

A pregnant woman with long dark hair, wearing a light-colored cardigan over a white top, is shown in profile from the waist up. She is smiling and gently holding her pregnant belly with both hands. The background is a bright, out-of-focus window with white curtains.

# great expectations

A Cooper Guide for Pregnancy,  
Childbirth and Your New Baby

 **Cooper**  
University Health Care

# Congratulations and Welcome

*We share your joy and excitement at this special time in your life. Our skilled and caring Cooper team will work with you to make this the most healthful, comfortable and rewarding experience possible.*

One of the most important journeys in your life has begun. We feel truly honored to be a part of this thrilling new chapter as you progress through your pregnancy, through childbirth, and beyond. You have chosen a team of the most highly skilled OB-GYN physicians, nurses and support services anywhere.

We are committed to comprehensive, personalized, sensitive care, from the management of pregnancy and delivery to childbirth and infant care. As part of a major academic medical center, we offer women and infants the widest array of clinical services available in South Jersey. Innovative diagnosis and treatment options, access to cutting-edge research and protocols, and an interdisciplinary approach to obstetric and gynecologic conditions are only a few of the important medical advantages that OB-GYN care at Cooper has to offer.

Our group encourages your active participation in the planning of your labor and delivery. This is your unique pregnancy, and we want you to feel involved with each and every decision along the way. If you have questions or special requests, please let us know. We encourage you to take part in childbirth education programs which prepare prospective parents for the many possibilities which can occur during labor, delivery, and postpartum care.

Prenatal care is provided by our OB-GYN attending physicians and OB-GYN residents. The physicians and residents in our group rotate coverage for our patients who are in the hospital. It is possible that any one of our physicians could deliver your baby. You have the opportunity to be seen by the same physician at each appointment, or you can meet each physician in the group during your prenatal care by requesting appointments with them.



# Some basics to remember during your pregnancy.

*Your Cooper team is there for you every step of the way.*

## Office Visits

During each prenatal visit, we will check your weight, blood pressure, urine, and size of your abdomen. We will also always check your baby's heart rate. You will have an appointment every two weeks until 26 weeks, then weekly until you deliver — unless you are high-risk or problems arise during pregnancy.

## Calling the Office

For all non-emergency phone calls, we ask that you call the office during routine office hours. Our staff is able to answer many questions. If the nurse is unable to answer your question, she will speak to the doctor and then return your call as soon as possible.

We strive to provide you with quality care that meets your needs. If we fail to meet your needs, please discuss your feelings with your doctor or any other staff member. Your comments are always welcome.

## Emergency Calls

If you experience an emergency during your pregnancy, please contact your home office and ask the operator to page the OB-GYN resident on call. The practitioner will return your call promptly. If you are unable to reach a doctor, call the hospital at **856.342.2000** and ask to be connected to Labor and Delivery.

## Your Due Date

We cannot predict for you exactly when your labor will begin. We know that most babies gestate, or grow in the womb, for 280 days or 40 weeks. We begin counting days from the date you started your last menstrual period. Your due date is an estimate based on those figures. It is considered perfectly normal for you to deliver two weeks before or two weeks after your due date. When we talk to you about the length of your pregnancy, we will always refer to the number of weeks of gestation you have completed.



# Childbirth and family education.

*Cooper classes help you feel more confident. We can help your family be an important part of your experience.*

Cooper University Health Care's department of Maternal Child Health is committed to keeping you well informed during your pregnancy. Educational programs have been designed to help you make the best decisions for you and your baby. All of our educational classes will enhance your birthing experience and assist you in becoming comfortable with the hospital setting and personnel. In addition, the skills and knowledge you gain from our classes help you manage the many changes that come with being a new parent.



## Childbirth Preparation Classes

Childbirth preparation classes are designed to increase your knowledge of the labor and delivery experience. They will also increase your confidence and assist you in making choices that provide the best care for you and your infant during this time. Topics include the stages of labor, comfort measures, care after delivery, and how to care for yourself and your new baby. Classes are taught by Cooper staff so that you will see familiar faces when you come in to deliver. We recommend you take this class early in the last trimester of your pregnancy.

## Scheduling a Tour

Our nurses offer a semi-private tour of the Labor and Delivery and Mother Infant Units, so you can see firsthand Cooper's home-like birthing rooms and mother-infant suites. This will help you and your family feel comfortable with the Cooper birthing environment and will familiarize you with



our policies and procedures. Free tours are available to expectant parents and those family members who will offer support during your stay at Cooper, or to families who are planning a future pregnancy.

## Breastfeeding: An Introduction

Your body is the perfect place for your baby to grow and thrive during pregnancy and after delivery. Breastmilk is nutrition that only you can provide your baby, and the benefits are numerous for both of you. The American Academy of Pediatrics

recommends exclusive breastfeeding for the first six months of life and as desired by the mother and infant, until one year of age or longer. Exclusive breastfeeding during the post-partum period and beginning with the first two hours after delivery ensures your body receives optimal stimulation for a milk supply that is always adequate for your baby. Cooper's breastfeeding class is designed to educate and foster your confidence on the skills needed to successfully breastfeed your baby. Classes are taught by a board certified lactation consultant or certified as breastfeeding peer counselor.

## Baby 101: An Introduction to Newborn Care, Characteristics, and Safety

Baby 101 reviews the basics in baby care to help expectant parents feel more confident as they transition into parenthood. Learn about dressing, feeding, diapering, bathing, comforting, and calming your baby. There is also discussion on car seats including how Cooper ensures your new baby is safe for their trip home from the hospital.

