

High-Risk Pregnancy

Caring for you and your baby before and after delivery

Your care provider's number: _____

Your birth center's number: _____

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What is a high-risk pregnancy?

You may have just learned that your pregnancy has become high risk. This means you and your baby have a higher chance than usual of having problems during or after pregnancy.

Your care providers will watch you closer and more often. Conditions that may make a pregnancy high-risk include:

- Gestational hypertension (high blood pressure)
- Pre-eclampsia
- High blood pressure that started before pregnancy
- HELLP syndrome
- Pre-term labor
- Early rupture of membranes (water breaks early)
- Multiple pregnancy

This booklet is a guide to the problems you may have and how we may prevent or treat them. It includes some simple changes you can make to help take good care of you and your baby.



What is a high blood pressure disorder of pregnancy?

High blood pressure (hypertension) is when your blood pressure reaches 140/90 (“140 over 90”) or higher. When this happens before, during or after pregnancy, it is called **high blood pressure disorder of pregnancy**.

Types of high blood pressure disorders

There are 4 types of high blood pressure disorders in pregnancy: **gestational, preeclampsia, chronic, and HELLP syndrome**.

The type of disorder you have depends on when the high blood pressure first started and whether any organs are affected (kidneys, liver, heart, lungs, or brain). Each disorder may create problems for you and your baby. They also raise your long-term risk of high blood pressure.

What should I do?

- See your care provider regularly during pregnancy. This will help detect changes as soon as they occur.
- Check your weight and blood pressure at home if asked to do so. You may find these resources helpful:
 - Checking Your Blood Pressure at Home, www.fvfiles.com/525339.pdf
 - Know Your Blood Pressure Numbers, www.fvfiles.com/525965.pdf
 - Postpartum Home Blood Pressure Monitoring www.fvfiles.com/526018.pdf
- Take any prescribed medicines as directed.
- Tell your care provider if you have any symptoms of preeclampsia (listed on [page 5](#)). These can develop in the postpartum period (**after having a baby**).

What are the risks?

- Gestational diabetes can turn into preeclampsia, which can be serious.
- Preeclampsia more than triples your risk of having chronic (long-term) high blood pressure. It also increases your risk of stroke.
- Having any high blood pressure disorder in pregnancy raises your lifetime risk of getting heart disease. This risk goes up even more if any of these factors apply to you:
 - You have chronic hypertension.
 - You have high cholesterol, diabetes, obesity (are very overweight), a blood clotting problem, or anyone in your family has these problems.
 - You or people in your family have a history of high cholesterol, heart disease, obesity (being overweight), diabetes, a blood clotting problem, or metabolic syndromes.
 - You had pregnancies less than 18 months apart.
 - You have more than one of the risk factors above.
- Heart disease is the leading cause of death in people assigned female at birth. It is increasing for ages 35 to 54 years.

What to talk to your provider about:

Talk to your healthcare provider about your pregnancy history, especially.

1. How many pregnancies have you had?
2. Have you had a miscarriage or stillbirth?
3. Have you had preeclampsia?
4. Have you had gestational diabetes?
5. What was the weight of your babies? Were any of your babies born early or small?

Gestational hypertension

Gestational hypertension is high blood pressure (140/90 or higher) that develops after 20 weeks of pregnancy. While it usually goes away within 12 weeks after delivery, it has some risks, such as:

- Narrows the blood vessels of the placenta, making it harder for your baby to get all the oxygen they need. This can cause your baby to grow slower than usual and be born smaller.
- Raises your risk of preeclampsia. We will watch you closely for the signs of preeclampsia listed in this handout.
- Raises your risk of early (premature) delivery.
- Raise your risk of having chronic hypertension later in life by 3 to 4 times.
- Double your long-term risk of heart disease, including heart attack or stroke.

Chronic hypertension

Chronic high blood pressure is high blood pressure that develops before, during, and after pregnancy and lasts long term. Chronic hypertension:

- Raises your risk of preeclampsia (see details at the right)
- May lead to serious health problems like stroke or heart failure if not controlled.

