight loss of stability in the first trimester due to nausea, decreased appetite, and improved food choices and overall health. Most weight gain of pregnancy is expected in the late second trimester and early third trimester.
- Pets
  - You are safe to handle your personal pets as usual EXCEPT for litter duty. Please do not handle soiled cat litter during your pregnancy.

# Common Prenatal Screenings

## Cell-Free DNA (also called Non-Invasive Prenatal Testing or NIPT

- Performed as early as 10 weeks of pregnancy.
- This testing looks at fetal DNA and RNA in the mother's blood and screens for down syndrome, trisomy 18, trisomy 13 and other problems with X and Y chromosomes. This testing can also determine the baby's RH status, sex and other types of genetic mutations.
- Currently, it is most often used for high-risk mothers (such as older than 35 years old or has had a previous child with a genetic disorder).
- It is not widely covered by insurance for low-risk mothers. Please contact your insurance if you would like to know if testing will be covered.

## Is this covered by my insurance?

- Most insurance providers cover these services. If you have concerns, please contact your insurance provider.

Please note that your insurer may not cover all the services described. Your insurance does not cover all your healthcare costs. Your insurance only pays for covered items and services when their rules are met. The fact that your insurance may not pay for a particular item or service does not mean that you should not receive it. There may be a good reason your provider recommended it. We cannot always determine coverage prior to the test being performed.

# SAFE MEDICATION LIST DURING PREGNANCY

| CONDITION | OVER THE COUNTER SAFE MEDICATION TO USE DURING PREGNANCY | ALTERNATIVE OPTIONS |
|---|---|---|
| Allergies | • Claritin (loratadine) 10 mg daily<br>• Zyrtec (cetirizine) 10 mg daily<br>• Benadryl (diphenhydramine) 25-50 mg every 6 hours | • Saline nasal washes |
| Cold & Flu | • Tylenol (acetaminophen)<br>• Robitussin (guaifenesin/dextromethorphan)<br>• Mucinex (guaifenesin)<br>• Halls cough drops | • Warm salt and water gargle<br>• Saline nasal drops/spray |
| Headache | • Tylenol (acetaminophen)<br>• Magnesium oxide 400-500 mg twice daily<br>• Vitamin B2 (Riboflavin) 400 mg daily | • Increase water intake<br>• Eat regular meals<br>• Cool compress to head and neck |
| Nausea & Vomiting | • Vitamin B6 (pyridoxine) 25 mg every 6-8 hours (maximum of 200 mg/day)<br>• Unisom (doxylamine succinate) 25 mg at bedtime<br>• Acid reducing agents (see “Heartburn”) | • Ginger ale, saltine crackers, peppermint tea, suck on hard candy<br>• Avoid greasy and spicy foods<br>• Eat 5-6 small meals throughout the day<br>• Avoid strong smells<br>• Sea Band bracelet |
| Heartburn and Reflux | • Tums, Maalox, or Mylanta<br>• Pepcid (famotidine)<br>• Prilosec (omeprazole) | • Elevate head of bed<br>• Eat smaller, bland meals<br>• Avoid spicy foods and fried foods<br>• Sit upright for at least an hour following meals |
| Constipation | • Metamucil, Benefiber, or Citrucel<br>• Colace (docusate sodium)<br>• Miralax (polyethylene glycol)<br>• Senokot or Dulcolax | • Increase fluids<br>• Prune juice<br>• Eat whole grains, fruits, and vegetables |
| Diarrhea | • Imodium AD (loperamide) – only after 12 weeks gestation and if no blood in stool | • BRATT diet (bananas/broth, rice, applesauce, tea, and toast)<br>• Bland diet<br>• Increase fluid intake<br>• Avoid dairy products<br>• Call if not improved in 24 hours |
| Bloating & Gas | • Gas X (simethicone) | |
| Hemorrhoids | • Preparation H<br>• Anusol<br>• Tucks/witch hazel pads | • Increase water intake<br>• Prevent constipation<br>• Avoid straining |
| Yeast Infection | • Monistat (miconazole)<br>• Gyne-Lotrimin (clotrimazole) | • Avoid irritating soaps/lotions<br>• Shower daily, avoid submerging baths<br>• Decrease simple sugar intake<br>• Wear cotton underwear<br>• Eat live culture yogurt |
| Insomnia | • Benadryl<br>• Unisom<br>• Tylenol PM | • Sleep during regular night hours<br>• Avoid caffeine<br>• Decrease fluids 2 hours prior to bedtime |
| Rashes | • Hydrocortisone cream<br>• Calamine lotion<br>• Benadryl cream or pills | • Non-irritating soaps, lotions, and detergents |
| Fever | • Tylenol | • Over 100.5 contact office |

# Listeriosis

- What is listeriosis?
    - An illness caused by a bacteria that can be found in many foods. Listeriosis can result in miscarriage, premature delivery, serious sickness for you and baby, and/or death of baby.
- How do I know if I have it?
    - You may not know, but early signs include **fever**, chills, muscle aches, diarrhea, and an upset stomach. It presents much like a flu-like illness but can progress quickly. There are 2500 cases per year in the US. If you are concerned you could have symptoms, you should notify your doctors with the symptoms.
- How can I avoid it?
    - Keep your refrigerator colder than 40 F and your freezer colder than 0 F.
    - Clean up all spills right away, especially juices from hot dogs, raw meat, etc.
    - Keep your refrigerator clean with hot water and soap.
    - Eat all precooked or ready-to-eat food as quickly as possible.
    - Wash your hands after you touch any raw meat, seafood, etc.
    - Reheat all leftovers until steaming hot.
- What can I not eat?
    - Hot dogs, lunch meats, bologna, or other deli meats unless <u>steaming</u> hot.
    - Pate meat spreads or smoked seafoods.
        - Canned tuna and salmon are OK to eat.
    - Any unpasteurized milk or milk products like certain feta, queso blanco, queso fresco, brie, camembert, and panela.
        - OK to eat products that say, “Made with Pasteurized Milk”.
    - Unpasteurized juice or vinegars.
    - Unwashed fruits and vegetables.
        - Especially sprouts and pre-sliced melon (ok to slice yourself but wash the rind).
    - Salads made in the store such as ham salad, chicken salad, tuna salad, etc.
        - OK to eat if freshly prepared at home with properly refrigerated ingredients.

# Other Food Concerns

- Mercury
    - Seafood can be great in pregnancy but avoid too much mercury which can be harmful.
    - Avoid or limit: Swordfish, shark, king mackerel, and tilefish.
    - Limit to two meals per week of: Shrimp, salmon, Pollock, catfish, anchovies, or trout.
    - Tuna should be less than 6 oz/week or one serving.
- Avoid Raw, Undercooked, Contaminated Searfood
    - Sushi, sashimi, or raw oysters, scallops, or clams
    - Even refrigerated, uncooked seafood such as lox, smoked salmon, etc. should be avoided.
        - OK if canned or cooked into a casserole.
- Eggs are OK to eat as long as cooked through.

# Exercise in Pregnancy

- What type of activities should I avoid?
  - Anything with a high risk for fall including gymnastics, water skiing, mountain biking, and horseback riding.
  - Downhill snow skiing
  - SCUBA
  - Contact sports
- What should I be aware of when exercising during pregnancy?
  - The changes in your body can make certain positions and activities risky for you and baby. Be aware of these changes and respond by modifying your movement, pace, range of motion, etc. as needed.
  - Avoid overheating and stay hydrated.
  - After approximately 20 weeks (or after you "pop"), avoid being flat on your back or belly.
  - If you are just starting an exercise routine, start gradually and build up in 5-minute increments.
  - Avoid brisk exercise in extremes of heat/humidity (no hot yoga).
  - Wear comfortable clothing, especially a well-fitting, supportive bra.
- What are warning signs that I should stop exercising?
  - Vaginal bleeding
  - Dizziness or feeling faint, muscle weakness, or increased shortness of breath that doesn't resolve with appropriate rest and recovery
  - Chest pain
  - Headache unrelieved with Tylenol
  - One sided calf pain and swelling
  - Uterine contractions, leakage of fluid, or signs of labor
  - Decreased fetal movement
- When can I resume exercising after baby is born?
  - Walking is a good way to start and can be done as tolerated after delivery. Walking also gets you and baby out of the house for fresh air!
  - Anything more strenuous should be discussed with your provider based on your delivery.

# Travel During Pregnancy

Source: ACOG FAQ 055

- When is the best time to travel during pregnancy?
  - Probably in the middle of your pregnancy, weeks 14-28.
  - After 28 weeks, it may be harder to move around or sit for a long time.
  - Discuss any planned travel with your physician as early as possible.
- What should I know about planning long car trips?
  - Make each day's drive brief. Try to limit driving to no more than 5-6 hours each day.
  - Wear your seatbelt any time you ride in a car, even if you have an air bag.
  - Plan to make frequent stops to move around and stretch your legs.
- What should I know about airplane travel?
  - Some airlines restrict travel or even discourage it after 36 weeks. Make sure you discuss your plans with your physician before booking.
  - Be sure to check with the CDC for any travel warnings before booking any international travel.
  - If you can, book an aisle seat so it's easy to get up and stretch your legs.
  - Avoid gas producing foods and carbonated beverages before your flight.
  - Wear your seatbelt low and on your hips, below your belly, at all times.
  - Consider taking an anti-nausea medicine if needed.
- What should I know about a trip on a ship?
  - Be sure to check with the CDC for any travel warnings before booking any international travel.
  - Some cruise lines restrict travel in pregnancy. Check with them before booking about any gestational age restrictions and discuss with your provider.
  - Seasickness bands are useful for some people and can help ward off an upset stomach.
  - Norovirus is a contagious virus that can spread rapidly. It is not dangerous to your baby, but can be very dehydrating. Check with the CDC to see if your ship passed its inspection.
- How can I prepare for international travel while pregnant?
  - Discuss with your physician where you are planning to go. Be sure to also check with the CDC for any travel warnings before booking any international travel.
  - The CDC can also advise you of any travel alerts, safety tips, and vaccination recommendations.
  - You should not travel to areas with malaria in Africa, Central/South America, and Asia
  - If you are going to drink tap water of unknown safety, it should be boiled for 1 minute or 3 minutes at higher than 6,000 ft.
  - Bottled water is safer than unboiled tap water, but there are no official standards for bottled water so always check the source and label.
  - Carbonated beverages and drinks made with boiled water are safe to drink.
  - Do not put ice made from unboiled water in your drinks.
  - Do not drink out of glasses washed in unboiled water.
  - Avoid fresh foods and vegetables unless cooked or peeled yourself.
  - Do not eat raw or undercooked meat or fish.

# Preparing for the Hospital

## When to go to the hospital:

Less than 34 weeks, present to Baptist Medical Center Labor & Delivery 4th floor or a local ER if out of town. At 34- 37 weeks-if you have 4-6 contractions in one hour, go to Lakeside Women's Hospital 1st floor for evaluation.

At least 37 weeks-if contractions are 5 minutes apart, lasting 1 minute each for at least 1 hour, it is time to go to Lakeside Women's Hospital (1st Floor).

It is ideal to have an overnight bag packed and ready in case you need to leave for the hospital in a hurry. The hospital will take care of most of your needs, but you may find the following list of items helpful to bring with you:

- Insurance card and ID
- Car seat
- Bathrobe, nightgown, lose fitting clothing, slippers, etc.
- Toothbrush and toothpaste
- Deodorant
- Shampoo/conditioner
- Hairbrush/comb
- Other cosmetics
- One or two bras
- Breastfeeding/support pillows
- Books, magazines, tablet
- Charger for electronics
- Small bills or change for vending machines
- Baby book
- Baby outfit to wear home
- Baby blanket

## Labor & Delivery

Every woman's labor and delivery experience are unique, even from one delivery to the next. Understanding what is typical can help you understand what to expect as your due date nears. Even so, labor and delivery may take surprising twists and turns. You might reconsider your wishes about pain medications, or you may need an unexpected cesarean delivery. However, your labor and delivery may unfold, remember that your health and the health of your baby are most important. Please discuss your preferences during prenatal visits and when you arrive at the hospital.

## Induction of Labor

Some reasons for induction include diabetes, high blood pressure, or other conditions of pregnancy. Most moms and babies stay in the hospital approximately 2 days after a vaginal delivery. Newer evidence supports delivery for all pregnancies before 40 weeks.

On the day of your scheduled induction, you may:

- Eat a small, light meal
- Choose high protein, low-fat foods
- Drink fluids as usual
- Take your medications as usual

# Postpartum Warning Signs

Most women who give birth recover without any issues. However, any woman can experience complications after delivery. Learn to recognize these postpartum warning signs and what you should do.