## Breastfeeding Support

Breastfeeding may seem challenging to the first-time mother. It may take four to six weeks or more to feel comfortable and confident when breastfeeding your baby. Please discuss your needs for on-going lactation care with your lactation consultant or nurse during your post-partum stay so an outpatient appointment can be made to continue supporting your breastfeeding efforts.

All educational classes and tours require registration which can be found at [events.cooperhealth.org](https://events.cooperhealth.org).

# What you need to know about your diet.

*Making healthy choices can become a rewarding new way to eat.*

One of the best safeguards for you and your baby during pregnancy is eating a good diet. Being selective about what you eat, or choose not to eat, is one of the most powerful and easy ways to have a healthy pregnancy. Eating habits are a matter of personal taste and style.

It's important for you to eat a variety of foods that meet your nutritional needs without exceeding your caloric needs.

A woman of ideal weight should gain 24 to 32 pounds during her pregnancy.

During the first 13 weeks, a weight gain of 3 to 5 pounds is expected, and then ½ to 1 pound per week thereafter. If you are above or below the ideal weight, please talk to your doctor so that you can set weight-gain goals.

## Some Healthful Hints

- Eat to satisfy your appetite. Don't consistently feel hungry. Drink plenty of liquids. Six to eight glasses of water per day is recommended.
- Eat a variety of foods every day.
- Keep your food as wholesome and unprocessed as possible. For example, choose fresh fruits and vegetables and whole grain breads and cereals. Try to avoid food that contains artificial additives and colorings.
- Snacks that are high in protein and high in nutrition are almost always necessary for you to achieve the recommended daily allowance of essential nutrients.
- Limit high calorie, low nutrient drinks, such as sodas and sweetened drinks.

## Prenatal Vitamins

We recommend that you take a prenatal vitamin during pregnancy. These vitamins are a dietary supplement and should never replace a healthy, well-balanced diet. You and your baby need protein, carbohydrates, fats, and calories each day to ensure proper growth.

## Fish

Fish provides plenty of protein and vitamins and is also low in fat. Most fish are good choices for a healthy diet. Swordfish, shark, mackerel, tile, and tuna fish, however, can contain potentially high levels of mercury and should be avoided. Mercury can be transferred to a growing fetus and cause health problems.

The U.S. Food and Drug Administration has advised pregnant women to eat no more than 12 ounces of cooked fish or canned tuna (typical serving is 3 to 6 ounces) a week, and to avoid raw fish and shellfish such as oysters and clams.



## Artificial Sweeteners

Aspartame is a common artificial sweetener. It is used in many soft drinks and is sold under the name Nutrasweet® or Equal®. Current studies have not shown aspartame to cause any problems with fetal development. Sucralose (sold as Splenda®) is a sugar substitute with no calories. The FDA has no restrictions on the use of Sucralose during pregnancy and when nursing your baby. It may be used in moderation in pregnancy.

## Caffeine

The relationship between high consumption of caffeine during pregnancy and birth defects is not known. It is best to limit your intake of coffee, tea, cola beverages, or chocolate during pregnancy. A cup of coffee in the morning is probably not harmful; however, frequent caffeinated drinks during the day may be too much. Caffeine may also cause you to have trouble sleeping.

## Toxoplasmosis

Toxoplasmosis is a disease caused by a common organism found in our environment.

If you become infected for the first time during pregnancy, it can have serious consequences for your baby. For that reason, we suggest you use some simple precautions. Do not eat raw or under-cooked meat and avoid venison (deer meat). Meat should be safe if it has been frozen before cooking. In addition, you should not handle cat litter at all.

Wash your hands with soap and water after handling your pets.

# Important guidelines for your baby's safety, and yours too.

*Protecting that precious little life is your top priority.*

## Medications

Almost all medications that you take during pregnancy cross the placental barrier.

That means that your baby also comes into contact with the medicine. It is best to avoid medicines during pregnancy, although we know that this is not always possible. A list of common problems and suggested remedies is on page 10. Try non-medicine remedies first. To the best of our knowledge, the medicines listed are safe, but warnings about "use in pregnancy" are listed in each medication's insert. Use only the medicines we suggest. Take the medicine as directed on the package. Never use old prescription medicines or medicines that have expired.

## Smoking

Smoking is harmful to the well-being of your baby and can inhibit the baby's growth. The nicotine in cigarettes makes the fetal heart rate speed up and interrupts the baby's respiratory movements, which are the baby's way of rehearsing for breathing. Nicotine makes the blood vessels in the placenta constrict so that less oxygen and fewer nutrients reach the baby. Smokers have a higher risk of miscarriage, babies who die of Sudden Infant Death Syndrome (SIDS), pre-term delivery, and delivery of a low birthweight baby. There will never be a better time for you to quit smoking than now! You should also avoid being in a smoke-filled room. Once your baby arrives it is important that your child not be exposed to smoke-filled rooms.

## Alcohol

Drinking alcohol can negatively affect your baby's development. Use of alcohol, including beer and wine, should be eliminated during pregnancy.

## Dental Care

If you visit your dentist during your pregnancy, be sure he or she knows that you are pregnant. Many dental procedures may be done during pregnancy. Local anesthetics such as Novocaine® and Lidocaine® may be used. X-rays are fine with a shield.

