Amniocentesis

What is amniocentesis?

Amniocentesis [am-nee-oh-sen-TEE-sis] is a procedure that is usually done between 15 and 20 weeks of pregnancy. It involves obtaining a very small sample of the amniotic fluid, the special fluid that surrounds your developing baby. Amniocentesis is called an invasive test because it requires going into your uterus (womb) with a needle to get the sample.

By doing an amniocentesis and obtaining amniotic fluid, your doctor has an accurate way to determine if your pregnancy is affected by a genetic disorder, such as Down syndrome, trisomy 18, or cystic fibrosis. The fluid obtained can also be screened for neural tube defects—a type of birth defect—such as spina bifida. During the third trimester, the fluid can be tested to check fetal lung development.

Why do I need amniocentesis?

As with all prenatal tests, amniocentesis is optional. Women who choose amniocentesis—or a similar test called CVS—are often those who:

• Are older at the time of the pregnancy, as the chance of a genetic disorder affecting pregnancy increases with the mother’s age
• Have a family history of a disorder that can be detected by amniocentesis
• Have had a prenatal test suggesting an increased chance of having a genetic disorder

Talking to your doctor or a genetic counselor can help you decide whether amniocentesis is right for you and your baby. A genetic counselor is a medical professional who helps patients learn more about the chances of having a genetic disorder. The counselor can also discuss other testing options with you.

How is amniocentesis done?

During amniocentesis, a doctor inserts a thin, hollow needle through your abdomen (belly) into your uterus. Ultrasound shows the doctor where to safely put the needle. Once the needle is in place, the doctor withdraws a small amount of fluid (less than 1 ounce). The needle is then taken out, and the sample is sent to a laboratory for testing.

Amniocentesis takes 1 minute or less to perform and is done as an outpatient procedure. This means the procedure will happen at a hospital or clinic, but you won’t be hospitalized. It requires no special preparation.
What happens before amniocentesis?
Before amniocentesis, you’ll:

- **Discuss the test with your doctor or genetic counselor.** Topics for discussion may include:
  - Your chance of having a child with a genetic disorder. Your doctor and genetic counselor can help evaluate this based on your family history, age, ethnic group, and so on.
  - **Possible benefits, risks, and alternatives** that may apply to your situation.
  - **Which genetic disorders your amniocentesis should test.** Testing for some disorders—such as Down syndrome—is routinely done. Tests for some other disorders must be specifically ordered.
  - **The meaning of different possible test results.** Amniocentesis results can detect almost all neural tube defects. The results are accurate in telling more than 99 out of 100 people if their pregnancies are affected by a genetic disorder. **Note that a normal result doesn’t guarantee that a baby will be free of all health problems.**

- **Have your blood type tested.** If you have a certain blood type—called Rh negative—you may need an injection after this or any other procedure during pregnancy.

What happens after amniocentesis?
After amniocentesis, you:

- **Can return to normal activities.**
- **May have mild cramping or spotting**—a small amount of bleeding from the vagina—for 1 day.
- **Should not take antibiotics for 24 hours.** Only take one dose of acetaminophen (Tylenol®) if you need it to relieve cramping.
- **Will receive test results in about 10 to 14 days.**

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**When should I call my doctor?**

Call your doctor if you have any:
- Spotting that becomes heavy bleeding
- Mild cramping that becomes severe
- Flu-like symptoms (aches, chills) or a fever of 100°F or higher

*If you have any of these symptoms and can’t reach your doctor, go to the nearest hospital or emergency room.*

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### Potential benefits

| High accuracy results. Results are accurate in more than 99 out of 100 people. |
| Detection of neural tube defects—such as spina bifida. Results are accurate in about 99 out of 100 babies with a neural tube defect. |**Miscarriage (pregnancy loss).** With an experienced doctor, this happens in less than 1 out of 300 to 500 procedures. |
| **Leaking of amniotic fluid.** This happens 1 to 2 times for every 100 procedures. | **Injury.** Needle injuries to the fetus are very rare. |
| **Soreness at needle insertion site.** | **Mild cramping and spotting.** |
| **No results.** You may not get results from amniocentesis. This can happen when a sample of the fluid can’t be obtained, or if the fluid cells do not grow in the laboratory. | **Incorrect results in less than 1 out of 100 people.** |

### Risks and possible complications

| No prenatal testing. |
| Other prenatal screening tests such as: |
| - CVS |
| - Combined, integrated screening |
| - Cell free fetal DNA screening |
| - Serum marker screening |
| Genetic testing on you and your partner to determine the risk of passing on a genetic disorder. |
| Ultrasound. |