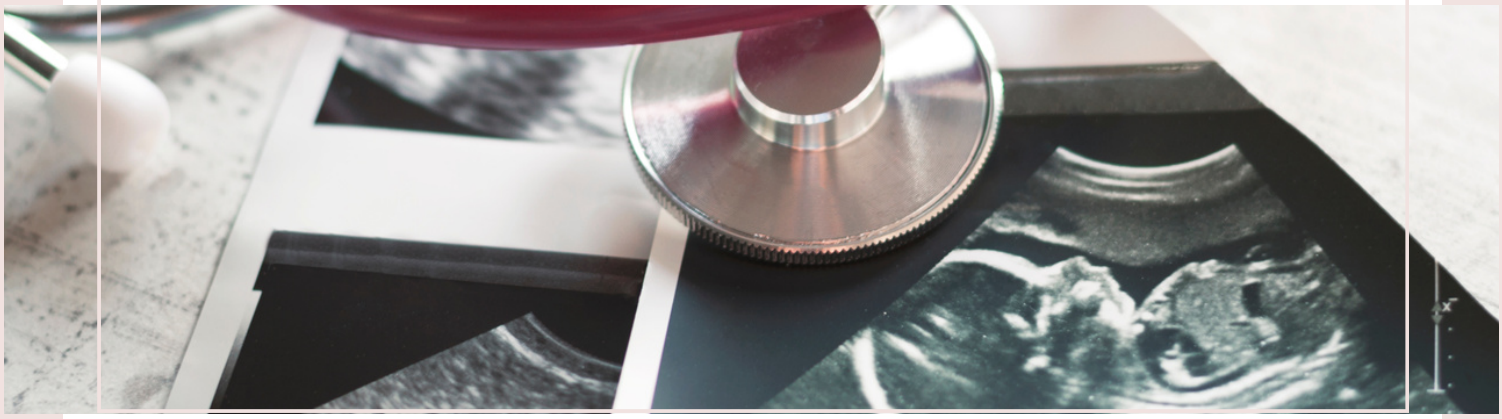
Prenatal Testing

COMMUNITY CARE OBSTETRICS/GYNECOLOGY



There are many tests that are available during pregnancy that are considered standard or optional

While the list of tests may seem overwhelming, we hope this handout will make it more understandable!

This handout is designed to:

- List tests in the order completed during your pregnancy
- Qualifies the test as standard or optional Let you
- know where the test is done

While this handout list all typical tests, there are other tests that based on your specific medical history, pregnancy history, or family medical history may need to be done.

Standard Test
These are tests that all pregnant patients in this country are expected to have done. Insurance companies typically pay for these tests. However, you may want to check with your insurance company to see if you are expected to pay for some of the cost of the test.

Optional Test
These are tests that are not expected to be done, but are offered. It is your choice to decide whether or not you do an optional test. Many insurance companies are now starting to pay for optional prenatal testing, however, there are still many companies which do not pay for these tests. You will want to check with your insurance company to see if these tests are covered.

Deciding whether to do optional testing When trying to decide whether or not to do an optional test, you may want to consider what you would do about the information if the testing showed an abnormal result. These tests are for disorders that we cannot cure. Here are some questions to consider:

- Would you terminate the pregnancy if your baby was found to have the disorder? Or would you simply just want to know the answer?

- If you would not terminate the pregnancy for the disorder, would you be happier not knowing about the disorder until the baby is born? Or would you rather know so that you could start to work on networking resources?

While it may be scary to consider this outcome, it may be worth you and your partner discussing these issues before making your decision about the test. In many cases, couples have not discussed their views or opinions with their partner before now.

Dating Ultrasound

TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY

By the time you have this handout, you may have already had an ultrasound to determine if your due date will be based on your last menses or based on the ultrasound.

As a basic rule, if a women is certain of her last menses and has regular menses, the ultrasound would need to show more than a 6 day discrepancy or difference to change the due date based on an ultrasound in early pregnancy. Ultrasounds are most accurate for dating a pregnancy when done in early pregnancy. As a pregnancy progresses, the ultrasound gets less accurate for dating a pregnancy. If your initial ultrasound did not change your due date, your due date will not change based on an ultrasound done later in pregnancy.