## Sex

Unless you are told otherwise, you may have intercourse during your pregnancy until labor begins. Pregnant women can safely have orgasms. A small amount of spotting after intercourse may occur and is no reason for alarm. If you should have bleeding or leakage of water from your vagina, please let us know. If you have cramping and irregular contractions after intercourse, using a condom may be



helpful. Human semen contains hormones that can cause contractions. Most couples experience some changes in their sexual patterns or drive during pregnancy. More than ever, mutual understanding and open communication is important. You may need to explore new ways of pleasing each other.

## Travel

Common sense when you travel will be your best guide. If you are traveling a long distance, your comfort level will increase if you stretch, walk, and empty your bladder every two hours. Air travel is fine, but some airlines require written permission from your doctor if you are flying during your last trimester. During the last month of your pregnancy, it might be wise to stay near home. If you have had any complications during your pregnancy or have risk factors for complications you should discuss your travel plans with your doctor before your plans are finalized.

## Automobile Safety

Wearing a seat belt greatly lowers your chance of serious injury or death in an automobile accident. You should fasten the lower strap of the seat belt across your upper thighs and underneath your abdomen. The shoulder part of the seat belt should be placed between your breasts.

# Activity, fitness, and exercise.

*You'll have lots more energy if you exercise every day.*

Most of your normal daily activities can be done throughout your pregnancy. If you run or jog on a regular basis, there is no need to stop. You will notice that you tire easily and are more prone to losing your balance. Therefore, skating, skiing, horseback riding, or any activity that could cause you to fall should not be done.

Exercise helps improve posture, enhances circulation, alleviates minor discomfort and reduces the stress of labor. Due to some of the normal physical changes of pregnancy, certain movements or positions are discouraged.

Please refer to the guidelines listed on the following pages. And remember, during exercise your heart rate should not rise above 140 beats per minute.

## Body Changes During Pregnancy:

### *Center of gravity shifts forward and downward*

#### Recommendations:

- Keep all motion smooth and slow.
- Use good posture (stand tall, tilt pelvis back and knees slightly bent).
- Do not wear high heels.
- Avoid activities that may cause you to lose your balance.

### *Hormonal changes soften ligaments and may lead to joints being strained*

#### Recommendations:

- Do exercises that are free of sudden or exaggerated motions.

- Do not do momentum swinging exercises.
- Never push or pull with hands to separate legs.

### *Sciatic nerve irritation*

#### Recommendations:

- Lie on your side with top leg raised with a pillow.
- Never swing your extended leg out to the side.

### *Abdominal muscles stretch (or separate down the center)*

#### Recommendations:

- When exercising one leg, always stabilize pelvis by placing the other foot on the floor.
- No exercise should increase the forward curve of the lower spine.
- Do not do sit ups or sit backs all the way to the floor.

## Recommended Daily Exercises:

### *Pelvic tilt*

Lie on the floor with knees bent. Inhale.

While exhaling flatten your back against the floor so that there is no space between your back and the floor. Tighten abdominal and buttock muscles as you flatten your back. Repeat 10 times twice daily.

### *Kegel*

Slowly tighten your pelvic muscles and hold. Release the muscles slowly. Repeat 50-100 times a day. A good way to tell if you are performing this correctly is to tighten the muscles as you urinate. If you can stop the flow of urine, you are tightening the correct muscles.

### *Walking*

Half to one mile each day.

### *Prenatal yoga*

If you are in your second or third trimester of pregnancy you can increase your flexibility, focus, strength, and awareness through yoga practice using postures, breathing, and meditation. Yoga can improve both your pregnancy and your birthing experience, and help you to get back in shape after delivery. Check out our Prenatal Yoga classes at Cooper. And, as always, be sure to ask your doctor before starting any exercise program while you are pregnant.



# Some discomforts you may experience.

*Your changing body can present you with new and different challenges.*

Your body is constantly changing during pregnancy. The changes are both wonderful and, at times, uncomfortable. Common sense will always be your best guide to treating the normal aches and pains of pregnancy. If you are hungry, eat. If you are tired, rest. The suggestions below are general guidelines you may follow in handling some of these discomforts.

## Nausea and Vomiting

**CAUSES:** Slowing of digestion. Increased hormone levels.

**SUGGESTED TREATMENT:** Eat small, non-spicy meals. Try crackers and toast. Keep small amounts of food in your stomach—avoid becoming too empty or too full. Sip carbonated drinks. Do not eat fatty, fried or highly spicy foods.

## Indigestion and Heartburn

**CAUSES:** Increased level of stomach acid. Slowing of digestion.

**SUGGESTED TREATMENT:** Avoid eating spicy or hard to digest foods. Eat frequent small meals. Avoid lying down for two hours after eating. If symptoms are worse at night, try to eat supper earlier and do not eat any after-dinner snacks. Sipping a few ounces of milk may help. If the above measures fail, try Maalox®, Mylanta®, Riopan®, or Tums®. You may also take over-the-counter acid-reducing medications such as Pepcid AC®, or Tagamet®. Take as directed on the package. You should avoid Pepto-Bismol®. Pain in your right upper abdomen that does not go away with these suggested treatments should be reported to your doctor right away.

## Constipation

**CAUSES:** Increased hormone levels cause the bowel to relax. Slow digestion. Pressure from the uterus.

**SUGGESTED TREATMENT:** Drink lots of fluids, especially fruit juices. Increase the fiber in your diet by eating fresh fruit, vegetables, bran and whole grain. Eating dried fruits or drinking prune juice may help. If these measures fail and your stools are very hard, stool softeners such as Colace® or Surfak®, may be taken as directed on the label. Bulk agents such as FiberCon®, Metamucil®, and Konsyl® are also safe.