**Call 911 if you have:**

- Pain in your chest
- Obstructed breathing or shortness of breath
- Seizures
- Thought of hurting yourself or your baby

**Call your healthcare provider or come into the hospital if you have:**

- Bleeding that soaks through one pad/hour or multiple blood clots the size of an egg or bigger
- Incision that is not healing
- Red or swollen leg that is painful or warm to the touch.
- Temperature of 100.4 degrees or higher.
- Headache that does not go away, even after taking medicine, or a headache with vision changes.

Trust your instincts. These warning signs can become life-threatening if you do not seek medical care right away because:

- Pain in the chest, obstructed breathing, or shortness of breath could 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 your baby can be a sign of postpartum depression.
- Bleeding that soaks more than one pad an hour or passing egg-sized clots or bigger, may mean you are hemorrhaging.
- Incision that is not healing, increased redness, or any pus from incision site may mean you have an infection.
- Redness, swelling, warmth, or pain in the calf may be a sign of a blood clot.
- Temperature of 100.4 degrees or higher, foul smelling vaginal blood, or discharge may mean you have an infection.
- Headache not relieved with medication, vision changes, or pain in the upper right area of your abdomen may mean you have high blood pressure or postpartum preeclampsia.

# Formula

Breast milk is the ideal food for babies, However, if breastfeeding isn't possible or isn't a part of your plan, use infant formula. Healthy newborns do not need water, juice, or other fluids. To ensure proper nutrition and avoid food-related illness, make sure to prepare your infant formula safely:

- Check the formula container and expiration date-never buy or use containers with bulges, dents, or rust. Always go by the "use by" date.
- Wash your hands with soap and warm water before preparing formula.
- Wash bottles, nipples, caps, and rings with soap and water and allow to air dry before each use.
- Follow the manufacturer's instructions for how much water to use with powdered formula.
- Use clean water from the tap or bottled water. If you are concerned about the safety of your tap water, sterilize it (boil it for one to two minutes and then cool to room temperature) before adding it to the bottle.
- Use the scoop that came with the formula container to properly measure the formula.
- Warm the formula under running water or let stand in a bowl/pan of hot water for a few minutes. Do not warm bottles in the microwave-this can cause heat spots and can burn your baby's mouth. Shake the bottle and feed to the baby immediately.
- Throw away any formula that remains in the bottle after feeding.
- If you prepare and fill several bottles at once, keep them in the refrigerator until you need them. Don't freeze them. Throw away any prepared formula that has been in the refrigerator for more than 24-48 hours.

# Pediatrician List

**Northwest Pediatrics**
4140 W Memorial Rd #413
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Dr. Carla Hardzog-Britt
Dr. Tony Leveridge
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Dr. Erica Faulconer
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Dr. Erin Goranson
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Dr. Prithi Reddy
Dr Lauren Garabelli
Audrey McGowen PA-C
Tara Henderson APRN-CNP

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Dr. Jana Freeman
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Dr Jennifer Semore

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Dr. Savannah Stumph

**Mercy Health Edmond Santa Fe**
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Dr. Lauren Kenney Garabelli

**Village Center Pediatrics**
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326124th Avenue NW Suite 101
Norman, Oklahoma 73069
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Dr. James Fields
Dr. Brian Ellis
Dr. Andre Ruhlmann


You can visit www.lakeside-wh.com or scan the QR code below to register for a hospital tour or any birthing and prenatal classes we offer.

Scan this QR code or visit integris.coursestorm.com to see available classes and when you can schedule a tour of Lakeside Women's Hospital.

Lakeside Women's Hospital
INTEGRIS
HEALTH

Lakeside Women's Hospital is partially owned by physicians.

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# Recommended Websites

Although there is a wealth of information, tips, on the internet, some information may not be reliable or medically sound. Below are a few websites our providers believe are good resources for you to use. Please discuss with your provider before taking any supplements, medications, or attempting any activities you may read or hear about regarding your pregnancy, labor, and birth.

Preparing for a lifetime:

- www.text4baby.org

Nutrition in Pregnancy/ Breastfeeding and Pumping Resources:

- www.choosemyplate.gov
- www.womenshealth.gov/breastfeeding
- http://newborns.stanford.edu/Breastfeeding/
- www.okbreastfeeding.org/
- www.lllok.org
- www.ok.gov/health2/documents/HE-Eng.pdf
- www.fda.gov/medical-devices/consumer-products/breast-pumps

Travel:

- www.cdc.gov/travel

Infant Safety

- www.nichd.nih.gov/sts
- www.safekidsok.org

General Pregnancy Information

- www.acog.org
- www.cdc.gov

APPS:

- What to Expect
- The Bump

# Regarding Your Breast Pump
## and the Affordable Health Care Act

Breastfeeding is recognized as "Best for Baby" by the United States Surgeon General, American Academy of Pediatrics, American College of Obstetricians and Gynecologists, Association of Women's Health, Obstetric and Neonatal Nurses, American Academy of Family Physicians, American Public Health Association, American Dietetic Association, and other professional health care organizations.

Recent legislative changes brought about by the Affordable Health Care Act provide that many insurance companies now cover more preventive services, including breastfeeding supplies like breast pumps. You may qualify for a breast pump under this new legislation.

In order to facilitate the process of getting your breast pump, we encourage you to contact your insurance company and ask the following questions early in your pregnancy.

1) What is my breast pump coverage?

2) Ask if the pump has to be obtained from a DME (durable medical equipment) provider. If so, ask them for a list of breast pump providers covered by your plan. Some plans require the pump to be ordered from an out of state DME. If this is the case, it is beneficial for you to do this ahead of time, as some patients are waiting a long time for their pump to arrive. At this time, Lakeside Women's Hospital is not a DME provider.

3) If there is not a DME in your area, ask your insurance company if you can buy it from the hospital, and submit a claim for reimbursement.

4) Ask if you need a prescription from your physician for the breast pump.

Every insurance is different; some cover rentals, some cover personal pumps, some cover hand pumps, and some are "grandfathered in" and don't have to provide a pump. Sometimes a primary insurance will not cover a breast pump, but a secondary insurance will.

*We encourage you to contact your insurance company regarding your breast pump early in your pregnancy.*

Respectfully,

Lakeside Women's Hospital and Physicians

Lakeside Women's Hospital
INTEGRIS HEALTH

Lakeside Women's Hospital is partially owned by physicians.

ARIADNE LABS

TEAMBIRTH

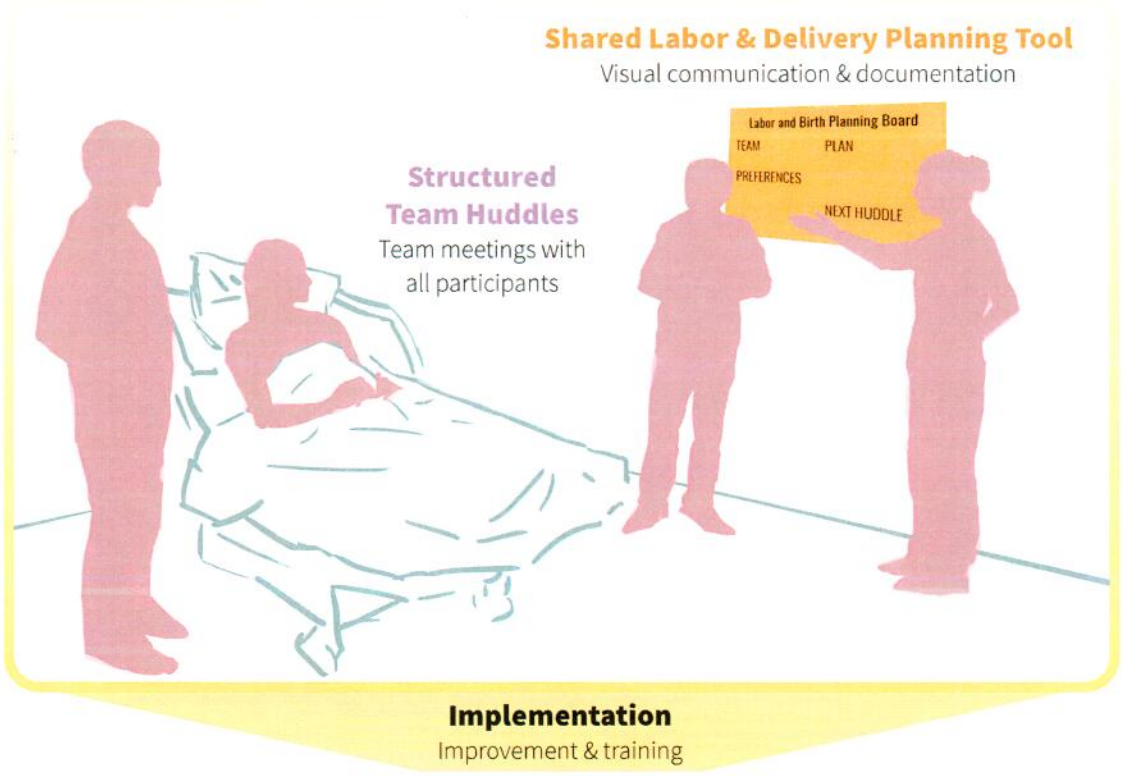
# TeamBirth Purpose

TeamBirth is a care process innovation involving a series of team huddles between the patient and those caring for her, designed to empower each team member to contribute information, reliably structure communication, and help the team arrive at shared plans together.

For patients, TeamBirth invites them into the conversations and provides a structure that is easy to understand and participate in. For clinicians, TeamBirth encourages all conversations to be had with the patient to promote effective team communication and alignment across the full team.

# TeamBirth Core Components

*Components which are critical to successful delivery of the intervention**




* www.health.org.uk/blogs/collaborate-to-replicate-spread-and-scale-in-health-care

## Structured Team Huddles

Huddles are team meetings that must at a minimum:

1. include the direct care team (for the US context that means the patient, nurse, and provider),
2. give all team members the opportunity to speak,
3. discuss preferences, care plans (distinguishing plans for mom, baby, and labor progress), and expectations for the next huddle, and
4. occur at minimum throughout labor at admission, at decision points or changes in the plan of care, or at the request of any team member.

## Shared Labor & Delivery Planning Tool

All labor rooms have a shared visual tool to structure huddle communication; we recommend a large, wall-hung dry erase board, but you may use a different format if necessary in your context (e.g. dry erase board/clipboard, paper, app).

At a minimum, the shared visual tool includes

- space to note the team,
- preferences,
- care plans (distinguishing plans for mom, baby, and labor progress), and
- next huddle.

If additional spaces are added, these added spaces must include information that is accessible and relevant for the whole team.

## Implementation

You follow a structured quality improvement process to successfully implement TeamBirth, including testing & adapting for your context and ongoing coaching, monitoring and evaluation, and feedback to frontline clinicians.

Since teams come together randomly in labor, you must train all clinicians that are a part of the direct care team, including creating onboarding processes for new clinicians joining your unit.

**Additional details on flexible adaptations of these core components can be accessed through higher tiers of service on Aria.**

PATIENT HANDOUT

# Will delayed umbilical cord clamping help my baby?

Society for Maternal-Fetal Medicine

By the Society for Maternal-Fetal Medicine (SMFM) with the assistance of Loralei Thornburg, MD, University of Rochester, Strong Memorial Hospital

## What is delayed umbilical cord clamping?

Delayed umbilical cord clamping simply means waiting longer after a baby is delivered to clamp the cord. Immediate clamping is typically performed within 15 seconds of delivery, whereas delayed clamping is performed 25 seconds to 5 minutes after delivery. Delaying clamping allows blood to continue to flow to the infant, thereby increasing the infant's total blood volume.

## What are the risks and benefits of delayed umbilical cord clamping in the preterm infant?

Babies born preterm (between 24 weeks' and 37 weeks' gestation) are more likely to have difficulty staying warm, to require immediate care by a pediatrician, to have low blood pressure, and to require a blood transfusion than are babies born full term. Delayed umbilical cord clamping may reduce a preterm baby's need for blood transfusions and risk of bleeding in the brain and of a serious bowel complication called necrotizing enterocolitis. It may also help increase a preterm baby's blood pressure.

However, delayed umbilical cord clamping is also associated with jaundice (yellowing of the skin caused by too much bilirubin in the infant's blood). The immediate benefits of delayed umbilical cord clamping to preterm infants have been documented but the long-term effects are largely unknown.

## What are the risks and benefits in the term infant?

Compared to preterm infants, term infants (those born after 37 weeks of gestation) have lower risks of complications. In term infants, delayed umbilical cord clamping is associated with higher red blood cell levels 1–2 days after birth and lower risk of iron deficiency at 3–6 months of age. However, delayed umbilical cord clamping in term infants may increase the risk of jaundice, which may require phototherapy (light treatment). If untreated, severe jaundice can result in complications. Also, there is limited information about the long-term effects of delayed umbilical cord clamping in term infants.

## Are there any risks to the mother?

The risks to the mother are not well studied. In theory, delayed umbilical cord clamping could increase the risk of blood loss to the mother because delivery of the placenta is delayed. This may be especially a concern after a cesarean delivery.