Initial Prenatal Bloodwork Labs

TEST TYPE: STANDARD
LOCATION: ANY CCP LABCARE LOCATION

This set of tests gives us baseline information on your health. It includes tests such as:

- Blood Type
- CBC (gives information about anemia - low iron levels in your blood)
- HIV
- Syphilis
- Chlamydia
- Hepatitis
- Tests to see if you are immune to several communicable diseases that can be harmful in pregnancy such as:
    - Rubella (you were vaccinated for this as a child, but by adulthood some people lose immunity)
    - Varicella (Chicken Pox).
    - A urine culture is also done to check for a urinary tract infection (UTI) since most pregnant women who have a UTI do not have symptoms.

At your Education visit, we will place the order for whichever lab you choose and you should ideally have these tests done before you come for second prenatal visit so that we can go over your results with you.

Testing at the Initial Prenatal Visit

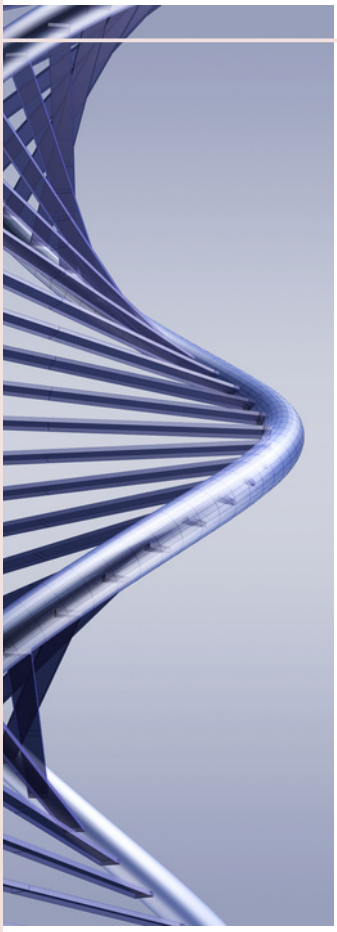
TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY DURING YOUR SECOND PRENATAL VISIT WITH A PROVIDER

At your first prenatal visit, we will do a physical exam similar to an Annual Exam. A test will be done for Gonorrhea and Chlamydia. Chlamydia is the most common sexually transmitted disease. Everyone is tested whether married or single.

If you are due for a pap smear which is the screening test for cervical cancer, a pap will be done as well. A speculum is used to do these tests.

Genetic Carrier Testing

TEST TYPE: OPTIONAL
LOCATION: ANY CCP LABCARE DRAWING STATION
WE USE THE COMPANY LABCORP AND THE TEST IS CALLED MaterniT21



These tests give information about whether you carry a genetic mutation that could cause a serious inherited disorder in your baby. These tests are done early in pregnancy and can even be done before you are pregnant. If you have tested for these in a prior pregnancy, you would not need to test again this pregnancy.

These tests are for recessive disorders such as:

- Cystic Fibrosis
- Spinal Muscular Atrophy (SMA)

For the baby to have the disorder, you and the baby's father must both carry the gene. Here are some helpful facts:

- If you both carry the gene, there is a 25 % chance that each time you conceive together, that child could have the disorder
- If only one of you carry the gene, the child will not have the disorder
- It is possible to carry a genetic disorder without knowing of anyone in your family who had the disorder
- We test the mother first and only need to test the father if the mother carries the gene
- If both of you carry the gene, you can decide to do further testing such as chorionic villi sampling (CVS) (described later) or an amniocentesis (described later) to see if the baby has the disorder.

This test also includes testing for Fragile X which is a genetic disorder which only the mother needs to carry the genetic mutation for the baby to have the disorder. If the mother tests positive as a carrier, further testing can be done to see if the baby has the disorder.

People who are French Canadian or Ashkenazi Jewish have many other recessive disorders that they can be at risk for carrying. If
you are one of these ethnicities, please let us know.