## Bleeding Gums

**CAUSES:** Hormone changes.

**SUGGESTED TREATMENT:** Keep up your normal routine of brushing and flossing teeth. You may want to change to a soft bristle brush.

## Hemorrhoids

**CAUSES:** Straining during bowel movements. Pressure from the uterus on veins in the rectum.

**SUGGESTED TREATMENT:** Prevent constipation. Soak in a tub of warm water several times a day. When possible, try to keep hemorrhoid tissue inside the rectum, behind the anal sphincter. This can often be done by gently pressing with a soapy/finger during baths, or after bowel movements with Vaseline® or KY Jelly®. Apply Cortaid Cream® after each bowel movement. Anusol®, Wyanooids® cream or suppositories, and Tucks® are all available without a prescription at most drug stores.

## Needing to Urinate Often

**CAUSES:** Enlarged uterus pressing on bladder.

**SUGGESTED TREATMENT:** If you are frequently awakened in the middle of the night because of the need to urinate, avoid drinking fluids two to three hours before bedtime. If you have burning upon urination, cloudy urine, blood in your urine, fever or have back pain, contact your doctor.



## Swelling of Hands/Feet

**CAUSES:** Hormone changes. Growing uterus. Decrease in circulation.

**SUGGESTED TREATMENT:** Do not eat salty foods. Increase your daily intake of protein (meats, eggs, dairy, nuts, and beans). Most importantly, increase the time you lie down so that the extra fluid can be reabsorbed. If headache or changes in vision occur with this swelling during the first three months of the pregnancy, call your doctor.

## Common Cold

**CAUSES:** Virus (colds during pregnancy tend to last longer and be more severe).

**SUGGESTED TREATMENT:** A cold will “run its course.” You must get plenty of rest to allow your own “defenses” to fight the virus. Try Tylenol® for aches, fever, or headaches. Drink plenty of fluids. You should not take any over-the-counter medicine that contains aspirin, ibuprofen, or Advil®. Sudafed®, Robitussin®, Triaminic®, Vicks®, Chlor-Trimeton®, Dimetapp®, Drixoral®, DayQuil®, and Nyquil® are safe to take. Use a cool air vaporizer in rooms where you spend much of your time, such as your bedroom. Salt water or saline nasal spray is also helpful.

## Nosebleed

**CAUSES:** Increase in blood flow and congestion of mucus membrane.

**SUGGESTED TREATMENT:** Sit down and gently squeeze the soft portion of your nose between your thumb and finger (so that the nostrils are closed) for about five to 10 minutes. Lean forward to avoid swallowing the blood and breathe through your mouth. It may also help to apply a cold compress or ice to the bridge of your nose. Using a vaporizer at night may be helpful if nosebleeds continue.

## Dizziness, Feeling Faint

**CAUSES:** Pressure from the uterus on blood vessels. Hormone changes.

**SUGGESTED TREATMENT:** Avoid lying on your back. Lie on your left side. These “spells” are not dangerous; however, be careful not to fall or have an accident.

When you feel faint or dizzy, stop what you are doing and sit or lie down. The symptoms should pass in a few minutes. If you should lose consciousness, someone should call the doctor.

## Increased Vaginal Discharge

**CAUSES:** Hormone changes.

**SUGGESTED TREATMENT:** Increase in the amount of vaginal discharge is normal.

Color of discharge may range from cream to yellow. If accompanied by foul odor, burning, itching, or irritation, call our office. Do not douche during pregnancy.



## Stomach Virus (associated with nausea, vomiting and/or diarrhea)

**CAUSES:** Virus.

**SUGGESTED TREATMENT:** Avoid dehydration. We suggest sips of cola, ginger ale, Gatorade®, or weak tea. Try dry toast or crackers. To control diarrhea, you may use Kaopectate® or Imodium®. If symptoms persist for more than 24 hours, call our office.

## Low Back Pain

**CAUSES:** Shift in weight. Change in the center of gravity. Uterus pressing on nerves.

**SUGGESTED TREATMENT:** Do the pelvic tilt exercises as explained earlier. Apply a heating pad on medium heat to the lower back. Soak in a bathtub of warm water.

- Use good posture. Never bend at the waist when lifting an object. Always squat and bring the item close to your body and lift using your leg muscles.
- Wear proper-fitting, low-heeled shoes.
- Tylenol® can be taken for the pain.

## Sudden Grabbing, Pulling, Aching Pains in Your Lower Abdomen

**CAUSES:** Spasm of muscles surrounding the uterus.

**SUGGESTED TREATMENT:** Stop what you are doing and rest. The pain should subside quickly. Applying a heating pad on medium or soaking in a warm tub may be helpful. Avoid quick, jerky motions. Always change position in a slow, smooth manner.

