

Routine tests during pregnancy



At UCLA Health, we want you and your baby to remain healthy throughout your pregnancy.

We also want to anticipate any potential health challenges you or your baby might face, so we can be fully prepared to care for you.

Below are some of the most common laboratory tests we'll ask you to undergo while you're pregnant. We've also included a screening outline that explains which tests are recommended during each trimester. Your provider may recommend additional tests, depending on your health needs.

Initial testing

These lab tests are routinely recommended as part of your prenatal care. They help identify (and rule out) conditions that could complicate your pregnancy.

Complete blood count

In some cases, this test is conducted in each trimester of pregnancy. Your red blood cell number indicates whether you have anemia (not enough healthy red blood cells). Your white blood cell number shows how many disease-fighting cells are in your blood. Your platelet count can reveal whether you could have problems related to blood clotting.

Blood type

Determines your blood type (A, B, AB or O) and your Rh factor (positive or negative). If you are Rh negative, a RhoGAM injection will be recommended during, and possibly after, your pregnancy to reduce the chances of fetal anemia in future pregnancies.

Urinalysis

A urine test to screen for urinary-tract infection, diabetes or preeclampsia (a serious illness that includes extremely high blood pressure).



Urine culture

The definitive test for bladder and kidney infections, which are common during pregnancy.

Rubella

A blood test to determine if you've had a rubella (German measles) infection or if you have been vaccinated against this disease.

Hepatitis B

A virus that infects the liver. If you test positive for hepatitis B, your provider can help prevent you from transmitting the infection to your baby by vaccinating him or her within the first hours of life. It's still safe for you to breastfeed.

Human immunodeficiency virus (HIV)

A virus that attacks the immune system. A pregnant woman with HIV could pass the virus to her baby. However, medications and other strategies can be used to protect at-risk newborns.

Other sexually transmitted diseases (STDs)

Syphilis, chlamydia and gonorrhea can cause complications for you and your baby. If you have an STD, you will be treated for it during pregnancy and retested later to see if the treatment was successful.

Pap smear

A cervical-cancer screening. If you are due for your pap smear during your pregnancy, your provider will complete it during your physical exam.

Tuberculosis (TB)

If you test positive for this serious lung infection, your provider will recommend a chest X-ray — usually after you deliver. Medications and other strategies can help protect your baby and close family members from contracting TB.

Genetic counseling

Genetic counseling is different from genetic testing. Genetic counselors have advanced training in genetics, and they are able to assess your and/or your partner's genetic risk factors. They will review your personal medical history and pregnancy history, as well as your family history. Genetic counselors help educate individuals and couples who are pregnant or are thinking of becoming pregnant. They can explain what causes certain conditions, how these conditions are passed down, how doctors test for them and manage them, and what the typical prognosis is.

If you have the following family-history factors, you may want to seek genetic counseling or evaluation:

- If you or your partner have a family history of any of the following issues, or already have a child with any of the following conditions:
 - Intellectual disability
 - Neural tube defects, such as spina bifida
 - Chromosome abnormalities, such as Down syndrome
 - Single gene defects, such as cystic fibrosis or Phenylketonuria
 - Cleft lip or palate
 - Visual or hearing impairments
 - Heart defects
 - Cancers
 - Short stature
 - Learning disabilities
 - Psychiatric disorders
 - Other genetic disorders
- If you have had multiple miscarriages and stillbirths, or infant deaths
- If you and/or the father of the baby has a parent with an “autosomal dominant disorder” (a mutated gene that could cause certain genetic disorders, such as Huntington’s disease in a child), or any inherited disorder present in many generations of your family
- If both you and the father of the baby are carriers for an autosomal recessive disorder (meaning you both have the gene but are not affected yourself); parents usually find this out through a screening or because they already have a child who is affected
- If the mother is known or thought to be a carrier of an X-linked disorder, such as hemophilia
- If you or the father of the baby is known to be a carrier of a balanced chromosome abnormality

You may also want to seek genetic counseling for the following pregnancy factors:

