

Mayo Clinic - Heart conditions and pregnancy: know the risks

Pregnancy stresses your heart and circulatory system, but many women who have heart conditions deliver healthy babies. Know the risks – and how to help prevent complications.

If you have a heart condition, you'll need special care during pregnancy. Here's what you need to know about heart conditions and pregnancy.

How does pregnancy affect the heart?

Pregnancy stresses your heart and circulatory system. During pregnancy, your blood volume increases by 30 to 50 percent to nourish your growing baby. The amount of blood your heart pumps each minute also increases by 30 to 50 percent. Your heart rate increases as well. These changes cause your heart to work harder.

Of course, labor and delivery add to your heart's workload, too. During labor – particularly when you push – you'll experience abrupt changes in blood flow and pressure. When your baby is born, decreased blood flow through the uterus also stresses your heart.

What are the risks?

The risks depend on the nature and severity of the underlying heart condition. For example:

Heart rhythm issues. Minor abnormalities in heart rhythm are common during pregnancy. They're not usually cause for concern.

Heart valve issues. If you have an artificial heart valve or your heart or valves are scarred or malformed, you might face an increased risk of complications during pregnancy. If your valves aren't working properly, you might have trouble tolerating the increased blood flow. In addition, artificial or abnormal valves carry an increased risk of endocarditis – a potentially life-threatening infection of the lining of the heart and heart valves. Mechanical artificial heart valves also pose serious risks during pregnancy due to the need to adjust use of blood thinners and the potential for life-threatening clotting (thrombosis) of heart valves.

Congestive heart failure. As blood volume increases, congestive heart failure can get worse.

Congenital heart defect. If you were born with a heart problem, your baby has a greater risk of developing some type of heart defect, too. You may also be at risk of premature delivery.

Do some heart conditions cause more complications than others do? Certain heart conditions, including problems with the mitral valve or aortic valve, can pose life-threatening risks for mother or baby. Depending on the circumstances, some heart conditions might require major treatments – such as heart surgery – before you try to conceive. The risk of pregnancy in women who have Eisenmenger's syndrome – a rare congenital condition – or pulmonary hypertension – a condition characterized by high blood pressure that affects the arteries in the lungs and the right side of the heart – is so high that pregnancy isn't recommended.

What about medication?

Any medication you take during pregnancy can affect your baby. Often the benefits outweigh the risks, however. If you need medication to control your heart condition, your health care provider will prescribe the safest medication at the most appropriate dose. Take the medication exactly as prescribed. Don't stop taking the medication or adjust the dose on your own.

What should I do to prepare for pregnancy?

Before you try to conceive, schedule an appointment with your cardiologist and the health care provider who'll be handling your pregnancy. Also meet with other members of your health care team, such as your family doctor. Your medical team will evaluate how well you're managing

your heart condition and consider any treatment changes you might need to make before pregnancy begins.

Certain medications commonly used to treat heart conditions aren't used during pregnancy. Depending on the circumstances, your health care provider might adjust the dosage or make a substitution and explain the risks involved.

What can I expect during prenatal visits?

During pregnancy, you'll see your health care provider often. Your weight and blood pressure will likely be checked at every visit, and you might need frequent blood and urine tests. Your health care provider might use various tests to evaluate your heart function, including:

Echocardiogram, a test that uses sound waves to produce images of the heart

Electrocardiogram, a test that records the heart's electrical activity

How can I make sure my baby is okay?

Your health care provider will closely monitor your baby's development throughout the pregnancy. Routine ultrasound exams can be used to track your baby's growth, and specialized ultrasounds can be used to detect any fetal heart abnormalities. Your baby might need monitoring or treatment after delivery as well.

What can I do to prevent complications?

Taking good care of yourself is the best way to take care of your baby. For example:

Keep your prenatal appointments. Visit your health care provider regularly throughout your pregnancy. Take your medication as prescribed. Your health care provider will prescribe the safest medication at the most appropriate dose.

Get plenty of rest. Take a daily nap, if you can, and avoid strenuous physical activities. Bed rest might be recommended in some cases.

Monitor your weight. Gaining the right amount of weight supports your baby's growth and development, but gaining too much weight places additional stress on your heart.

Manage anxiety. Ask questions about your progress. Find out what to expect during labor and delivery. Knowing what's happening can help you feel more at ease.

Know what's off-limits. Avoid smoking, alcohol and illegal drugs.

What signs or symptoms should I report to my health care provider?

Contact your health care provider if you have any signs or symptoms that concern you, particularly:

- Difficulty breathing
- Fainting
- Heart palpitations, rapid heart rate or irregular pulse
- Chest pain
- A bloody cough or coughing at night

What about labor and delivery?

Your health care provider might recommend delivering your baby at a medical center that specializes in high-risk pregnancies. If there are concerns about your heart or circulation or you need to have certain specialists present during labor, your health care provider might plan to induce labor.

During labor, you might need monitoring with specialized equipment. For example, a catheter can be inserted into a vein or artery to provide detailed information about your heart function. An echocardiogram can give your health care provider additional information about your heart. Your health care provider might also continuously monitor your contractions and your baby's heart rate. Instead of lying flat on your back, you might be asked to lie on your side and draw one of your knees toward your chest.

To reduce stress on your respiratory system, your health care provider might recommend epidural anesthesia for pain relief. If you deliver vaginally, your health care provider might limit the amount of time you push. Sometimes it's best to deliver the baby with the help of forceps or a vacuum extractor. If you're at risk of endocarditis, you might receive antibiotic treatment just before and after delivery.

It's unusual to need a C-section because of a heart condition. If you develop an obstetrical problem that leads to a C-section, special precautions will be taken to monitor your heart function during the delivery.

Will I be able to breast-feed my baby?

Breast-feeding is encouraged for most women who have heart conditions, even those who take medication. Discuss any treatment adjustments you'll need to make with your health care provider ahead of time. Sometimes an alternative medication is recommended. If you have congenital heart disease, breast-feeding might be limited to prevent a low risk of mastitis with bacteremia, which could lead to a potentially life-threatening infection of the lining of the heart and heart valves (endocarditis).