## Drugs in pregnancy.

*You're already creating a safe environment for your baby.*

- **Antibiotics:** Most antibiotics are safe, with the exception of Tetracycline and Doxycycline (Vibramycin). Sulfa drugs (such as Septra) are usually not prescribed at the end of pregnancy. Quinolones (such as Floxin, Cipro, Levaquin) are not safe during pregnancy.
- **Pain medications:** Tylenol® and certain prescription narcotics, such as codeine and Percocet® are safe to take. However, we need to be informed if you are taking a narcotic. The class of drugs called NSAIDS (non-steroidal, anti-inflammatory drugs) such as ibuprofen (Motrin®), Aleve®, Orudis®, and aspirin products should be avoided unless directed by your obstetrician.
- **Cough, cold, and allergy medications:** Antihistamines, decongestants, cough syrups, and lozenges are safe to use. Examples include Sudafed®, Robitussin®, Triaminic®, Vicks®, Chlor-Trimeton®, Dimetapp®, Drixoral®, DayQuil®, and NyQuil® capsules. Do not take Advil®, aspirin, or ibuprofen cold remedies.
- **Inhalers:** All inhalers are fine.
- **Antidiarrheal medications:** Kaopectate® and Lomotil® are acceptable. Bulk agents (such as FiberCon®, Metamucil®, and Konsyl®) and stool softeners (such as Colace®) are safe. Bowel stimulants and enemas should not be used during your pregnancy.
- **Antacids:** All of the over-the-counter antacids are safe. The newer heartburn medications such as Tagamet® and Pepcid® may be taken after the first trimester for more persistent symptoms. Do not use Pepto-Bismol®.
- **Yeast:** Any of the over-the-counter or prescription yeast medications are fine to use.
- **Local anesthetics:** Local anesthesia, such as those used by the dentist, are safe during pregnancy.
- **Dental work:** X-rays are safe with a shield. Local anesthesia such as Novocaine® and Lidocaine® are fine. See the information about antibiotics if your dentist gives you a prescription.
- **Allergy medications.** After the first trimester, Zyrtec®, Claritin®, and Allegra® are safe to take. All other prescription medications should be discussed with your obstetrician.

## Genetic screenings.

*Your peace of mind is important to you, and to us, too.*

### Sequential Screen for Down Syndrome

Down syndrome, also known as Trisomy 21, is caused by an extra chromosome 21 in each cell of the body. It is seen in one per 800 births, and usually occurs in women without a family history of genetic abnormalities. It is the most common genetic cause for mental retardation in this country, and can also lead to certain birth defects.

In the past, the only method available for identifying women at higher risk for having a baby with Down syndrome was “advanced maternal age,” which was defined as a mother who was 35 years old or greater. However, by using this cut-off, only 30% of all Down syndrome cases could be detected.

There is screening option available to you which can increase the detection of Down syndrome to 90%. It is called a sequential screen. This test will not tell you if the baby does or does not have Down syndrome, but it will give you a more accurate estimation of your risk compared to using your age alone. The sequential screen will also detect 90% of fetuses with Trisomy 18, another serious chromosomal abnormality, as well as 80% of neural tube defects such as spina bifida.

A sequential screen is a two-part test. The first part involves an ultrasound examination between 11 and 14 weeks to measure the thickness of the back of the baby's neck (nuchal translucency), along with a finger prick blood test. If the preliminary result indicates an increased risk, you will be notified and offered additional testing. If the preliminary result is reassuring, you will be asked to complete the second part of the test, which is ideally performed at 16 to 18 weeks, and requires a blood sample from your arm.

After the second part is completed, you will be given a final result, which takes into account your age and the results from the first and second parts of the test.

The sequential screen has a very high detection of Down syndrome (90%), but it requires that you complete both parts of the screen.

In 3.5% of normal pregnancies, the sequential screen will come back positive for Down syndrome. This is known as the false positive rate. In the vast majority of cases (about 90%), women with a positive screen will not have a baby with Down syndrome. If the sequential screen does come back positive (either in the first or second trimester), you will be offered genetic counseling to discuss your specific risks, and you will be offered additional screening or diagnostic testing (see amniocentesis, CVS, and NIPT below).

For women presenting for screening after 14 weeks, a quad screen can still be offered. This is a blood test at 16 to



21 weeks that has an 80% detection rate for Down syndrome. It is important to remember that all of these screening tests are optional. You may decline screening if you would not have a diagnostic test for a positive screen, would not terminate a Down syndrome pregnancy, or simply wish not to be tested.

As stated by the American College of Obstetricians and Gynecologists (ACOG), all women have the option to have invasive testing by CVS or amniocentesis. Unlike the sequential screen, CVS and amniocentesis are diagnostic tests which will give you a definite answer but are associated with a small risk of miscarriage.

For any patient considering diagnostic testing, you will need to speak with a genetic counselor first to discuss the risks and benefits of this testing.

### **Amniocentesis**

This procedure is performed after the 16th week of pregnancy. A needle is inserted through the mother's abdomen into the womb, and a small amount of amniotic fluid is withdrawn. The fluid is then sent to the lab where it can be studied for the presence of genetic abnormalities.

### **Chorionic Villus Sampling (CVS)**

CVS can be done earlier in your pregnancy than amniocentesis. In most cases, it is done about 10 to 12 weeks from your last menstrual period. This provides earlier detection of genetic problems, such as Down syndrome or other genetic abnormalities.

A small sample of cells is taken from the early placenta where it is attached to the wall of the uterus. Chorionic villi are formed from the fertilized egg and are tiny parts of the placenta.

There are two ways to perform a CVS, usually determined by the location of the placenta. With the trans cervical technique, a speculum is inserted just as it is for a Pap test. Then, a very thin plastic tube is inserted through the vagina and into the cervix. With ultrasound guidance, the tube is inserted into the placenta. A small sample is removed. With the transabdominal approach, a thin needle is inserted similarly as it is for an amniocentesis, except that the needle is placed into the placenta rather than the amniotic fluid.