## What about 'milking' or 'stripping' the umbilical cord?

These terms refer to the practice of squeezing blood down the cord to the baby. Typically, the delivering provider will "strip" a segment of the umbilical cord toward the baby's abdomen 3–4 times before clamping the cord.

The aim of this procedure is to shorten the time from delivery to clamping the cord. It is not yet clear whether there are benefits to milking or stripping the umbilical cord and further study is necessary.

## What do professional societies recommend?

Both the American College of Obstetricians and Gynecologists (ACOG) and the American Academy of Pediatrics (AAP) support delaying umbilical cord clampir. in preterm infants for 30–60 seconds after delivery.

For term infants, ACOG states that there is currently insufficient evidence to routinely recommend delayed umbilical cord clamping.

## When should delayed cord clamping be avoided?

Caution regarding delayed cord clamping is sometimes warranted. It has not been studied in pregnancies with multiple gestations, such as twins and triplets. Delayed clamping should not be performed in infants who require immediate evaluation and resuscitation (such as those with breathing problems or low heart rates). It is not recommended in cases of placental abnormalities such as placenta previa (placenta over the cervix), vasa previa (umbilical cord vessels over the cervix), or suspected placental abruption (a tear in the placenta), because of the increased risk of bleeding for the mother and possible need for immediate care of the infant.

FROM THE PAGES OF Contemporary OB/GYN
Expert Advice for Today's Ob/Gyn
ContemporaryOBGYN.net

# Alcohol and Pregnancy

## If you drink alcohol during pregnancy, your baby may be at risk of lifelong birth defects.

### Moderate Drinking: What's the Risk?

There is no safe amount or type of alcohol use during pregnancy. Even moderate drinking (one drink a day) can cause lifelong problems for your baby. These problems may be less obvious than those caused by heavy drinking. They may include problems with

- coordination
- behavior
- attention
- learning
- understanding consequences

### Heavy Drinking: What's the Risk?

Heavy drinking is having more than three drinks per occasion or more than seven drinks per week. The most severe result of heavy drinking during pregnancy is called fetal alcohol syndrome (FAS). FAS can cause serious birth defects for your baby, including

- problems with brain development
- lower-than-average height and weight
- smaller-than-normal head size
- abnormal facial features

## Did You Know?

- No drinks are safe. One beer, one shot of liquor, one mixed drink, and one glass of wine all contain about the same amount of alcohol.
- If you are trying to get pregnant, you should not drink alcohol.
- Didn't know you were pregnant? While no amount or type of alcohol is safe during pregnancy, serious harm is unlikely if you drank before you knew you were pregnant. The most important thing is to stop drinking alcohol when you find out you are pregnant.

ACOG
The American College of Obstetricians and Gynecologists

# Alcohol-related birth defects are completely preventable. Do not drink alcohol during pregnancy.

If it is hard for you to stop drinking, talk with your obstetrician–gynecologist (ob-gyn) about getting help. You can also visit the Alcoholics Anonymous website at www.aa.org or call the Substance Abuse and Mental Health Services Administration's treatment referral line at 800-662-HELP (4357).

During your first prenatal visit, or at any time throughout your pregnancy, your ob-gyn can offer advice about avoiding alcohol while pregnant. The American College of Obstetricians and Gynecologists believes that pregnant people who are dependent on alcohol should receive counseling and medical support to help them stop drinking.



ACOG
The American College of Obstetricians and Gynecologists

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# Tobacco and Pregnancy

**Smoking during pregnancy is dangerous for you and your fetus. If you use cigarettes or e-cigarettes, now is the time to quit.**

## RISKS FOR YOUR FETUS

- Delayed growth
- Higher chance of being born too early
- Permanent brain and lung damage
- Higher risk of stillbirth

## RISKS FOR YOUR NEWBORN

- Smaller size at birth
- Colic with uncontrollable crying
- Sudden infant death syndrome (SIDS)
- Development of obesity and asthma during childhood

## RISKS FOR YOU

- Ectopic pregnancy (a pregnancy outside of the uterus)
- Problems with the placenta
- Problems with your thyroid
- Water breaking too early


## Did You Know?

- Nicotine is only one of 4,000 toxic chemicals in cigarettes.
- Using e-cigarettes (vaping) is not a safe substitute for smoking cigarettes.
- Other smokeless tobacco products, like snuff and gel strips, also are not safe.
- Secondhand smoke can cause growth problems for your fetus and increase your baby's risk of SIDS.

ACOG
The American College of Obstetricians and Gynecologists

**If you need help quitting, talk with your obstetrician–gynecologist (ob-gyn). Or call the national smoker's quit line at 1-800-QUIT-NOW.**

The American College of Obstetricians and Gynecologists believes that pregnant people who use tobacco should receive counseling to help them quit. Your ob-gyn can offer advice about quitting at your first prenatal visit or at any time throughout your pregnancy.



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PATIENT EDUCATION

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

# How to Tell When Labor Begins

The average length of pregnancy is 280 days, or 40 weeks. But there is no way to know exactly when you will go into labor. Most women give birth between 38 and 41 weeks of pregnancy. The more you know about what to expect during labor, the better prepared you will be once it begins.

## You Need to Know

- the signs that labor may be starting
- how to tell whether it's "false" labor or "true" labor
- when you should call your provider or go to the hospital

### When Labor Starts

No one knows exactly what causes labor to start, although changes in ***hormones*** may play a role. Most women can tell when they are in labor, but sometimes it's hard to tell when labor begins.

#### *What happens to the body when labor begins?*

As labor begins, the ***cervix*** opens (dilates). The muscles of the ***uterus*** contract at regular intervals. When the uterus contracts, the abdomen becomes hard. Between the contractions, the uterus relaxes and becomes soft.

#### *What changes should I watch for?*

Certain changes may signal that labor is beginning. These changes include

- lightening
- loss of the mucus plug
- rupture of membranes
- contractions

You might or might not notice some of these changes before labor begins.

#### *What is lightening?*

This is the sensation that the fetus has dropped lower and the head settles deep in your pelvis. Because the fetus isn't pressing on your diaphragm, you may feel "lighter." Lightening can happen anywhere from a few weeks to a few hours before labor begins.

#### *What is loss of the mucus plug?*

A thick mucus plug forms at the cervix during pregnancy. When the cervix begins to dilate several days before labor begins or at the start of labor, the plug is pushed into the ***vagina***. You may notice an increase in

vaginal discharge that is clear, pink, or slightly bloody. Some women expel the entire mucus plug.

### *What is the rupture of membranes?*

When the fluid-filled ***amniotic sac*** that surrounds the fetus during pregnancy breaks, it is called the rupture of membranes. This is also referred to as your "water breaking." You may feel this as fluid that trickles or gushes from your vagina. If your water breaks, call the office of your ***obstetrician-gynecologist (ob-gyn)*** or other ***obstetric care provider*** and follow their instructions.

### *What do contractions feel like?*

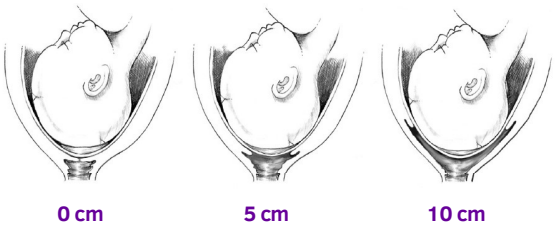
As your uterus contracts, you may feel pain in your back or pelvis. This pain may be similar to menstrual cramps. Labor contractions happen in a regular pattern and get closer together over time.

### *What are Braxton Hicks contractions?*

***Braxton Hicks contractions*** can happen for many weeks before real labor begins. These "practice" contractions can be very painful and can make you think you are in labor when you are not. You might notice them more at the end of the day.

### *How will I be able to tell the difference between "false" labor and "true" labor?*

Usually, "false" contractions are less regular and not as strong as "true" labor. Time your contractions and note whether they continue when you are resting and drinking water. If rest and hydration make the contractions go away, they are not true labor contractions. Sometimes the only way to tell the difference is by having a vaginal exam to find changes in your cervix that signal the start of labor. Table 1 lists some differences between true labor and false labor.




**The cervix during labor.** As labor begins, the cervix dilates (opens). It is measured in centimeters (cm)—from 0 cm (no dilation) to 10 cm (full dilation).

### *How will I know whether to call my provider or go to the hospital?*

If you think you are in labor (or are not sure), call your ob-gyn or other obstetric care provider. You should go to the hospital if you have any of these signs:

- Your water has broken and you are not having contractions.
- You are bleeding heavily from the vagina.
- You have constant, severe pain with no relief between contractions.
- You notice the fetus is moving less often.

### *How long does labor last?*

For a woman having her first baby, labor typically lasts 12 to 18 hours. For women who have given birth before, it typically lasts 8 to 10 hours. But every woman is different. Your labor may not be like your mother's, your sister's, or your friend's labor. It may even be different with each child you have. Even so, labor and delivery usually follow a pattern.

## Table 1: Differences Between "False" Labor and "True" Labor

| Symptom | False Labor | True Labor |
|---|---|---|
| **Timing of contractions** | Contractions are not regular. They do not get closer together. These are called Braxton Hicks contractions. | Contractions come at regular intervals. As time goes on, they get closer together. Each lasts about 60 to 90 seconds. |
| **Change with movement** | Contractions may stop when you walk or rest. They also may stop with a change of position. | Contractions continue even when you rest or move around. |
| **Strength of contractions** | Contractions are weak and do not get much stronger. They may start strong and then weaken. | Contractions steadily get stronger. |
| **Frequency of contractions** | Contractions are irregular and do not have a pattern. | Contractions have a pattern. |
| **Location of pain** | Pain usually is felt only in the front. | Pain usually starts in the back and moves to the front. |

## What to Think About Before Labor Begins

You can take steps to prepare for your labor and delivery, even if you do not know exactly when your labor will start.

### *What should I discuss with my health care team?*

Well before your due date, talk about the following with your health care team:

- The right time to call your ob-gyn or other obstetric care provider
- How to reach your doctor, provider, or nurse after office hours
- Whether to call first or go directly to the hospital
- Special steps you should take if you think labor has begun

## How should I plan my trip to the hospital?

Before labor begins, you can do the following:

- Determine how far you live from the hospital and how long it will take to get there
- Rehearse going to the hospital to get a good sense of how long it might take to get there
- Consider traffic, rush hour, and possible delays on the regular route

## What other things should I be doing?

- Pack for the hospital and leave your bag in a handy place, such as a hall closet or the trunk of your car.
- Plan for who will care for your other children, your pets, and your home when you are in the hospital.
- Make sure you have a car seat to bring home your baby, and make sure it is installed properly.
- Talk with your supervisor about who will manage your workload while you are out.

## Your Takeaways

1. Every woman's labor is different, but labor usually follows a pattern.
2. There are signs that can tell you labor is starting or close to starting.
3. There are ways to tell if you are having "false" labor or "true" labor contractions.
4. Go to the hospital if your water has broken and you are not having contractions, you are bleeding heavily, you have constant severe pain, or you notice less movement of your fetus.

## Terms You Should Know

***Amniotic Sac:*** Fluid-filled sac in a woman's uterus. The fetus develops in this sac.

***Braxton Hicks Contractions:*** False labor pains.

***Cervix:*** The lower, narrow end of the uterus at the top of the vagina.

***Hormones:*** Substances made in the body that control the function of cells or organs.

***Obstetric Care Provider:*** A health care professional who cares for a woman during pregnancy, labor, and delivery. These professionals include obstetrician–gynecologists (ob-gyns), certified nurse–midwives (CNMs), maternal–fetal medicine specialists (MFMs), and family practice doctors with experience in maternal care.

***Obstetrician–Gynecologist (Ob-Gyn):*** A doctor with special training and education in women's health.

***Uterus:*** A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus.

***Vagina:*** A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.



This is EP004 in ACOG's Patient Education Pamphlet Series.

ISSN 1074-8601

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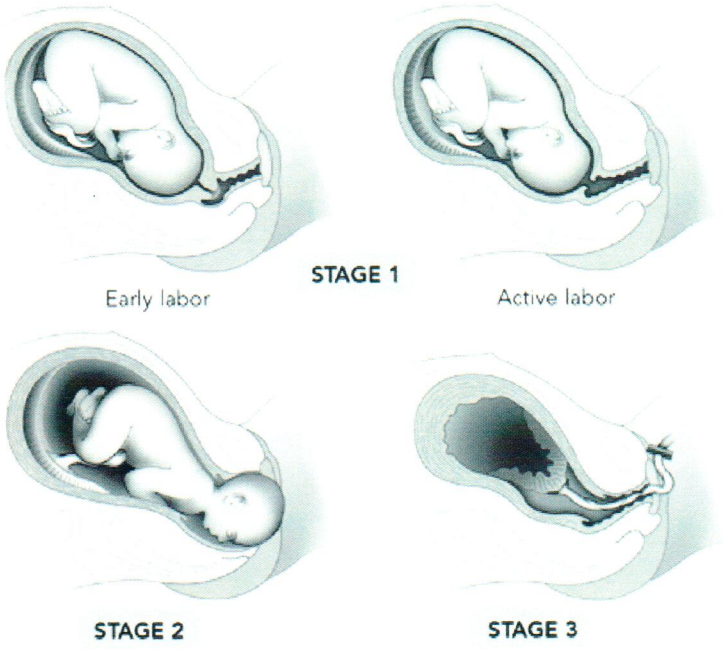



The three stages of childbirth. In Stage 1, the cervix dilates. In Stage 2, the cervix completely dilates, and the woman pushes the baby out of the vagina. In Stage 3, the placenta comes away from the uterus and is delivered.

