



Preeclampsia

Quick Facts:

- Preeclampsia is a serious medical problem that can happen during and after pregnancy.
- Preeclampsia usually occurs after 20 weeks of pregnancy, but it can also occur after childbirth.
- It causes high blood pressure and can affect the kidneys, liver, lungs, blood, brain.
- Some people with preeclampsia have symptoms, but most do not.
- Preeclampsia can affect how the fetus grows and develops. Depending on the severity, people with preeclampsia may have a preterm birth.
- Some people have an increased risk of preeclampsia. Risk factors include having preeclampsia in the past, being older than age 35, having certain medical conditions, obesity, and being pregnant with more than one baby.
- Treatment for preeclampsia is delivery of the baby. In some cases, delivery can be delayed to allow the fetus to continue to grow. In other cases, delivery must occur right away.

What is preeclampsia?

- Ⓞ **Preeclampsia** is a serious medical problem that can happen during and after pregnancy. It causes a pregnant person's blood pressure to go very high, which can be dangerous for the pregnant person and their fetus.
- Ⓞ Preeclampsia usually occurs after 20 weeks of pregnancy. But it also can occur after childbirth.
- Ⓞ In some cases, preeclampsia can get worse and lead to **eclampsia** (seizures).

Who is at risk?

Anyone can get preeclampsia, but the risk is higher in those with the following risk factors:

- Ⓞ First pregnancy
- Ⓞ Multiple pregnancy (twins, triplets, or more)
- Ⓞ Chronic high blood pressure (that existed before pregnancy)
- Ⓞ Preeclampsia in a past pregnancy
- Ⓞ Diabetes (either preexisting or during pregnancy [gestational])
- Ⓞ Having certain health problems like **lupus**, **antiphospholipid syndrome**, kidney disease, and **obstructive sleep apnea**
- Ⓞ Obesity before pregnancy
- Ⓞ Being age 35 years or older

How can preeclampsia affect me?

- Ⓞ Symptoms may include headache; changes in vision; swelling of your hands, feet, or face; rapid weight gain; and upper abdominal pain (see box)

- Ⓞ High blood pressure can temporarily affect the kidneys, liver, lungs, blood, and brain.
- Ⓞ Most of the effects of preeclampsia go away soon after or within 6 weeks of delivery. However, having preeclampsia increases your risk of heart disease for the rest of your life. Talk to your health care practitioner about regular screening for heart disease and things you can do to lower your risk. Healthy eating, exercise, and not smoking can all help prevent heart disease.

Preeclampsia signs and symptoms

- Swelling of your face, hands, or feet
- Dull or severe throbbing headache
- Nausea or vomiting
- Pain in the abdomen and/or right shoulder
- Changes in vision, like seeing spots or blurry vision
- Low back pain, especially when it occurs with abdominal or right shoulder pain
- Sudden weight gain (3-5 pounds in a week)
- Shortness of breath or difficulty breathing

How can preeclampsia affect the fetus?

- Ⓞ The fetus can grow more slowly (**fetal growth restriction**).
- Ⓞ The amount of **amniotic fluid** may be too low (**oligohydramnios**).
- Ⓞ Early delivery may be needed to treat preeclampsia, which can result in the baby being born too early (**preterm**). Preterm babies are at risk of many health problems. These include problems with breathing, eating, and staying warm.

- ⦿ Preeclampsia can increase the risk of **placental abruption**, in which the placenta suddenly separates from the wall of the uterus. It can cause severe bleeding (**hemorrhage**) during delivery that can be life-threatening.

How is preeclampsia diagnosed?