A small sample of placenta is then obtained.

The sample of chorionic villi is then sent to a lab where the cells are grown and tested.

CVS can detect most of the same genetic abnormalities as amniocentesis.

### **Noninvasive Prenatal Testing (NIPT)**

NIPT is a newer screening test for Trisomy 21, Trisomy 18, and Trisomy 13. It analyzes cell-free DNA in the maternal circulation, which contains both maternal and fetal DNA. Using a complex mathematical formula, 99% of Trisomy 21 and Trisomy 18 can be detected, with less than 1% false positive rate. Despite its high accuracy, it is still considered a screening test, so women with a positive test would still be offered CVS or amniocentesis. This test is usually covered by insurance companies for women who will be 35 or older at delivery, who had a prior pregnancy with a chromosomal abnormality, who have an abnormal sequential or quad screen, or who have abnormalities on the ultrasound. For otherwise low-risk women, insurance may or may not cover the cost of this test. If not, you would be responsible for any out-of-pocket costs.

## **Rh Factor.**

Just as there are different major blood groups, such as A and B type blood, there is also an Rh factor — a type of protein on the surface of the red blood cells. Most people have the Rh factor and are Rh-positive.

Those who do not have the Rh factor are Rh-negative. Today, a simple blood test determines whether you are Rh-positive or Rh-negative.

Although the Rh factor does not affect a person's general health, it can cause problems during pregnancy. Now, with treatment, these problems can almost always be prevented. The Rh factor causes problems when an Rh-negative person's blood comes in contact with Rh-positive blood. An Rh negative mother and an Rh-positive father can conceive an Rh-positive child. If a small amount of the baby's blood mixes with the mother's blood, which often happens, the mother's body may respond as if it were allergic to the baby.

Your body may make antibodies to the Rh antigens in the baby's blood. A small number of women with Rh-negative blood pregnant with an Rh-positive fetus will react to the fetal blood as a foreign substance and become sensitized by making antibodies. These antibodies then attack the baby's blood, breaking down the red blood cells and producing anemia. This condition, which is called hemolytic disease, can become severe enough to cause serious illness, brain damage, or even death in the fetus or newborn.

Today, hemolytic disease can for the most part be prevented if the Rh-negative woman has not already made antibodies against the Rh factor from an earlier pregnancy or blood transfusion. Rh immunoglobulin (RhoGAM) is a treatment that can prevent sensitization of an Rh-negative mother and suppresses her ability to respond to Rh-positive red cells. RhoGAM is normally injected into a muscle of the arm or

buttocks making the mother “passively immunized.”

A single blood test can tell you your blood type and Rh factor. Another blood test, called an antibody screen, can — if you are Rh-negative — show if you have developed antibodies to Rh-positive blood.

## HIV screening in pregnancy.

*There is so much to think about. Let our experts help you with decisions.*

The State of New Jersey has a law relating to HIV testing in pregnancy.

This law states that all pregnant women should be tested twice in pregnancy for HIV. The law requires that we inform you about HIV testing and inform you that an HIV test will be included in standard prenatal testing and procedures and that you may refuse testing. If you refuse to be tested during your pregnancy, your baby will be tested after he or she is born. Here is some basic information about HIV. If all your questions are not answered, please ask your doctor.

### What Is HIV

Human Immunodeficiency Virus (HIV) is the virus that causes AIDS. The virus is found in the blood and in certain body fluids (such as semen or breast milk) of people who are infected. A person can become infected by being in contact with these fluids of an infected person. It is not spread by casual contact, like hugging and kissing, by insects, or by touching or using household items.

### Why Get Tested

There is very strong evidence that if a pregnant woman is infected and is treated during her pregnancy with medications for HIV, she can significantly reduce the risk of transmitting the virus to her baby.

There is a very small group of people who may go from negative to positive in the course of the pregnancy. It is your right to refuse testing. Your baby will be tested after birth, if your HIV status is unknown.

### What Does a Negative Test Mean

It means that you are most likely not infected with HIV.

### What Does a Positive Test Mean

It means that it is very likely that you have been infected with HIV. If your test is positive, you will be offered further care and counseling with specialists in all aspects of health care for people who are infected with HIV. It is required by law in the State of New Jersey that the name of the infected person is reported to the Department of Health.

## Where Can I Get More Information

Call your physician or the New Jersey AIDS Hotline at **1.800.624.2377**.

## Group B Streptococcus (GBS).

*Tests are part of your common sense prenatal care.*

GBS is a type of bacteria found in 10 to 30% of pregnant women. It can be passed from mother to baby during delivery. Most babies who get GBS from their mothers do not have any problems; however, a few will become sick. This can cause major health problems or even threaten their lives.

### What Is GBS

GBS is one of the many bacteria that usually do not cause serious illness. It can be found in the digestive, urinary, and reproductive tracts of men and women. In women, it is most often found in the vagina and rectum. GBS is not a sexually transmitted disease. A person who has GBS but shows no symptoms is said to be colonized. If the bacteria grow and cause symptoms, infection has occurred. Although the names are similar, GBS is different from group A streptococcus, the bacteria that causes “strep throat.”

### Effects on the Baby

If the bacteria is passed from a woman to her baby, the baby may develop GBS infection. This happens to only one or two of every 100 babies whose mothers have GBS. Babies who do become infected may have early or late-onset infections.