The intensity of early labor also varies. Some women do not feel any contractions in very early labor. For others, contractions are more intense but usually are manageable.

If you are having a low-risk pregnancy, you probably will spend most of early labor at home, waiting for the contractions to get closer together. Your ob-gyn most likely will have given you instructions for when to leave for the hospital. Follow these instructions exactly. If your water breaks or if you have significant bleeding, call your ob-gyn and go to the hospital right away.

What You Can Do. During early labor, try to stay as relaxed as possible. Staying relaxed will help your cervix thin out and dilate. You may want to alternate active movements with rest. Here are some things you can do during early labor:

- Go for a walk.
- Take a shower or bath.
- Play some relaxing music.

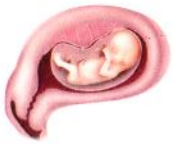
# Changes During Pregnancy

## Month 1 to 2
### Weeks 1 to 8

- The egg is fertilized by sperm and a growing ball of cells called the blastocyst implants in the uterus.
- Week 5 begins the embryo stage of development.
- The brain and spine begin to form, followed by the neural tube.
- Cardiac tissue starts to develop.
- Parts of the face take shape and the inner ear begins to develop.
- Arm and leg buds appear, and then webbed fingers and toes emerge.
- The long tube that will become the digestive tract takes shape.

By the end of week 8, the embryo is about half an inch long.

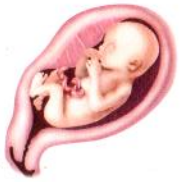
## Month 3
### Weeks 9 to 12



- Cartilage for the limbs, hands, and feet is forming but won't harden into bones for a few weeks.
- Eyelids form but remain closed.
- The head develops a rounded shape.
- Week 11 begins the fetus stage of development.
- The fetus makes breathing-like movements and swallows amniotic fluid.
- The kidneys are making urine, the pancreas is making insulin, and fingernails have formed.

By the end of week 12, the fetus is about 2 inches long and weighs about half an ounce.

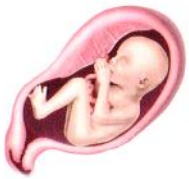
## Month 4
### Weeks 13 to 16



- By week 13, all major organs have formed and will continue to develop.
- Bones are hardening, especially the long bones.
- The skin is thin and see-through but will start to thicken soon.
- At week 14, the neck is defined, and the lower limbs are developed.
- The fetus's hearing begins to develop.
- The lungs begin to form tissue that will allow them to exchange oxygen and carbon dioxide after birth.
- Limb movements become more coordinated.

By the end of week 16, the fetus is more than 4 inches long and weighs more than 3 ounces.

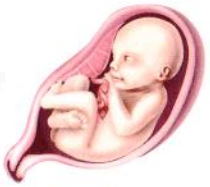
## Month 5
### Weeks 17 to 20



- At week 18, the fetus can hear sounds.
- The part of the brain that controls motor movements is fully formed.
- The digestive system is working.
- At week 19, the ears, nose, and lips may be recognizable on an ultrasound exam.
- Soft, downy hair called lanugo is starting to form all over the body.

By the end of week 20, the fetus is more than 6 inches long and weighs less than 11 ounces.

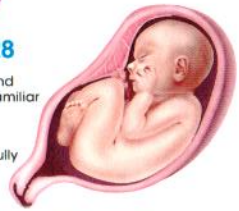
## Month 6
### Weeks 21 to 24



- The fetus's kicks and turns are stronger now.
- If the hand floats to the mouth, the fetus may suck its thumb.
- Eyebrows are visible.
- At week 23, most of the fetus's sleep time is spent in rapid eye movement (REM) sleep.
- Ridges are forming in the hands and feet that later will be fingerprints and footprints.
- The lungs continue to develop.

By the end of week 24, the fetus is about 12 inches long and weighs about 1½ pounds.

## Month 7
### Weeks 25 to 28



- The fetus can respond with movement to familiar sounds, such as your voice.
- The lungs are now fully formed but not yet ready to function outside the uterus.
- Loud sounds may make the fetus respond by pulling in arms and legs.
- The lungs begin making surfactant, a substance needed for breathing after birth.
- At 27 weeks, more fat is being added to keep the fetus warm.
- A greasy material called vernix has started to develop. Vernix acts as a waterproof barrier that protects the skin.

By the end of week 28, the fetus is nearly 15 inches long and weighs about 2½ pounds.

## Month 8
### Weeks 29 to 32

- The fetus can stretch, kick, and make grasping motions.
- The eyes can open and close and sense changes in light.
- The bone marrow is forming red blood cells.
- At week 31, major development is finished, and the fetus is gaining weight very quickly.
- In boys, the testicles have begun to descend into the scrotum.
- At week 32, the fine hair that covered the fetus's body (lanugo) begins to disappear.

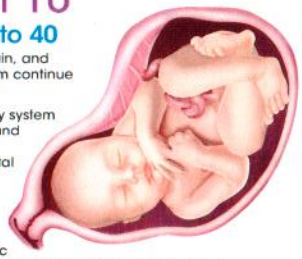
By the end of week 32, the fetus is almost 17 inches long and weighs a little more than 4 pounds.

## Month 9
### Weeks 33 to 36

- The brain is growing and developing rapidly.
- The bones harden, but the skull remains soft and flexible.
- More fat is forming under the skin.
- The fingernails have grown to the ends of the fingers.
- During week 36 or 37, most fetuses turn to a head-down position for birth.

By the end of week 36, the fetus is about 18 inches long and weighs a little more than 6 pounds.

## Month 10
### Weeks 37 to 40



- The lungs, brain, and nervous system continue to develop.
- The circulatory system is complete, and so is the musculoskeletal system.
- The fetus is taking up a lot of space in the amniotic sac and you should continue to feel movement.
- By now, the fetus's head may have dropped lower into position in your pelvis.

By the end of week 40, the fetus is 20 inches long and may weigh 7½ to 8 pounds.

## How the Uterus Grows During Pregnancy

The size of your uterus can help show how long you have been pregnant. The uterus fits inside the pelvis until week 12. By week 36, the top of the uterus is under your rib cage.


## Changes In Your Body

### The First Trimester

- Your period stops.
- Your breasts may become larger and more tender.
- Your nipples may stick out more.
- You may need to urinate more often.
- You may feel very tired.
- You may feel nauseated and may vomit.
- You may crave certain foods or lose your appetite.
- You may have heartburn or indigestion.
- You may feel bloated and have excess gas.
- You may be constipated.
- You may gain or lose a few pounds.

### The Second Trimester

- Your appetite increases and nausea and fatigue may ease.
- Your abdomen begins to expand. By the end of this trimester, the top of your uterus will be near your rib cage.
- You will begin to feel the fetus move.
- The skin on your abdomen stretches and may feel tight and itchy. You may see stretch marks.
- Your abdomen may ache on one side or the other as the ligaments that support your uterus are stretched.
- You may get brown patches, called the "mask of pregnancy," on your face.
- Your areolas, the darker skin around your nipples, may darken.
- Your feet and ankles may swell.

### The Third Trimester

- You can feel the fetus's movements strongly.
- You may be short of breath.
- You may need to urinate more often as the fetus drops and puts extra pressure on your bladder.
- Colostrum—a yellow, watery premilk—may leak from your nipples.
- Your navel may stick out.
- You may have contractions (abdominal tightening or pain). These can signal false or real labor.



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# Labor Induction

Labor is the process that leads to the birth of a baby. Labor usually starts on its own. Labor induction is the use of medications or other methods to bring on (induce) labor. More than 1 in 5 pregnant women in the United States have labor induced.

Labor may be induced for many reasons. Some medications used for induction also can be used to speed up labor that is going too slowly.

This pamphlet explains

- reasons for labor induction
- when labor is not induced
- how labor is induced
- risks of labor induction

## Reasons for Labor Induction

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 *fetus* is at risk. Some of the reasons for inducing labor include the following:

- Your pregnancy has lasted more than 41 to 42 weeks.
- You have health problems, such as problems with your heart, lungs, or *kidneys*.
- There are problems with the *placenta*.
- There are problems with the fetus, such as poor growth.
- There is a decrease in *amniotic fluid*.
- You have an infection of the uterus.
- You have *gestational diabetes* or had *diabetes mellitus* before pregnancy.
- You have chronic *hypertension*, *preeclampsia*, or *eclampsia*.
- You have *prelabor rupture of membranes (PROM)*.

Before labor is induced, your *obstetrician–gynecologist (ob-gyn)* should review the fetus's *gestational age*, how your pregnancy is going, and the possible risks for you and the fetus. With some complications, labor induction may be needed even if it means that the fetus will be born early. In these cases, the risks of continuing the pregnancy outweigh the risks of the fetus being born too early.

## Elective Reasons for Labor Induction

When you choose labor induction and you and your fetus are healthy, it is called elective induction. For example, labor may be induced at your request for reasons such as physical discomfort, a history of quick labor, or living far away from the hospital.

Labor induction may also be considered for healthy women at 39 weeks of pregnancy to reduce the chance of *cesarean birth*. Read the box "Induction at 39 Weeks."

If you are thinking about elective induction, your ob-gyn should review your records to be reasonably sure that you have reached 39 weeks of pregnancy. Most hospitals also require documentation showing you have reached 39 weeks. When you and your fetus are healthy, induction should not be done before 39 weeks.

### Induction at 39 Weeks

New research suggests that induction for healthy women at 39 weeks may reduce the chance of cesarean birth. It may also reduce the risk of preeclampsia or *gestational hypertension*. These findings apply only if:

- This is your first pregnancy.
- You are carrying only one fetus.
- You and your fetus are both healthy.

Early labor is the time when your contractions start and your *cervix* begins to open. If you have induction at 39 weeks, you should be allowed up to 24 hours or longer for the early phase of labor. You should also be given *oxytocin* at least 12 to 18 hours after stripping or sweeping of the membranes.

If labor does not progress, you may go home and can try induction again later. Or a cesarean birth may be needed.

## When Labor Is Not Induced

Some conditions may make a vaginal delivery unsafe for you or your fetus. Some of these conditions include the following:

- ***Placenta previa*** (the placenta covers the opening of the uterus)
- The fetus is lying sideways in the uterus or is in a ***breech presentation***
- Prolapsed ***umbilical cord*** (the cord has dropped down in the vagina ahead of the fetus)
- Active ***genital herpes*** infection
- Some types of previous uterine surgery, such as certain types of cesarean birth or surgery to remove ***fibroids***

In these situations, you may need a cesarean birth to protect the health of you and your fetus.

## How Labor Is Induced

There are several ways to start labor if it has not started naturally. The choice depends on several factors. These factors include your condition and the experience of your ob-gyn. Several of these methods may be used together.

### Ripening the Cervix

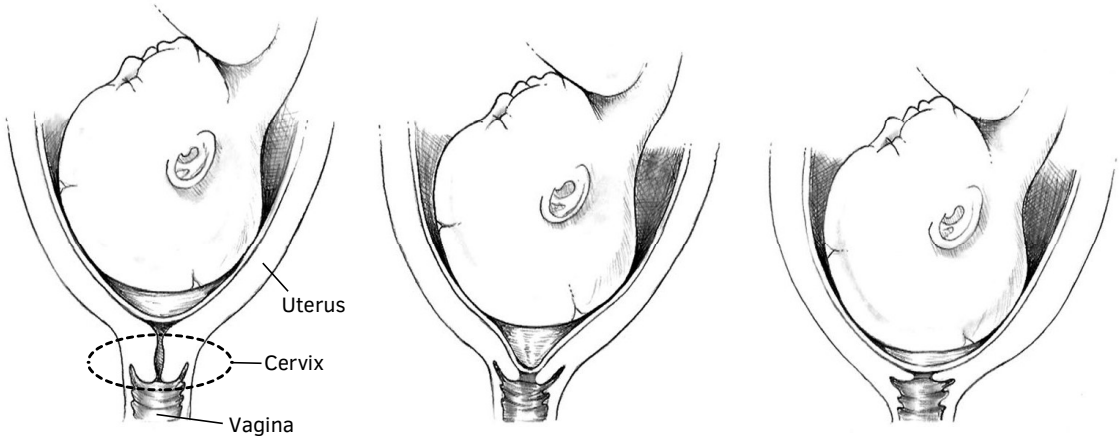
Ripening the cervix is a process that helps the cervix soften and thin out in preparation for labor. Sometimes when labor is going to be induced, the cervix is not yet "ripe" or soft. This means that labor cannot progress (read the box "Cervical Changes").