Genetic Testing for a Disorder Present in the Baby

TEST TYPE: OPTIONAL
LOCATION: SEE BELOW FOR MORE INFO

Unlike the previous tests which test to see if the parents carry a genetic mutation, these tests are specific to this baby. These tests cover genetic disorders such as Trisomy 21 (Down's syndrome), Trisomy 18, and Trisomy 13. There are several options for testing .Your age and/or your family history, will help determine which test may be the right test if you choose to do this testing.

These genetic tests fall under two categories: Non- Invasive Prenatal testing and Invasive Prenatal diagnosis. With medical advances, invasive prenatal diagnosis (the final absolute answer or diagnosis) is typically only done if the initial non-invasive testing (screening test) is found to be abnormal.

NON-INVASIVE PRENATAL GENETIC TESTING (SCREEN FOR GENETIC ABNORMALITIES)

Cell Free DNA: Cell-free fetal DNA (cffDNA) is fetal DNA from the placenta circulating freely in the maternal blood stream. It can be sampled by drawing the mother's blood. The test is about 99 % accurate for Trisomy 21, 18, and 13. The test can also be done for some microdeletions (missing a small part of one copy of a gene). You can also elect to have the test determine if there is the presence of a Y chromosome (to see if the baby is a boy or girl). Cell Free DNA is currently the "gold standard" for screening for chromosomal abnormalities.

Location: Any CCP LabCare drawing station. You must be at least 10 weeks pregnant to do this test. We use the company LabCorp and the test is called MaterniT21.

INVASIVE PRENATAL DIAGNOSIS (GIVES A YES OR NO DIAGNOSIS ABOUT A GENETIC ABNORMALITY)

Amniocentesis: With medical advances, this test is now typically only done if a non-invasive test such as cell free DNA shows a positive result. An Amniocentesis is a procedure in which amniotic fluid is removed from the uterus for testing or treatment. Amniotic fluid is the fluid that surrounds and protects a baby during pregnancy. This fluid contains fetal cells and various chemicals produced by the baby. This test can be done as early as 16 weeks, but is typically done at 18 -20 weeks. Guided by ultrasound, the MFM doctor will insert a thin, hollow needle through the abdomen and into the uterus. A small amount of amniotic fluid will be withdrawn into a syringe, and the needle will be removed. The sample of amniotic fluid will be analyzed in a lab. Preliminary results will be available within a few days. The final results will take two to three weeks. An amniocentesis can increase the risk for miscarriage, the risk is about 1 out of 400.

Location: Maternal Fetal Medicine at Albany Medical Center (AMC) in Albany, NY

Genetic Testing for a Disorder Present in the Baby (cont.)