### Testing for GBS

This screening is performed between the 36th and 37th week of pregnancy and involves a swab of both the vagina and the rectum. This is a simple, painless procedure.

The sample is then taken to a lab where a culture is analyzed for any presence of GBS. Test results are usually available within 24 to 48 hours.

### Treatment

To reduce the risk of GBS infection in newborns, all women who test positive for GBS will be treated with antibiotics during labor. Babies of women who are carriers of GBS and do not get treatment have more than 20 times the risk of getting infected than those whose mothers do receive treatment.

Antibiotics help eliminate some of the bacteria that can harm the baby during birth. The antibiotics work only if given during labor. The bacteria grow so fast that if treatment is given earlier, the GBS may grow back before the delivery. Antibiotics are given intravenously (through a vein).

# Smart Start Care at Cooper.

*Our lactation nurses will instruct and support you as you learn.*

## Feeding Your Baby

One of the most important decisions you will make is how to feed your infant.

We want you to make an informed decision and feel good about it. We want to encourage you to explore your feeding options and ask questions. We will provide education on successful breastfeeding during your prenatal care with us.

## When You Breastfeed

- Your baby will have a stronger immune system and be better protected from allergies, asthma, SIDS, and diabetes.
- Your baby will have fewer ear infections, respiratory infections, and diarrhea.
- Breastfeeding safeguards against overfeeding your baby. This reduces the risk that your baby will be overweight later in life.
- Breast milk is a gift you give your baby that will last a lifetime.
- Your uterus will return to pre-pregnant size more quickly and most mothers lose pregnancy weight faster.
- It helps strengthen the bond between mother and baby.

Breastfeeding is natural but at times can be challenging. Start planning before your baby arrives so you will be more confident when it is time to feed.

- Attending one of our breastfeeding classes prior to your due date will help relieve any anxiety you may have.
- Attend a breastfeeding support group meeting. You may discover a valuable support system and connection with other mothers that will help you as you and your baby get accustomed to breastfeeding.

Cooper University Hospital has lactation support services. Our certified breastfeeding counselors have extensive breastfeeding education and lactation consultants that assist when breastfeeding issues arise. We also provide breastfeeding support groups in Camden and Voorhees. If you qualify, WIC also has resources available to breastfeeding moms.

For a wealth of information about breastfeeding classes, as well as other childbirth and family education programs, please visit [events.cooperhealth.org](https://events.cooperhealth.org) or contact Cooper's lactation consultant and childbirth education coordinator at **856.342.3283**.



# Choose your pediatrician as the birth gets closer.

*Your new baby's doctor will advise you as your baby grows.*

## Choosing a Pediatrician for Your Baby

Your newborn will need a doctor to provide his or her care after birth. There are pediatricians and family practice doctors in this area who are well qualified to manage your baby's growth and development, and provide care should an illness occur. A list of pediatricians and family practitioners is available. You may want to set up appointments with a few doctors to determine which doctors are accepting new patients and then to determine who would be the best provider to meet your baby's needs.

## Cooper Pediatricians

Cooper pediatricians see patients in five offices in Burlington, Camden, Voorhees, Moorestown, and Washington Township. In addition, if your child ever needs our care, the Children's Regional Hospital at Cooper has expert clinical staff and the advanced medical technology to diagnose and treat the most complex pediatric diseases. As a state-recognized acute-care children's hospital, specialists are available. Visit [CooperHealth.org/pediatrics](https://CooperHealth.org/pediatrics).

# Your hospital experience.

*When the big day comes, you'll be prepared.*

## What to Bring to the Hospital

You should pack your suitcase two weeks before your due date. We suggest that you pack three nightgowns, three bras, a robe, slippers, shampoo, other personal items such as make-up, and clothes for you and your baby to wear home. Some mothers also include a baby book (for signatures of visitors), breastfeeding book, birth announcements, and address book and a small gift or treat for the sibling(s). Leave your suitcase in the car until after you have delivered.

## Cesarean Birth

With the consent of your doctor, a support person may be present at cesarean birth. During surgery, he or she will be seated near the mother's shoulder to offer emotional support, and then celebrate the birth with her.

If you will be delivering your baby by C-section, please remember the following:

- Please follow instructions to obtain your labs no more than three days prior to your C-section date.
- The lab will place an ID bracelet on you to match your lab work. Keep this bracelet on for your surgery. Do not remove it.

## The Day Before Your C-Section

- You will receive a phone call the day before your C-section to remind you of your instructions and what time to arrive at the hospital.
- Please do not have anything to eat or drink after midnight the night before your C-section. Do not have any gum, mints, or hard candy.

## The Day of Your C-Section

- Please remember to arrive at Cooper two hours prior to your scheduled surgery time to Labor and Delivery.
- You will be allowed to have two designated support people in Labor and Delivery; only one support person will be allowed to remain at your bedside during your C-section.

## NICU

Sometimes, a baby has difficulty making the transition to the world. Being born prematurely, having a difficult delivery, or birth defects can make these changes more challenging. Fortunately for these babies, special newborn care is available. The Newborn Intensive Care Unit (NICU) at Cooper combines advanced technology and specially educated health-care professionals to provide specialized care for the tiniest patients.