Your ob-gyn will check to see if your cervix has started this change. The Bishop score may be used to rate the readiness of the cervix for labor. With this scoring system, a number ranging from 0 to 13 is given to rate the condition of the cervix. A Bishop score of less than 6 means that your cervix may not be ready for labor. Medications or devices may be used to soften the cervix so it will stretch (dilate) for labor.

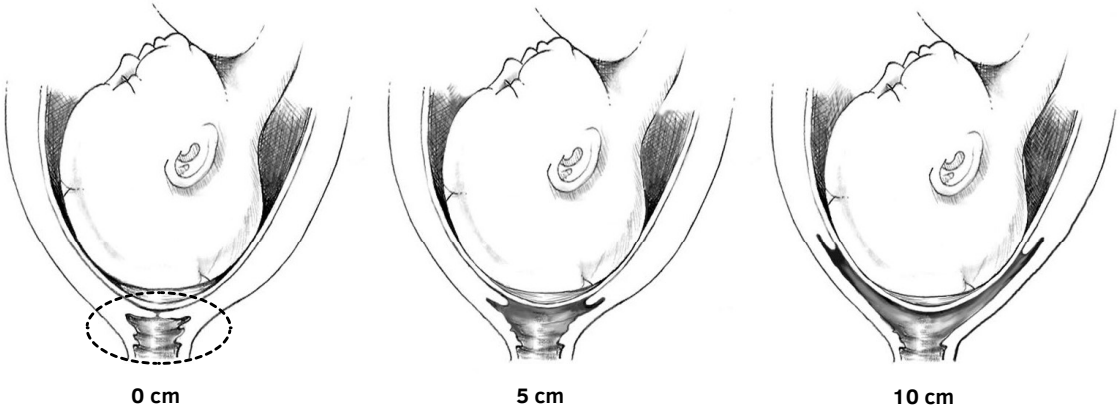
## Cervical Changes

To prepare for labor and delivery, the cervix begins to soften, thin out, and open. These changes usually start a few weeks before labor begins.

1. Ripening—the softening of the cervix so that it becomes able to stretch for labor.
2. ***Effacement***—the thinning out of the cervix. Before effacement, the cervix looks like a narrow tube about 4 centimeters long that is connected to the uterus. As the cervix becomes thinner, it shortens and pulls up toward the uterus. When effacement is complete, the cervix is part of the lower uterine wall. Effacement is measured in percentages, from 0 percent (no effacement) to 100 percent (full effacement).




3. ***Dilation***—the amount that the cervix has opened. Dilation is measured in centimeters, from 0 centimeters (no dilation) to 10 centimeters (fully dilated).



*Prostaglandins* are medications that can be used to ripen the cervix. They are forms of chemicals made naturally by the body. These medications can be inserted into the vagina or taken by mouth. Some prostaglandins are not used if you have had a previous cesarean birth or other uterine surgery to avoid increasing the possible risk of uterine rupture (tearing).

The cervix can also be widened with special dilators. For example, inserting *laminaria* (thin rods made of a substance that absorbs water) expands the cervix. A catheter (small tube) with an inflatable balloon on the end can also be inserted to widen the cervix. The balloon expands, which helps open the cervix.

These ways of ripening the cervix may be used together or one after another. You and your ob-gyn should talk about which approaches may work best for you and your cervix.

### "Stripping the Membranes"

"Stripping the membranes," also called "sweeping the membranes," is another common way to start labor. It can be done in your ob-gyn's office or in the hospital. The ob-gyn sweeps a gloved finger between the *amniotic sac* and the wall of your uterus, separating the fetal membranes from the cervix.

This action is done when the cervix is partially dilated. It may cause your body to release natural prostaglandins, which soften the cervix more and may start contractions.

### Oxytocin

Oxytocin 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. Oxytocin is given through an *intravenous (IV) line* in the arm. A pump hooked up to the IV tube controls the amount given.

Contractions usually start in about 30 minutes. Your condition, your contractions, and the fetus's heart rate will be monitored when you are given this medication.

### Rupturing the Amniotic Sac

When your water breaks, the fluid-filled amniotic sac that surrounds the baby has ruptured (burst). Most women go into labor within hours after their water breaks. If the sac hasn't burst already, breaking it can start contractions. Or if the contractions have already started, breaking the sac can make them stronger or more frequent.

To rupture the amniotic sac, an ob-gyn makes a hole in the sac with a special device. This procedure, called an *amniotomy*, may be done before or after you have been given oxytocin. Amniotomy can be done to start labor when the cervix is dilated and the baby's head has moved down into the pelvis. Most women go into labor within a few hours after the amniotic sac breaks, but sometimes oxytocin may be needed.

## Risks

There are risks with labor induction. One risk is that when oxytocin is used, the uterus may be overstimulated. This may cause the uterus to contract too often. Too many contractions may lead to changes in the fetal heart rate. If there are problems with the fetal heart rate, oxytocin may be reduced or stopped. Other treatments may be needed to steady the fetal heart rate.

Other risks of labor induction may include

- *chorioamnionitis*, an infection of the amniotic fluid, placenta, or membranes
- infection in the baby
- rupture of the uterus (rare)

Medical problems that were present before pregnancy or occurred during pregnancy may contribute to these complications. To help prevent these complications, the fetal heart rate and force of contractions may be electronically monitored during labor induction.

Sometimes labor induction doesn't work. If you and your pregnancy are doing well and the amniotic sac has not ruptured, you may be given the option to go home. You can schedule another appointment to try induction again. If your labor starts, you should go back to the hospital.

If you or your baby are not doing well during or after attempting induction, a cesarean birth may be needed. Although most cesarean births are safe, there may be additional risks for you, including

- infection
- *hemorrhage* (heavy bleeding)
- complications from *anesthesia*

The recovery time after a cesarean birth is usually longer than for a vaginal birth.

There are also considerations for future pregnancies. With each cesarean birth, the risk of serious placenta problems in future pregnancies goes up. In addition, the number of cesarean births you have had is a major factor in how you will give birth to any future babies.

## Finally...

Labor induction sometimes is necessary to protect the health of both you and your pregnancy. You and your ob-gyn should weigh the risks and benefits of labor induction compared with the risks and benefits of continuing the pregnancy. Understanding the risks and benefits allows you and your ob-gyn to make the best choice for you and your pregnancy.

## Glossary

*Amniotic Fluid:* Fluid in the sac that holds the fetus.

*Amniotic Sac:* Fluid-filled sac in a woman's uterus. The fetus develops in this sac.

*Amniotomy:* Artificial rupture (bursting) of the amniotic sac.

*Anesthesia:* Relief of pain by loss of sensation.

*Breech Presentation:* A position in which the feet or buttocks of the fetus appear first during birth.

*Cervix:* The lower, narrow end of the uterus at the top of the vagina.

*Cesarean Birth:* Birth of a fetus from the uterus through an incision (cut) made in the woman's abdomen.

*Chorioamnionitis:* A condition during pregnancy that can cause unexplained fever with uterine tenderness, a high white blood cell count, rapid heart rate in the fetus, rapid heart rate in the woman, and/or foul-smelling vaginal discharge.

*Diabetes Mellitus:* A condition in which the levels of sugar in the blood are too high.

*Dilation:* Widening the opening of the cervix.

*Eclampsia:* Seizures occurring in pregnancy or after pregnancy that are linked to high blood pressure.

*Effacement:* Thinning out of the cervix.

*Fetus:* The stage of human development beyond 8 completed weeks after fertilization.

*Fibroids:* Growths that form in the muscle of the uterus. Fibroids usually are noncancerous.

*Gestational Diabetes:* Diabetes that starts during pregnancy.

*Gestational Hypertension:* High blood pressure that is diagnosed after 20 weeks of pregnancy.

*Genital Herpes:* A sexually transmitted infection (STI) caused by a virus. Herpes causes painful, highly infectious sores on or around the vulva and penis.

*Gestational Age:* How far along a woman is in her pregnancy, usually reported in weeks and days.

*Hemorrhage:* Heavy bleeding.

***Hormone:*** A substance made in the body that controls the function of cells or organs.

***Hypertension:*** High blood pressure.

***Intravenous (IV) Line:*** A tube inserted into a vein and used to deliver medication or fluids.

***Kidneys:*** Organs that filter the blood to remove waste that becomes urine.

***Laminaria:*** Slender rods made of natural or synthetic material that expand when they absorb water. Laminaria are inserted into the opening of the cervix to widen it.

***Obstetrician–Gynecologist (Ob-Gyn):*** A doctor with special training and education in women's health.

***Oxytocin:*** A hormone made in the body that can cause contractions of the uterus and release of milk from the breast.

***Placenta:*** An organ that provides nutrients to and takes waste away from the fetus.

***Placenta Previa:*** A condition in which the placenta covers the opening of the uterus.

***Preeclampsia:*** A disorder that can occur during pregnancy or after childbirth in which there is high blood pressure and other signs of organ injury. These signs include an abnormal amount of protein in the urine, a low number of platelets, abnormal kidney or liver function, pain over the upper abdomen, fluid in the lungs, or a severe headache or changes in vision.

***Prelabor Rupture of Membranes (PROM):*** Rupture of the amniotic membranes that happens before labor begins. Also called premature rupture of membranes.

***Prostaglandins:*** Chemicals that are made by the body that have many effects, including causing the muscles of the uterus to contract, usually causing cramps.

***Umbilical Cord:*** A cord-like structure containing blood vessels. It connects the fetus to the placenta.

***Uterus:*** A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus. Also called the womb.



This is EP154 in ACOG's Patient Education Pamphlet Series

ISSN 1074-8601

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# Preeclampsia and High Blood Pressure During Pregnancy

***Hypertension*** can lead to health problems at any time in life. Hypertension (also called ***high blood pressure***) usually does not cause symptoms. During pregnancy, severe or uncontrolled high blood pressure can cause problems for you and your ***fetus***.

Some women have high blood pressure before they get pregnant. Others develop it for the first time during pregnancy. A serious high blood pressure disorder called ***preeclampsia*** can also happen during pregnancy or soon after childbirth.

You Need to Know

- what blood pressure is and how it is measured
- about ***chronic hypertension***
- about ***gestational hypertension***
- about preeclampsia

## Blood Pressure

Blood pressure is the force of blood pushing against the walls of blood vessels called ***arteries***. The arteries bring blood from the heart to your lungs, where it picks up ***oxygen*** and then moves to your organs and tissues. The organs and tissues use the oxygen to power their activities. Blood vessels called ***veins*** return the blood to the heart.

### What do the blood pressure numbers mean?

A blood pressure reading has two numbers separated by a slash. A blood pressure reading of 110/80 mm Hg, for example, is referred to as "110 over 80." The first number is the pressure against the artery walls when the heart contracts. This is called the ***systolic blood pressure***. The second number is the pressure against the artery walls when the heart relaxes between contractions. This is called the ***diastolic blood pressure***.

### What are the guidelines for blood pressure?

- Normal: Less than 120/80 mm Hg
- Elevated: Systolic between 120 and 129 mm Hg **and** diastolic less than 80 mm Hg
- Stage 1 hypertension: Systolic between 130 and 139 mm Hg **or** diastolic between 80 and 89 mm Hg
- Stage 2 hypertension: Systolic at least 140 mm Hg **or** diastolic at least 90 mm Hg

### How often should blood pressure be checked during pregnancy?

Your ***obstetrician–gynecologist (ob-gyn)*** should check your blood pressure at each ***prenatal care*** visit. Blood pressure changes often during the day. If you have one high reading, another reading may be taken later during your office visit.

## Chronic Hypertension

Chronic hypertension is high blood pressure that you have before getting pregnant or that develops in the first half of pregnancy (before 20 weeks of pregnancy). If you were taking blood pressure medication before you got pregnant—even if your blood pressure is currently normal—you have been diagnosed with chronic hypertension.

### How does chronic hypertension affect a pregnant woman?

When you are pregnant, your body makes more blood to support the fetus's growth. If blood pressure goes up during pregnancy, it can place extra stress on your heart and ***kidneys***. This can lead to heart disease, kidney disease, and ***stroke***. High blood pressure during pregnancy also increases the risk of preeclampsia, ***preterm*** birth, ***placental abruption***, and ***cesarean birth***.

### How does chronic hypertension affect a fetus?

High blood pressure may reduce blood flow to the ***placenta***. As a result, the fetus may not get enough of the ***nutrients*** and oxygen needed to grow.