- ⦿ Some people have symptoms (see box), but most don't.
- ⦿ Preeclampsia is diagnosed when you have high blood pressure (the top number is 140 or greater or the bottom number is 90 or greater) after 20 weeks of pregnancy plus one of the following:
 - High levels of protein in your urine (your kidneys' ability to filter protein from your blood is impaired)
 - Low platelet count (your blood may not clot properly)
 - High creatinine levels (your kidneys are not working properly)
 - High liver enzymes (your liver is not working properly)
 - Fluid in your lungs



- ⦿ Preeclampsia is diagnosed as "severe" when certain signs and symptoms are present. These are called "severe features." Some of the signs and symptoms listed above are considered severe features:
 - Low platelet count
 - High blood creatinine levels
 - High liver enzymes
 - Fluid in your lungs
- ⦿ Other severe features include:
 - Very high blood pressure (top number is 160 or greater; bottom number is 110 or greater)
 - New severe headache that does not go away
 - Vision problems
 - Pain in your upper right abdomen

How is preeclampsia treated?

- ⦿ Treatment for preeclampsia is delivery of the baby.
- ⦿ You and your health care practitioner will need to think about many factors when deciding on treatment:
 - How far along in the pregnancy you are
 - Whether you have severe features
 - How well you are doing
 - How well the fetus is doing
- ⦿ If you are still weeks away from your due date, but you and the fetus are doing well and you do not have severe

features, you may be able to wait until your pregnancy is further along before having your baby. You'll have regular blood pressure checks, lab tests, and ultrasounds.

- ⦿ If you have severe features, you may need to have your baby right away. You and your health care practitioner will weigh the risks and benefits of waiting versus delivery. The decision is based on your condition, the risks of waiting, and how preterm your baby will be at delivery. If the decision is to wait, you will be watched in the hospital until delivery.
- ⦿ During delivery, you may receive medication to control seizures and control your blood pressure.

Can preeclampsia be prevented?

Taking low-dose aspirin (81 mg) daily starting between 12 and 28 weeks of pregnancy may help prevent preeclampsia in certain people. Talk to your health care practitioner to see if this treatment is right for you.

To find a maternal-fetal medicine subspecialist in your area, go to <https://www.sfm.org/members/search>.

See glossary on next page

Glossary

Amniotic Fluid: The fluid in the sac that surrounds the fetus during pregnancy.

Antiphospholipid Syndrome: A disorder in which immune proteins called antibodies attack phospholipids, which are found in the body's cells. It can cause blood clots, miscarriage, low platelet counts, or headaches

Creatinine: A chemical made by muscles that is removed from the body by the kidneys. The level in the blood can be measured to assess the body's kidney function.

Diabetes: A condition in which a person's blood sugar is too high. It can be caused by a lack of insulin, a chemical in the body that helps move sugar from the bloodstream into cells. It also can be caused when cells do not respond properly to insulin.

Enzymes: Chemicals that speed up the chemical reactions in the body. The level of many enzymes in the blood can be measured to assess the function of various organs.

Fetal Growth Restriction: A condition in which a fetus measures much smaller than expected for the gestational age.

Hemorrhage: Very heavy bleeding that can be life-threatening.

Lupus: A disorder in which there are high levels of immune proteins called antibodies that attack the body's own tissues. It can affect many organs in the body, causing problems with the skin (rash), muscles (muscle pain), and joints (arthritis); inflammation of the heart, kidney, brain, and lung; and blood disorders such as anemia.

Obesity: Having a body mass index of 30 or greater.

Obstructive Sleep Apnea: A condition in which airflow is periodically blocked during sleep, causing snoring and episodes in which breathing can stop (apnea).

Oligohydramnios: Having a lower than normal level of amniotic fluid during pregnancy.

Placental Abruption: A serious complication of pregnancy in which the placenta separates too early from the uterus. It usually occurs in the third trimester or during childbirth. Symptoms include pain in the abdomen and vaginal bleeding.

Platelet: A type of blood component that functions in clotting.

Preeclampsia: A disorder that can occur during pregnancy in which the blood pressure goes too high. It can damage many organs in the body, including the kidneys, brain, and liver.

Thrombophilia: A disorder that causes the blood to clot abnormally.