Our Newborn Intensive Care Unit at the Children's Regional Hospital at Cooper is the highest level (Level III) facility, featuring 25 intensive care beds and a 12-bed transitional nursery. Our nurseries are equipped to care for any baby who requires special treatment. In addition to babies born at Cooper, many infants are transported in from other hospitals for specialized care. While most infants are in the Newborn Intensive Care Unit (NICU) because of premature birth and related conditions, some are full-term infants born with other medical or surgical problems. Our nurseries are staffed with highly skilled and experienced professionals, including neonatologists, registered nurses, neonatal nurse practitioners, a newborn clinical specialist, pediatricians, and pediatric residents to name a few. Our NICU is NIDCAP Nursery Certified, one of only two NICU's in the world to be so honored. NIDCAP Certification acknowledges the excellence of care that Cooper practices and continuously strives toward for the full integration of newborn individualized developmental and family-centered care for all infants and families.

Rooming-in means that you want to keep your baby with you during most of your stay in the hospital. We will show you how to bathe and diaper and feed your baby as needed. Our staff will check on the baby and will be available to help you with your baby at any time.

## Visitors

Your baby can be in your room when visitors are present. For your own comfort and recovery, we ask that you limit visitors to only two at any one time. It will be your responsibility to limit visitors if you are feeling tired and overwhelmed.

We take very seriously our responsibility to our patients' safety, including the littlest babies.

While you are in the hospital, you will be required to wear an identification band around your wrist. Our hospital staff will review other security measures with you which we take to protect your baby.

You may want to take some of your own safety precautions. We know that you are very excited about the birth of your baby and want your friends and neighbors to know of the arrival. However, placing signs in your yard or bows on your mailbox or other forms of public display may bring you unwanted attention.



## What you need to know about labor.

*It's easy to be confused about the signs of labor – real or false?*

### Preterm Labor Prevention

Labor occurs when the uterus begins to contract in a regular and frequent pattern and causes thinning and dilation of the cervix. Labor is considered preterm when it occurs more than three weeks before your due date.

The cause of preterm labor is often not known. Certain risk factors increase your chance of an early delivery, and place a woman at a higher risk. Risk factors include carrying more than one baby (multiple births), having already had a preterm delivery, having had an episode of preterm labor with this pregnancy, or having an abnormal uterus or cervix.

The signs and symptoms of preterm labor can easily be confused with some of the common complaints of pregnancy. If you experience any of the warning signs, a careful exam and monitoring are very helpful. Symptoms include an increase in contractions; menstrual-like cramping; dull low backache; pressure or pain in the lower abdomen, back or thighs; pelvic pressure; or changes in vaginal discharge. Report any concerns you have so we can provide the reassurance you need or timely medical treatment.

### What Is True Labor

During pregnancy your uterus contracts and relaxes in a mild, painless, and irregular manner. These contractions are

called Braxton-Hicks contractions. These contractions help your uterus grow and become toned for labor. No one knows when, but at some point these contractions become labor contractions. Labor contractions occur at regular intervals and often feel like menstrual cramps that radiate around to the lower back. Labor contractions cause the lower portion of the uterus (the cervix) to thin out (efface) and open (dilate). They also slowly push the baby through the pelvis and birth canal.

### Signs of Labor

- Uterine contractions that get closer together, do not go away, and increase in intensity.
- Vaginal discharge that appears to have mucus in it or is bloody.
- Ruptured membranes (water leaking from vagina).

**Note:** If you have contractions, whether painful or not, every 10 minutes or more before you are 37 weeks pregnant, get off your feet and drink 3 to 4 glasses of water. Call the office if the contractions continue for one hour. This could be a sign of preterm labor. Contact your obstetrician if you notice any changes in your contraction pattern (frequency, intensity, etc.).

## When to Go to the Hospital

Here are a few things to consider when deciding when it is time to go to the hospital:

- When your contractions are coming at regular intervals so that they can be timed for one hour at five minutes apart and last for approximately 30 to 40 seconds.
- If your water breaks, whether you are having contractions or not. This could be either a gush of fluid or small dribble.
- If you experience bright red bleeding.
- It is not necessary for you to call if you are having irregular contractions. You may have false labor pains which are usually irregular, and after a period of time will dwindle or stop. True labor pains establish a regular pattern with the contractions becoming closer and stronger. You may note a “bloody show” or “mucus plug.” However, you do not need to call for this unless your water breaks or you have regular contractions as above.
- When your water breaks or labor begins, avoid solid food. You may drink clear fluids and eat hard candy. Keep yourself well hydrated.
- Upon arrival at the hospital, go to the Emergency Department.

Please talk to your doctor regarding visitor policy.



## Obstetrics and Gynecology Office Locations

Sheridan Pavilion  
Three Cooper Plaza – Suite 104  
Camden, NJ 08103  
**856.342.2186**

Bunker Hill Plaza  
4 Plaza Drive – Suite 403  
Sewell, NJ 08080  
**856.270.4020**

1900 Burlington–Mount Holly Road  
Building 1 – Suite D  
Burlington, NJ 08016  
**609.835.5570**

Women's Pavilion  
1103 N. King's Highway – Suite 201  
Cherry Hill, NJ 08034  
**856.321.1800**

701 Route 73 North – Suite 7  
Marlton, NJ 08053  
**856.983.5691**

The Ripa Center for Women's Health  
& Wellness at Cooper  
6100 Main Street Complex  
Voorhees, NJ 08043  
**856.325.6600**



One Cooper Plaza, Camden, NJ 08103  
**800.8.COOPER (800.826.6737)**  
CooperHealth.org