### What is the treatment for chronic hypertension during pregnancy?

In the first half of pregnancy, blood pressure normally goes down. If your hypertension is mild, your blood pressure may stay that way or even return to normal during pregnancy. But if your blood pressure is 140/90 mm Hg or higher, your ob-gyn may recommend that you start or continue taking blood pressure medication during pregnancy.

## Your Blood Pressure Reading

110 = systolic = force of blood in the arteries when heart contracts

80 = diastolic = force of blood in the arteries when heart relaxes

### How will my health be monitored during pregnancy?

Your blood pressure should be checked at every prenatal care visit. You may also need to monitor your blood pressure at home. *Ultrasound exams* may be done throughout pregnancy to track the growth of the fetus. If growth problems are suspected, you may have other tests that monitor the health of the fetus. This testing usually begins in the third *trimester* of pregnancy.

### Will I need to deliver early if I have chronic hypertension?

If your condition remains stable, delivery 1 to 3 weeks before your due date (about 37 weeks to 39 weeks of pregnancy) generally is recommended. If you or the fetus develop *complications*, delivery may be needed even earlier.

### What will happen after delivery?

After delivery, you will need to keep monitoring your blood pressure at home for 1 to 2 weeks. Blood pressure often goes up in the weeks after childbirth. You may need to resume taking medication, or your medication dosage may need to be adjusted.

Talk with your ob-gyn about blood pressure medications that are safe to take if you plan to breastfeed. Do not stop any medications without talking with your ob-gyn.

## Gestational Hypertension

You have gestational hypertension when:

- You have a systolic blood pressure of 140 mm Hg or higher and/or a diastolic blood pressure of 90 mm Hg or higher.
- The high blood pressure first happens after 20 weeks.
- You had normal blood pressure before pregnancy.

Most women with gestational hypertension have only a small increase in blood pressure. But some women develop severe hypertension (defined as systolic blood pressure of 160 mm Hg or higher and/or diastolic blood pressure of 110 mm Hg or higher). These women are at risk of very serious complications.

### How will my health be monitored if I have gestational hypertension?

All women with gestational hypertension are monitored often (usually weekly) for signs of preeclampsia and to make sure that their blood pressure does not go too high.

### How does hypertension affect future health?

Although gestational hypertension usually goes away after childbirth, it may increase the risk of developing high blood pressure in the future. If you had gestational hypertension, keep this risk in mind as you take care of your health. Healthy eating, weight loss, and regular exercise may help prevent high blood pressure in the future.

## Preeclampsia

Preeclampsia is a serious disorder that can affect all the organs in your body. It usually develops after 20 weeks of pregnancy, often in the third trimester. When it develops before 34 weeks of pregnancy, it is called early-onset preeclampsia. It can also develop in the weeks after childbirth.

### What are the risk factors for preeclampsia?

It is not clear why some women develop preeclampsia. Doctors refer to "high risk" and "moderate risk" of preeclampsia. Factors that may put you in the "high risk" category include

- preeclampsia in a past pregnancy
- carrying more than one fetus (twins, triplets, or more)
- chronic hypertension
- kidney disease
- *diabetes mellitus*
- autoimmune conditions, such as *lupus* (systemic lupus erythematosus or SLE)
- having multiple moderate risk factors (see below)

Factors that may put you in the "moderate risk" category include

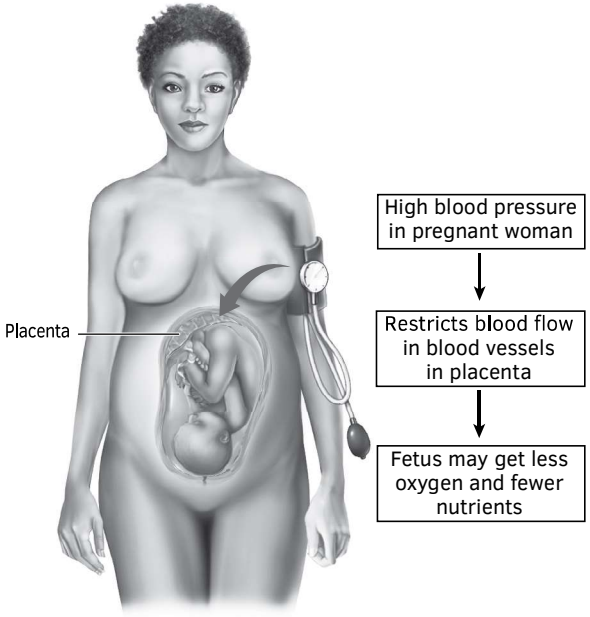
- being pregnant for the first time
- being pregnant more than 10 years after your previous pregnancy
- *body mass index (BMI)* over 30
- family history of preeclampsia (mother or sister)
- being age 35 or older
- complications in previous pregnancies, such as having a baby with a low birth weight
- *in vitro fertilization (IVF)*
- Black race (because of racism and inequities that increase risk of illness)
- lower income (because of inequities that increase risk of illness)

### How does preeclampsia affect the body?

- Preeclampsia can lead to a condition that causes seizures and stroke.
- Preeclampsia can cause *HELLP syndrome*. HELLP stands for ***h***emolysis, ***e***levated ***l***iver enzymes, and ***l***ow ***p***latelet count. HELLP syndrome damages or destroys red blood cells and interferes with blood clotting. It can also cause chest pain, abdominal pain, and bleeding in the liver. HELLP syndrome is a medical emergency. Women can die from HELLP syndrome. They can also have lifelong health problems from the condition.

### Will I need to deliver early if I have preeclampsia?

For women with preeclampsia, early delivery may be needed in some cases. Preterm babies have an increased risk of problems with breathing, eating, staying warm, hearing, and vision. Some preterm complications last a lifetime and require ongoing medical care.



### How does preeclampsia affect future health?

Women who have had preeclampsia—especially those whose babies were born preterm—have an increased risk later in life of kidney disease, heart attack, stroke, and high blood pressure. Also, having preeclampsia once increases the risk of having it again in a future pregnancy.

## Signs and Symptoms of Preeclampsia

Preeclampsia can develop quietly without you being aware of it. Symptoms can include

- swelling of face or hands
- 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

If you have any of these symptoms, especially if they develop in the second half of pregnancy, call your ob-gyn right away.

A woman with preeclampsia whose condition is worsening will develop "severe features." Severe features include

- low number of platelets in the blood
- abnormal kidney or liver function
- pain in the upper abdomen
- changes in vision
- fluid in the lungs
- severe headache
- systolic pressure of 160 mm Hg or higher **or** diastolic pressure of 110 mm Hg or higher

### How is preeclampsia diagnosed?

A high blood pressure reading may be the first sign of preeclampsia. If your blood pressure reading is high, it may be checked again to confirm the results. You may have a urine test to check for protein. You may also have tests to check how your liver and kidneys are working and to measure the number of platelets in your blood.

## Managing Preeclampsia

You and your ob-gyn should talk about how your condition will be managed. The goal is to limit complications for you and to deliver the healthiest baby possible.

### How is preeclampsia managed when there are no severe features?

Women who have gestational hypertension or preeclampsia without severe features may be treated in a hospital or as an outpatient. Being an outpatient means you can stay at home with close monitoring by your ob-gyn. You may need to keep track of your fetus's movement by doing a daily ***kick count***. You may also need to measure your blood pressure at home. Visits to your ob-gyn may be once or twice a week.

At 37 weeks of pregnancy, you and your ob-gyn may talk about delivery. Labor may be induced (started with medications). If test results show that the fetus is not doing well, you may need to deliver earlier. Women with preeclampsia can have vaginal deliveries, but if there are problems during labor, cesarean birth may be needed.

### How is preeclampsia managed when there are severe features?

If you have preeclampsia with severe features, you may be treated in the hospital. If you are at least 34 weeks pregnant, you and your ob-gyn may talk about having your baby as soon as your condition is stable.

If you are less than 34 weeks pregnant and your condition is stable, it may be possible to wait to deliver your baby. Delaying delivery for just a few days may be helpful in some cases. It allows time to give ***corticosteroids***, which can help the fetus's lungs mature. Delaying can also give you time to take medications to reduce your blood pressure and help prevent seizures. If your health or the fetus's health worsens, you and your ob-gyn should discuss immediate delivery.

## Preventing Preeclampsia

### Can preeclampsia be prevented?

Prevention involves identifying whether you have risk factors for preeclampsia and taking steps to address them.

### Does low-dose aspirin prevent preeclampsia?

Low-dose aspirin may reduce the risk of preeclampsia in some women. Your ob-gyn may recommend that you take low-dose aspirin if

- you are at high risk of developing preeclampsia
- you have two or more moderate risk factors for preeclampsia

Low-dose aspirin may also be considered if you are Black or have a low income, even if you have no other risk factors.

Talk with your ob-gyn about whether you should take aspirin. Do not start taking aspirin on your own without talking with your ob-gyn.

### What should I do if I want to get pregnant?

If you have high blood pressure and want to get pregnant, see your ob-gyn for a check-up. Your ob-gyn will want to know if your high blood pressure is under control and if it has affected your health.

You may have tests to check how your heart and kidneys are working. Your medications should be reviewed to see if you need to switch to others that are safer during pregnancy. You should also talk about the signs and symptoms of pre-eclampsia.

## Your Takeaways

1. High blood pressure during pregnancy can increase the risk of complications for you and your fetus.
2. If you have hypertension during pregnancy, you should be monitored closely for worsening high blood pressure and for preeclampsia.
3. It's important to be aware of the signs and symptoms of preeclampsia. If you have any of the symptoms, call your ob-gyn right away.
4. If you develop gestational hypertension or preeclampsia, you and your ob-gyn should work together to monitor your health and your fetus's health.

## Terms You Should Know

*Arteries:* Blood vessels that carry oxygen-rich blood from the heart to the rest of the body.

*Body Mass Index (BMI):* A number calculated from height and weight. BMI is used to determine whether a person is underweight, normal weight, overweight, or obese.

*Cesarean Birth:* Birth of a fetus from the uterus through an incision (cut) made in the woman's abdomen.

*Chronic Hypertension:* Blood pressure that is higher than normal for a person's age, sex, and physical condition.

*Complications:* Diseases or conditions that happen as a result of another disease or condition. An example is pneumonia that occurs as a result of the flu. A complication also can occur as a result of a condition, such as pregnancy. An example of a pregnancy complication is preterm labor.

*Corticosteroids:* Drugs given for arthritis or other medical conditions. These drugs also are given to help fetal lungs mature before birth.

*Diabetes Mellitus:* A condition in which the levels of sugar in the blood are too high.

*Diastolic Blood Pressure:* The force of the blood in the arteries when the heart is relaxed. It is the lower reading when blood pressure is taken.

*Fetus:* The stage of human development beyond 8 completed weeks after fertilization.

*Gestational Hypertension:* High blood pressure that is diagnosed after 20 weeks of pregnancy.

*HELLP Syndrome:* A severe type of preeclampsia. HELLP stands for hemolysis, elevated liver enzymes, and low platelet count.

*High Blood Pressure:* Blood pressure above the normal level. Also called hypertension.

*Hypertension:* High blood pressure.

*In Vitro Fertilization (IVF):* A procedure in which an egg is removed from a woman's ovary, fertilized in a laboratory with the man's sperm, and then transferred to the woman's uterus to achieve a pregnancy.

*Kick Count:* A record kept during late pregnancy of the number of times a fetus moves over a certain period.

*Kidneys:* Organs that filter the blood to remove waste that becomes urine.

*Lupus:* An autoimmune disorder that affects the connective tissues in the body. The disorder can cause arthritis, kidney disease, heart disease, blood disorders, and complications during pregnancy. Also called systemic lupus erythematosus or SLE.

*Nutrients:* Nourishing substances found in food, such as vitamins and minerals.

*Obstetrician–Gynecologist (Ob-Gyn):* A doctor with special training and education in women's health.

*Oxygen:* An element that we breathe in to sustain life.

*Placenta:* An organ that provides nutrients to and takes waste away from the fetus.

*Placental Abruption:* A condition in which the placenta has begun to separate from the uterus before the fetus is born.

*Preeclampsia:* A disorder that can occur during pregnancy or after childbirth in which there is high blood pressure and other signs of organ injury. These signs include an abnormal amount of protein in the urine, a low number of platelets, abnormal kidney or liver function, pain in the upper abdomen, fluid in the lungs, or a severe headache or changes in vision.

*Prenatal Care:* A program of care for a pregnant woman before the birth of her baby.

*Preterm:* Less than 37 weeks of pregnancy.

*Stroke:* A sudden interruption of blood flow to all or part of the brain, caused by blockage or bursting of a blood vessel in the brain. A stroke often results in loss of consciousness and temporary or permanent paralysis.