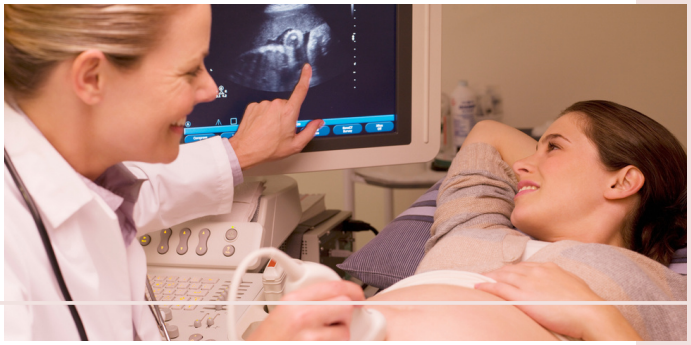
TEST TYPE: OPTIONAL
LOCATION: SEE BELOW FOR MORE INFO

Chorionic Villi Sampling (CVS): With medical advances, this test is now typically only done if a noninvasive test such as cell free DNA shows a positive result. CVS sampling is usually done between weeks 10 and 14 of pregnancy, earlier than an amniocentesis is performed. Chorionic villus sampling can reveal whether a baby has a chromosomal condition, such as Down syndrome or Trisomy 18. Chorionic villus sampling can also be used to test for other genetic conditions, such as cystic fibrosis, SMA, or Fragile X. Chorionic villus sampling (CVS) is a prenatal test in which a sample of chorionic villi is removed from the placenta for testing. The sample can be taken with a thin catheter type needle place in the vagina or the abdominal wall. Ultrasound is used to guide the MFM doctor while doing the procedure. During pregnancy, the placenta provides oxygen and nutrients to the growing baby and removes waste products from the baby's blood. The chorionic villi are wispy projections of placental tissue that share the baby's genetic makeup.While the test gives an accurate diagnosis, it is an invasive test and has several risks which include a 1 in 400 risk of miscarriage.

Location: AMC Maternal Fetal Medicine

Fetal Anatomy Ultrasound

TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY



An ultrasound to check the baby's growth and anatomy is done at 19-20 weeks of pregnancy. While this ultrasound is not done to find out the sex of the baby, if the ultrasonographer is able to determine the baby's sex and you would like to know, they will be happy to let you know if your baby is a boy or girl.

For most pregnant women, this will be the last ultrasound in the pregnancy. We check on the growth of the baby by assessing the size of your uterus relative to far you are in pregnancy. This is done by examining your abdomen, which we do each visit. There are however, some women who need several to many ultrasounds in pregnancy. We will let you know if there are any risk factors that will make extra ultrasounds necessary for you.

Prenatal Testing at 24-28 Weeks

TEST TYPE: STANDARD
LOCATION: ANY CCP LABCARE LOCATION

As you near the third trimester of pregnancy, there is another set of tests that are done.

These tests include:

- Glucose tolerance test (to determine if you are diabetic during pregnancy)
- CBC (to determine if you are anemic)
- Syphilis
- If your blood type is negative, we also do a blood type antibody screening test.
- You do not need to be fasting to do the test.

Group Beta Strep (GBS)

TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY
AT YOUR 36 WEEK PRENATAL VISIT

GBS is a bacteria that about 20-30 % of all people have. The bacteria can come and go but some people are chronic carriers. The bacteria GBS lives mostly in the intestinal tract, but can also be present in the vagina. We test for this bacteria at 36 weeks by doing a Q-tip type of swab, swabbing the vagina and swabbing by the rectum. We do not use a speculum to do this test.

The test results are good for about 5 weeks, which is why we wait until the end of pregnancy. (Some women who are chronic carriers will show this bacteria in one or both of the urine cultures in earlier pregnancy. If so, we will not need to repeat this test at 36 weeks since those women are considered positive for the entire pregnancy.)

If your GBS culture test is positive, we will treat you in labor. Testing negative or positive in another pregnancy has no bearing on the results for this pregnancy.

Prenatal Visits

TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY

At each prenatal visit your blood pressure will be taken, your provider will listen to the baby's heartbeat, determine if your uterus is the appropriate size for how far you are in pregnancy, and answer your questions.

During a typical normal pregnancy without risk factors, prenatal visits are every 4 weeks until 28 weeks of pregnancy, then every 2 weeks until 36 weeks of pregnancy. Once you are 36 weeks pregnant, visits are every week. At those weekly visits, if you would like, our provider will do a vaginal exam to check your cervix.

Testing After the Due Date

TEST TYPE: STANDARD
LOCATION: CCP OB/GYN OFFICE IN LATHAM, NY

If you go past your due date, we **may** do an ultrasound to check the amount of amniotic fluid and check on the baby's well-being and we will do a test to monitor the baby's heart beat called a Non-Stress test.

Timing of delivery is individualized and is based on you and your pregnancy course. We recommend delivery by 42 weeks for all pregnancy persons. We will review delivery recommendations during your OB visits. If you any concerns, please address them with your provider.

PLEASE NOTE

Every women is an individual and there may be exceptions to these guidelines based on your or your baby's specific health status. There are tests not listed that based on your medical history, pregnancy history, or family medical history may need to be done.

If you have any questions regarding these tests, feel free to call us!

COMMUNITY CARE PHYSICIANS