- A serum screening indicates a higher risk for Down syndrome, neural tube defects or trisomy 18
- Baby’s mother is 35 years or older at delivery
- Baby’s father is significantly older than average at the time of conception
- Mother or baby has been exposed to harmful drugs, chemicals, radiation or infection
- Mother’s ultrasound shows abnormalities in the baby or there are other abnormal test results
- The mother (or father) has certain health concerns, including:
 - Schizophrenia
 - Depression
 - Alcoholism
 - Diabetes
 - Seizure disorder
 - Thyroid disorder
 - Other conditions that are linked to birth defects, including medications you may have taken for the condition
- There is an infertility issue and your doctor suspects a chromosome abnormality
- You used assisted reproductive techniques to get pregnant, or you are donating eggs or sperm for those purposes
- You are thinking of getting pregnant but know that you and your partner are at high risk for genetic disorders because of family or personal medical history

Other reasons to seek genetic counseling include:

- You have a great deal of anxiety (whether other factors apply or not) about birth defects
- You have a specific ethnic background or you are living in an area where certain disorders are more prevalent, such as Tay-Sachs disease, sickle cell disease or thalassemia
- You and your partner are related by blood, or the pregnancy resulted from incest



Ultrasounds

Ultrasound scans (sonograms) are very safe. An ultrasound uses high-frequency sound waves to show an image of your internal organs, evaluate your baby's development and health, and verify your baby's due date. The number of ultrasounds you'll need depends on several factors, including your and your baby's health, your prior ultrasound and blood test results, and any complications during your pregnancy. There are two kinds of ultrasounds that doctors use during pregnancy.

Abdominal ultrasound

Your provider rubs a water-based gel on your abdomen and uses a handheld probe called a transducer. The gel makes it easier for your care provider to move the transducer around your abdomen and capture images of the organs.

Transvaginal ultrasound

The physician or technician will insert a smaller ultrasound transducer into your vagina. Your provider might use this kind of ultrasound in early pregnancy because it provides a clearer image.

Fetal ultrasounds are safe. Some women may feel a slight pressure from the transducer on their abdomens or in their vaginas, but it is generally not painful. Ultrasounds do not use radiation, so there is no risk. For those allergic to latex, the test typically involves using a latex sheath to cover the transvaginal ultrasound transducer. Let your provider know if you have a latex allergy.

First-trimester prenatal screening tests

First-trimester ultrasound

- Establish your baby's due date (this is the most accurate way to do so)
- Determine the number of fetuses you're carrying and identify placental structures
- Diagnose an ectopic pregnancy (when pregnancy develops outside the uterus) or miscarriage
- Examine the uterus and pelvic anatomy
- In some cases, detect fetal abnormalities

Ultrasound test for fetal nuchal translucency (NT)

- Noninvasive test conducted between 11 weeks and 2 days, and 14 weeks and 2 days
- Measures the back of baby's neck for increased fluid or thickening; helps screen for Down syndrome and trisomy 18 (Edwards syndrome)
- Detects certain severe birth defects

Maternal serum screening test

- Screens your blood for biochemical markers that may indicate your baby is at higher risk for certain genetic diseases and birth defects.
- When used together, nuchal translucency screenings and maternal blood tests are very effective at determining if the fetus might have birth defects, such as Down syndrome and trisomy 18

Noninvasive prenatal testing (NIPT) for birth defects

- Typically recommended for mothers at high risk of carrying a baby with a chromosomal abnormality (mothers over age 35 or mothers with a family history of birth defects, for instance)
- May be recommended if an earlier blood test or ultrasound is abnormal
- NIPT is a safe, simple blood test that can be performed as early as the first trimester

Genetic testing (carrier testing)

- Your provider may recommend genetic testing if you and/or your partner have a family history of genetic disorders or if you have previously given birth to a baby with a genetic abnormality
- Genetic disorders are often passed on from parent to child
- If your baby does end up having health issues, knowing in advance can give you time to prepare and can also help your physician or midwife provide your baby with extra medical support at birth

Examples of genetic disorders that can be diagnosed before birth include:

- Cystic fibrosis
- Duchenne muscular dystrophy
- Hemophilia A
- Thalassemia
- Sickle cell anemia
- Polycystic kidney disease
- Tay-Sachs disease

If screening test results are abnormal, your provider may recommend genetic counseling and further testing.