*Systolic Blood Pressure:* The force of the blood in the arteries when the heart is contracting. It is the higher reading when blood pressure is taken.

*Trimester:* A 3-month time in pregnancy. It can be first, second, or third.

*Ultrasound Exams:* Tests in which sound waves are used to examine inner parts of the body. During pregnancy, ultrasound can be used to check the fetus.

*Veins:* Blood vessels that carry blood from various parts of the body back to the heart.



This is EP034 in ACOG's Patient Education Pamphlet Series

ISSN 1074-8601

American College of Obstetricians and Gynecologists
409 12th Street SW
Washington, DC 20024-2188

PATIENT EDUCATION

The American College of Obstetricians and Gynecologists
WOMEN'S HEALTH CARE PHYSICIANS

# Gestational Diabetes

*__Diabetes mellitus__ (also called "diabetes") is a condition in which too much __glucose__ (sugar) stays in the blood instead of being used for energy. Health problems can occur when blood sugar is too high. Some women develop diabetes for the first time during pregnancy. This condition is called __gestational diabetes (GD)__. Women with GD need special care both during and after pregnancy.*

*This pamphlet explains*

- *how GD develops*
- *risk factors*
- *how GD affects a woman*
- *how GD affects a baby*
- *testing and management*
- *delivery and care after pregnancy*

## How Gestational Diabetes Develops

The body produces a __hormone__ called __insulin__ that keeps blood sugar levels in the normal range. During pregnancy, higher levels of pregnancy hormones can interfere with insulin. Usually the body can make more insulin during pregnancy to keep blood sugar normal. But in some women, the body cannot make enough insulin during pregnancy, and blood sugar goes up. This leads to GD.

GD goes away after childbirth, but women who have had GD are at higher risk of developing diabetes later in life. Some women who develop GD may have had mild diabetes before pregnancy and not known it. For these women, diabetes does not go away after pregnancy and may be a lifelong condition.

## Risk Factors

Several risk factors are linked to GD, including

- being overweight or obese
- being physically inactive
- having GD in a previous pregnancy
- having a very large baby (9 pounds or more) in a previous pregnancy
- having __high blood pressure__

- having a history of heart disease
- having ***polycystic ovary syndrome (PCOS)***

GD also can occur in women who have no risk factors.

## Who is Most Often Affected

Anyone can get GD during pregnancy. But some women are affected more than others, including women of African, Asian, Hispanic, Native American, and Pacific Island descent.

## How Gestational Diabetes Affects a Woman

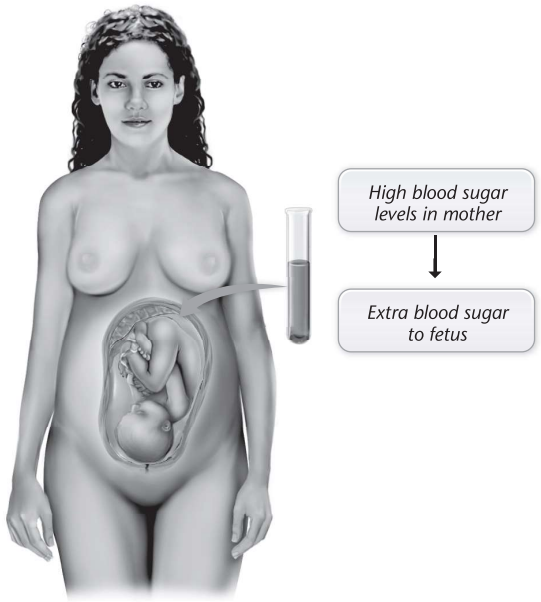
When a woman has GD, her body passes more sugar to her ***fetus*** than it needs. With too much sugar, her fetus can gain a lot of weight. A large fetus (weighing 9 pounds or more) can lead to ***complications*** for the woman, including labor difficulties, ***cesarean birth***, and heavy bleeding after delivery. In women who give birth vaginally, delivery of a large fetus can cause severe tears in the vagina and the area between the vagina and the anus.

When a woman has gestational diabetes, she also may have other conditions that can cause problems during pregnancy. For example, high blood pressure is more common in women with GD. High blood pressure during pregnancy can place extra stress on the heart and kidneys.

***Preeclampsia*** also is more common in women with GD. Preeclampsia is a condition that occurs during pregnancy or right after childbirth. A woman has preeclampsia when she has high blood pressure and other signs that her organs are not working normally. If preeclampsia occurs during pregnancy, the fetus may need to be delivered right away, even if it is not fully grown.

Women who have high blood pressure or preeclampsia during pregnancy are at greater risk of heart disease and stroke later in life. If you had high blood pressure or preeclampsia during a past pregnancy, tell your ***obstetrician–gynecologist (ob-gyn)*** so the health of your heart and blood vessels can be monitored throughout your life.

### Diabetes During Pregnancy




*When a woman has high blood sugar levels during pregnancy, her body passes more sugar to her fetus than it needs. With too much sugar, the fetus can grow too large.*

## How Gestational Diabetes Affects a Baby

Babies born to women with GD may have problems with breathing and ***jaundice***. These babies may have low blood sugar at birth. They are at increased risk of obesity as children and increased risk of diabetes as adults.

Large babies are more likely to experience birth trauma, including damage to their shoulders, during vaginal delivery. Large babies may need special care in a ***neonatal intensive care unit (NICU)***. There also is an increased risk of ***stillbirth*** with GD.

## Testing for Gestational Diabetes

All pregnant women should be screened for GD. Your ob-gyn should ask about your medical history to determine whether you have risk factors for GD. If you have risk factors, your blood sugar will be tested early in pregnancy. If you do not have risk factors or your testing does not show you have GD early in pregnancy, your blood sugar will be measured between 24 and 28 weeks of pregnancy.

## Managing Gestational Diabetes

If you have GD, you will need more frequent prenatal care visits to monitor your health and your fetus's health. You will need to track your blood sugar and do things to keep it under control. Doing so will reduce the risks to both you and your fetus. For many women, a healthy diet and regular exercise will control blood sugar. Some women may need medications to help reach normal blood sugar levels even with diet changes and exercise.

Women may see a diabetes educator or a dietitian. A diabetes educator is a health care professional who helps women develop a plan to stay healthy and gives them the tools to manage their diabetes. A dietitian is an expert in nutrition, meal planning, and helping women choose healthy food options.

Later in pregnancy, special tests of the fetus's well-being may be done. You are more likely to have these tests if your GD is not controlled, if you need to take medications to help control your blood sugar levels, or if you develop health problems during pregnancy.

### *Tracking Blood Sugar Levels*

A glucose meter is used to test blood sugar levels. This device measures your blood sugar from a small drop

of blood. Checking your blood sugar is an important tool for managing GD. For the best results, follow the schedule your ob-gyn gives you.

Keep a record of your blood sugar levels and bring it with you to each prenatal visit. Blood sugar logs also can be kept online, stored in phone apps, and emailed to your ob-gyn. Your blood sugar log will help your ob-gyn provide the best care during your pregnancy.

### *Healthy Eating*

A healthy diet is a key part of any pregnancy. Your fetus depends on the food you eat for its growth and nourishment. When women have GD, making healthy food choices is even more important to keep blood sugar from getting too high. A dietitian can help you make sure you are getting the recommended amounts of nutrients while controlling your blood sugar.

If you have GD, you should eat regular meals throughout the day. You may need to eat small snacks as well, especially at night. Eating regularly helps avoid dips and spikes in your blood sugar level. Often, three meals and two to three snacks per day are recommended.

Carbohydrates are an important part of a healthy diet. There are two types: 1) simple carbohydrates and 2) complex carbohydrates. Simple carbohydrates provide a quick energy boost because they are digested and absorbed rapidly. They are found in naturally sweet foods like fruits as well as honey, maple syrup, sugary drinks, and foods with added sugar.

Complex carbohydrates have dietary fiber and starches. It takes your body longer to process them, so complex carbohydrates provide longer-lasting energy than simple carbohydrates. Complex carbohydrates are found in whole wheat bread and pasta, brown rice, some fruits, and starchy vegetables such as potatoes and corn.

If you have GD, focus on the type of carbohydrates in your meals. Complex carbohydrates are a better choice than simple carbohydrates. Carbohydrates should make up around 40 percent of your total calories. Protein (20 percent) and fat (40 percent) should make up the rest.

The number of calories needed daily during pregnancy depends on your prepregnancy weight, stage of pregnancy, and level of activity. It is important to gain a healthy amount of weight during pregnancy. Talk with your ob-gyn about how much weight gain is best for your pregnancy. For a woman with GD, too much weight gained or weight gained too quickly can make it harder to keep blood sugar levels under control.

### *Exercise*

Exercise helps keep blood sugar levels in the normal range. You and your ob-gyn can decide how much and what type of exercise is best for you.

In general, 30 minutes of moderate-intensity aerobic exercise at least 5 days a week is recommended (or a minimum of 150 minutes per week). An aerobic activity is one in which you move large muscles of the body (like those in the legs and arms) in a rhythmic way. Moderate intensity means you are moving enough to raise your heart rate and start sweating. You still can talk normally, but you cannot sing during moderate-intensity exercise. Brisk walking is an example of this. If you have never exercised before, talk with your ob-gyn before beginning an exercise program.

Walking is a great exercise for all pregnant women. In addition to weekly aerobic exercise, it's a good idea to add a walk for 10 to 15 minutes after each meal. This can lead to better blood sugar control.

### *Medications*

For some women, medications may be needed to manage GD. Insulin is the recommended medication during pregnancy to help women control their blood sugar. Insulin does not cross the ***placenta***, so it doesn't affect the fetus. Your ob-gyn or diabetes educator should teach you how to give yourself insulin shots with a small needle. In some cases, your ob-gyn may prescribe a different medication to take by mouth.

If you are prescribed medication, you will continue monitoring your blood sugar levels as recommended. Your ob-gyn should review your glucose log to make sure that the medication is working. Changes to your medication may be needed throughout your pregnancy to help keep your blood sugar in the normal range.

### *Special Tests*

When a woman has GD, she may need special tests to check the well-being of the fetus. These tests may help your ob-gyn detect possible problems and take steps to manage them. These tests may include the following:

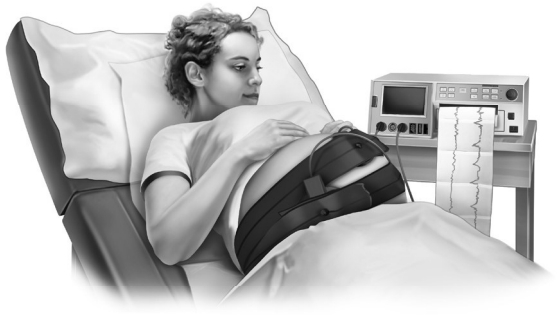
- Fetal movement counting ("kick counts")—This is a record of how often you feel the fetus move. A healthy fetus tends to move the same amount each day. You may be asked to keep track of this movement late in pregnancy. You should contact your ob-gyn if you feel a difference in your fetus's activity.
- Nonstress test—This test measures changes in the fetus's heart rate when the fetus moves. The term "nonstress" means that nothing is done to place stress on the fetus. A belt with a sensor is placed around your abdomen, and a machine records the fetal heart rate picked up by the sensor.
- Biophysical profile (BPP)—This test includes monitoring the fetal heart rate (the same way it is done in a nonstress test) and an ***ultrasound exam***. The BPP checks the fetus's heart rate and estimates the amount of ***amniotic fluid***. The fetus's breathing, movement, and muscle tone also are checked. A modified BPP checks only the fetal heart rate and amniotic fluid level.

## Delivery

Most women with controlled GD can complete a full-term pregnancy. But if there are complications with your health or your fetus's health, labor may be induced (started by drugs or other means) before the due date.

Although most women with GD can have a vaginal birth, they are more likely to have a cesarean birth than

### Nonstress Test



*A woman with gestational diabetes may have tests to check the well-being of the fetus. During a nonstress test, a belt with a sensor that measures the fetal heart rate is placed around the abdomen. The fetal heart rate is recorded by a machine.*

women without GD. If your ob-gyn thinks your fetus is too big for a safe vaginal delivery, you may discuss the benefits and risks of a scheduled cesarean birth.

## Care After Pregnancy

GD greatly increases your risk of developing diabetes in your next pregnancy and in the future when you are no longer pregnant. One third of women who had GD will have diabetes or a milder form of elevated blood sugar soon after giving birth. Between 15 percent and 70 percent of women with GD will develop diabetes later in life. If you had GD, you should have a test 4 to 12 weeks after you give birth. If your blood sugar is normal, you will need to be tested for diabetes every 1 to 3 years.

GD also increases your risk of future heart disease. If you had GD in a past pregnancy, let your ob-gyn know so your heart health can be monitored. Eating a healthy diet, limiting alcohol, staying at a healthy weight, not smoking, and getting daily exercise can help you maintain heart health. A heart-healthy diet

- stresses vegetables, fruits, beans, and low-fat dairy products
- includes fish and poultry
- limits red meat, sodium, and sugary foods and drinks

Children of women who had GD may be at risk of becoming overweight or obese during childhood. These children also have a higher risk of developing diabetes. Be sure to tell your baby's doctor that you had GD so your baby can be monitored. As your baby grows, his or her blood sugar levels should be checked throughout childhood.

## Finally…

GD can increase the risk of problems during pregnancy. Blood sugar control, a healthy diet, exercise, and medication (if needed) can lower these risks. Women with GD will need follow-up tests for diabetes beginning 4 to 12 weeks after giving birth and then every 1 to 3 years. You can improve your future health by losing your pregnancy weight, eating healthy foods, and getting regular exercise. These efforts will decrease your risk of getting diabetes in the future.

## Glossary

***Amniotic Fluid:*** Fluid in the sac that holds the fetus.

***Cesarean Birth:*** Birth of a fetus from the uterus through an incision (cut) made in the woman's abdomen.

***Complications:*** Diseases or conditions that happen as a result of another disease or condition. An example is pneumonia that occurs as a result of the flu. A complication also can occur as a result of a condition, such as pregnancy. An example of a pregnancy complication is preterm labor.

***Diabetes Mellitus:*** A condition in which the levels of sugar in the blood are too high.

***Fetus:*** The stage of human development beyond 8 completed weeks after fertilization.

***Gestational Diabetes (GD):*** Diabetes that starts during pregnancy.

***Glucose:*** A sugar in the blood that is the body's main source of fuel.

***High Blood Pressure:*** Blood pressure above the normal level. Also called hypertension.

***Hormone:*** A substance made in the body that controls the function of cells or organs. Insulin: A hormone that lowers the levels of glucose (sugar) in the blood.

***Insulin:*** A hormone that lowers the levels of glucose (sugar) in the blood.

***Jaundice:*** A buildup of bilirubin (a brownish yellow substance formed from the breakdown of red cells in the blood) that causes the skin to have a yellowish appearance.

***Neonatal Intensive Care Unit (NICU):*** A special part of a hospital in which sick newborns receive medical care.

***Obstetrician-Gynecologist (Ob-Gyn):*** A doctor with special training and education in women's health.

***Placenta:*** An organ that provides nutrients to and takes waste away from the fetus.

***Polycystic Ovary Syndrome (PCOS):*** A condition that leads to a hormone imbalance that affects a woman's monthly menstrual periods, ovulation, ability to get pregnant, and metabolism.

***Preeclampsia:*** A disorder that can occur during pregnancy or after childbirth in which there is high blood pressure and other signs of organ injury. These signs include an abnormal amount of protein in the urine, a low number of platelets, abnormal kidney or liver function, pain over the upper abdomen, fluid in the lungs, or a severe headache or changes in vision.

***Stillbirth:*** Birth of a dead fetus.

***Ultrasound Exam:*** A test in which sound waves are used to examine inner parts of the body. During pregnancy, ultrasound can be used to check the fetus.



This is EP177 in ACOG's Patient Education Pamphlet Series.

ISSN 1074-8601

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## Breastfeeding Positions

Finding a good position will help the baby latch on. It also will help you relax and be comfortable. Use pillows or folded blankets to help support the baby.

- **Cradle Hold**—Sit up as straight as you can and cradle your baby in the crook of your arm. The baby's body should be turned toward you and the belly should be against yours. Support the head in the bend of your elbow so the baby is facing your breast.

- **Cross-Cradle Hold**—As in the cradle hold, nuzzle your baby's belly against yours. Hold the baby in the arm opposite the breast you are using to nurse. For instance, if the baby is nursing from your right breast, hold him or her with your left arm. Place the baby's bottom in the crook of your left arm and support the baby's head and neck with your left hand. This position gives you more control of the baby's head. It's a good position for a newborn who is having trouble nursing.

- **Football Hold**—Tuck your baby under your arm like a football. Hold the baby at your side, level with your waist, so the baby is facing you. Support the baby's back with your upper arm and hold the head level with your breast.

- **Side-Lying Position**—Lie on your side and nestle your baby next to you. Place your fingers beneath your breast and lift it up to help your baby reach your nipple. Rest your head on your lower arm. You may want to tuck a pillow behind your back to help hold yourself up. This position is good for night feedings. It's also good for women who had a ***cesarean birth*** because it keeps the baby's weight off your belly and incision.

# My Postpartum Care Checklist

The postpartum period—the 12 weeks following the birth of a child—is an important time for your health. As you recover from childbirth and learn to care for your baby, your postpartum checkups will help make sure you are

- healing physically, mentally, and emotionally
- feeling good about your health and your baby's care
- feeling that you can ask for help if you need it

Use this checklist to keep track of the things you want to talk about with your obstetrician–gynecologist (ob-gyn).

## My Self-Care

- ❑ I am not getting enough sleep and rest
- ❑ I have enough support at home but would like more help
- ❑ I do not have enough support at home

## My Health and Lifestyle

- ❑ I would like to learn more about healthy eating and exercise
- ❑ I have questions about managing my health conditions (such as high blood pressure, diabetes)
- ❑ I want to stop smoking and need help
- ❑ I would like to drink less alcohol and need help
- ❑ I need help with my drug use
- ❑ I am concerned about keeping myself and my family safe

# What I Tell My Pregnant and Postpartum Patients About Depression and Anxiety

As an ob-gyn and psychiatrist, I talk with patients about mental health conditions and treatment options.
Dr. Nazanin E. Silver

Pregnancy and childbirth can be a vulnerable time in your life. You may experience depression and anxiety while you are pregnant or after you give birth. And you may not be sure how to get the help that you need to cope with these common challenges.

Treatment is available, and it can make all the difference for you and your baby. As an ob-gyn and a women's behavioral health psychiatrist, I help patients struggling with mental health conditions. I see their lives turn around with treatment.

Here is what I wish everyone knew about depression and anxiety during and after pregnancy—including when, why, and how to find the help you need.

Learning to watch for symptoms is key.

Mental health changes are very common during and after pregnancy. One in five pregnant or postpartum women experience depression, anxiety, or scary thoughts. It helps to understand what signs to look out for.

People with anxiety may often feel worried about everyday situations. They may have racing thoughts and a feeling that something very bad is about to happen. They may experience trembling, tense muscles, sweating, and nausea.

People with depression may feel sad and lose their interest and enjoyment in daily activities. They may feel hopeless, worthless, lose motivation, and think about wanting to die or hurt themselves.

Both anxiety and depression can cause irritability, trouble sleeping, and poor concentration.

Treatment can help you and your baby.

If you think you may have anxiety or depression, finding help is one of the most important things you can do for yourself and your family. Treating mental health conditions can help you be healthier and feel better. Treatment also can help you have a healthier pregnancy, help you take better care of your baby, and improve the long-term health of you and your child.

Seeking treatment for depression or anxiety while you're pregnant can prevent problems that might arise if you don't get treatment. When your mental health improves, you may have a lower risk of preterm birth, having a baby with low birth weight, or experiencing poor mother-baby bonding.

There are several treatment options. They all start with a conversation.

Talk about how you are feeling with your ob-gyn or primary care doctor. Your doctor may offer treatment options or refer you to a psychiatric specialist.

Treatment for anxiety and depression can involve medication and therapy. Medications can be taken even while pregnant and breastfeeding. You and your doctor should talk together about treatment options and the best path for you. Support groups and community resources may help too.

You can get through this. Help is within reach.

It can be hard to seek help when you are hurting and vulnerable. Any step you can take to get help can have life-changing results for you and your entire family.

One helpful resource is Postpartum Support International. They offer emotional support resources both during and after pregnancy. Reach out to their helpline via phone call or text (800-944-4773). They host online support group meetings and weekly Chat With an Expert phone sessions on Wednesdays. You also can contact the National Suicide Prevention Lifeline at 800-273-8255 or use their live online chat.

Remember, depression and anxiety are real and very treatable conditions. You do not have to suffer in silence.

Published: November 2021

Last reviewed: November 2021



About the Author

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# Postpartum Depression

- What are the baby blues?

  About 2–3 days after childbirth, some women begin to feel depressed, anxious, and upset. They may feel angry with the new baby, their partners, or their other children. They also may:
  - Cry for no clear reason
  - Have trouble sleeping, eating, and making choices
  - Question whether they can handle caring for a baby

  These feelings, often called the baby blues, may come and go in the first few days after childbirth.

- How long do the baby blues usually last?

  The baby blues usually get better within a few days or 1–2 weeks without any treatment.

- What is postpartum depression?

  Women with postpartum depression have intense feelings of sadness, anxiety, or despair that prevent them from being able to do their daily tasks.

- When does postpartum depression occur?

  Postpartum depression can occur up to 1 year after having a baby, but it most commonly starts about 1–3 weeks after childbirth.

- What causes postpartum depression?

  Postpartum depression is probably caused by a combination of factors. These factors include the following:

  - Changes in hormone levels—Levels of estrogen and progesterone decrease sharply in the hours after childbirth. These changes may trigger depression in the same way that smaller changes in hormone levels trigger mood swings and tension before menstrual periods.
  - History of depression—Women who have had depression at any time—before, during, or after pregnancy—or who currently are being treated for depression have an increased risk of developing postpartum depression.
  - Emotional factors—Feelings of doubt about pregnancy are common. If the pregnancy is not planned or is not wanted, this can affect the way a woman feels about her pregnancy and her fetus. Even when a pregnancy is planned, it can take a long time to adjust to the idea of having a new baby. Parents of babies who are sick or who need to stay in the hospital may feel sad, angry, or guilty. These emotions can affect a woman's self-esteem and how she deals with stress.
  - Fatigue—Many women feel very tired after giving birth. It can take weeks for a woman to regain her normal strength and energy. For women who have had their babies by cesarean birth, it may take even longer.
  - Lifestyle factors—Lack of support from others and stressful life events, such as a recent death of a loved one, a family illness, or moving to a new city, can greatly increase the risk of postpartum depression.

- If I think I have postpartum depression, when should I see my health care provider?

  If you think you may have postpartum depression, or if your partner or family members are concerned that you do, it is important to see your obstetrician–gynecologist (ob-gyn) or other health care professional as soon as possible. Do not wait until your postpartum checkup.

- How is postpartum depression treated?

  Postpartum depression can be treated with medications called antidepressants. Talk therapy is also used to treat depression, often in combination with medications.

- What are antidepressants?

  Antidepressants are medications that work to balance the chemicals in the brain that control moods. There are many types of antidepressants. Drugs sometimes are combined when needed to get the best results. It may take 3–4 weeks of taking the medication before you start to feel better.

- Can antidepressants cause side effects?

  Antidepressants can cause side effects, but most are temporary and go away after a short time. If you have severe or unusual side effects that get in the way of your normal daily habits, notify your ob-gyn or other health care professional. You may need to try another type of antidepressant. If your depression worsens soon after starting medication or if you have thoughts of hurting yourself or others, contact your health care professional or emergency medical services right away.

- Can antidepressants be passed to my baby through my breast milk?

  If a woman takes antidepressants, they can be transferred to her baby during breastfeeding. The levels found in breast milk generally are very low. Breastfeeding has many benefits for both you and your baby. Deciding to take an antidepressant while breastfeeding involves weighing these benefits against the potential risks of your baby being exposed to the medication in your breast milk. It is best to discuss this decision with your ob-gyn or other health care professional.

- What happens in talk therapy?

  In talk therapy (also called psychotherapy), you and a mental health professional talk about your feelings and discuss how to manage them. Sometimes, therapy is needed for only a few weeks, but it may be needed for a few months or longer.

- What are the types of talk therapy?

  You may have one-on-one therapy with just you and the therapist or group therapy where you meet with a therapist and other people with problems similar to yours. Another option is family or couples therapy, in which you and your family members or your partner may work with a therapist.

- What can be done to help prevent postpartum depression in women with a history of depression?

  If you have a history of depression at any time in your life or if you are taking an antidepressant, tell your ob-gyn or other health care professional early in your prenatal care. Ideally, you should tell him or her before you become pregnant. He or she may suggest that you begin treatment right after you give birth to prevent postpartum depression. If you were taking antidepressants before pregnancy, your ob-gyn or other health care professional can assess your situation and help you decide whether to continue taking medication during your pregnancy.

- What support is available to help me cope with postpartum depression?

  Support groups can be found at local hospitals, family planning clinics, or community centers. The hospital where you gave birth or your health care professional may be able to assist you in finding a support group. Useful information about postpartum depression can be found on the following websites:

  - National Women's Health Information Center https://www.womenshealth.gov/mental-health/mental-health-conditions/postpartum-depression
  - Medline Plus http://www.nlm.nih.gov/medlineplus/postpartumdepression.html

## If you have further questions, contact your ob-gyn.