Chorionic villus sampling (CVS)

- May be offered to women who are at increased risk for carrying a baby with chromosomal abnormalities or have a family history of a genetic defect
- Usually performed between 10 and 12 weeks of pregnancy
- Tests placental tissue for chromosomal and genetic abnormalities
- CVS doesn't provide information on neural-tube defects, such as spina bifida; women who undergo CVS also need a follow-up blood test for neural-tube defects between 15 and 20 weeks of pregnancy
- Some women aren't suitable candidates for CVS or get incomplete results; a follow-up amniocentesis may be necessary

Second-trimester (mid-trimester) prenatal screening tests

Mid-trimester ultrasound (the "18-to-20 week scan")

- Check fetus for abnormalities
- Assist in prenatal tests, such as an amniocentesis
- Check amount of amniotic fluid
- Examine blood-flow patterns
- Observe fetal behavior and activity
- Measure length of mother's cervix
- Monitor fetal growth

Multiple-marker blood tests

- A sample of your blood, taken between 15 and 20 weeks of pregnancy, is used to test proteins and hormones (biochemical markers)
- These markers can offer information about your risk of having a baby with certain genetic conditions or birth defects
- Abnormal test results might mean you'll need additional tests
- A multiple-marker screening is not 100-percent accurate; it's simply a screening to determine whether you need extra testing
- When you undergo both first- and second-trimester screenings, the combination of tests can much more accurately detect an abnormality than just a single screening

Amniocentesis

- Generally offered to women between weeks 16 and 20 of pregnancy who have a high risk of carrying a baby with chromosomal abnormalities
- Involves inserting a long, thin needle through your abdomen into the baby's amniotic sac to withdraw a small sample of the amniotic fluid
- The sample is checked for chromosomal disorders and open neural tube defects, such as spina bifida
- Some women feel a bit of cramping during or after the procedure
- Avoid any strenuous activities for 24 hours after an amniocentesis
- If you're carrying twins or other multiples, your provider may need samples from each amniotic sac
- Sometimes, the positions of the babies or placenta, the amount of fluid or other reasons may make an amniocentesis impossible to complete

Third-trimester prenatal screening tests

Glucose challenge/tolerance test (diabetes screening) and repeat CBC (complete blood count)

- You'll drink a sugary solution, wait one hour, then undergo a blood-sugar-level test at a lab
- If results are abnormal, you'll undergo a glucose tolerance test, usually between weeks 24 and 28 of pregnancy
- Abnormal glucose levels could indicate gestational diabetes, which is treatable

Group B streptococci (GBS)

- GBS bacteria normally live in the vagina and rectum
- Rarely, newborns can get seriously ill if exposed to GBS during delivery
- You'll be tested for GBS (via a swab of the vagina and rectum) between weeks 35 and 37 of pregnancy
- If you test positive, your provider may give you antibiotics during labor to help protect your baby from infection

Third-trimester ultrasound (if necessary)

- Monitor fetal growth
- Check the amount of amniotic fluid
- Determine fetal position
- Assess the placenta

Fetal monitoring

- Checks the rate and rhythm of the fetus's heartbeat
- During prenatal visits, your provider often uses a handheld Doppler device to count the fetal heart rate
- During labor, your provider may use a continuous electronic fetal monitor that is placed on your abdomen
- Your baby's heart rate may change depending on what's happening inside your uterus
- Monitoring your baby helps your provider catch an abnormal fetal heart rate
- An abnormal pattern may indicate that your baby is having a problem, such as not getting enough oxygen; if this happens, your provider will talk to you about options to keep the baby healthy, such as an emergency or cesarean delivery