You may need ongoing treatment to help manage your blood pressure. After your baby is born, please have your blood pressure checked at your follow-up visit. After that, see your usual care provider once a year.

Preeclampsia

Preeclampsia is high blood pressure that begins **after 20 weeks of pregnancy**. No one knows for sure what causes preeclampsia.

Having preeclampsia raises your risk of these problems:

- Organ damage
- Chronic high blood pressure
- Heart disease (your future risk of heart disease is 3–4 times higher if you had preeclampsia during pregnancy). See the next page for ways to reduce your risk.

What are the symptoms of preeclampsia?

- High blood pressure 140/90 (“140 over 90”) or higher
- Protein in your urine
- Sudden weight gain (more than 2 pounds per week)
- Swelling of the feet, hands, fingers, or face (especially under the eyes)
- Headaches that don’t go away with over-the-counter pain medicine like acetaminophen (Tylenol)
- Sudden changes in vision, including double or blurry vision, flashing lights, and auras.
- Sharp pain in the upper right belly
- Nausea (feeling sick to your stomach) and vomiting (throwing up).

The symptoms may be mild or severe. We will ask you about these at each prenatal visit.

How is preeclampsia treated?

- We may give you oral or IV medicines to lower your blood pressure and prevent seizures.
- We may do tests 1-2 times a week to make sure the placenta is still doing its job and keeping your baby healthy. These include:
 - Checking your weight and blood pressure.
 - Biophysical profile (an ultrasound exam to look at baby’s movement, breathing, and fluid).
 - Non-stress tests (monitors on your belly to record your baby’s movements, heart rate, and contractions).

What raises the risk of preeclampsia?

Preeclampsia often occurs in people with normal blood pressure. Your risk is even higher if these factors are true for you:

- Are pregnant for the first time, are carrying more than one baby, or are age 40 or older.
- Had high blood pressure or preeclampsia in a previous pregnancy.
- Have certain medical conditions, such as diabetes, kidney disease, lupus, or obesity (are overweight).
- Have factors that make it harder to get regular prenatal care, for example: issues with transportation, insurance, time off work, childcare, food, or housing.



How do I reduce my risk of heart disease?

To lower your risk of heart disease, we suggest making these lifestyle changes now:

- Walk 30 minutes a day, 5 times a week.
- Do muscle-strengthening exercises 2 or more times a week.
- Eat a healthy diet that is that is high in fiber (plenty of fresh fruits, vegetables, and whole grains) and low in fat. This has been proven to lower blood pressure and the risk of heart disease. For more information, see the DASH eating plan.
- Quit using tobacco. Whether you smoke, chew, or vape, tobacco raises your blood pressure and damages blood vessels right after using it.
- Wait 18 months before having another baby. Having another baby too soon can increase your risk of heart disease. We advise using birth control (contraception) during this time.
 - 1 out of 3 people (33%) in the U.S. have another pregnancy less than 18 months after their last baby.
 - 45 out of 100 pregnancies in the U.S. (45%) are unplanned.
- Have your blood pressure checked once a year, after delivery. If your blood pressure is still high, talk with your provider about how to lower it.

HELLP syndrome

HELLP syndrome is a rare but life-threatening condition that causes red blood cells to break down. Most of the time, HELLP syndrome happens in pregnancy, but it can also occur after delivery.

HELLP syndrome can lead to these problems:

- Anemia (low iron)
- Seizures
- Blood clotting problems
- Issues with the baby's liver, lungs, and placenta
- Early delivery

What are the symptoms of HELLP syndrome?

Watching for the common warning signs of HELLP syndrome can help you get early treatment and prevent the disease from getting worse.

Tell your care provider **right away** if you have any of these symptoms:

- Pain in the top right side of your belly or around your stomach
- Nausea or vomiting that won't go away.
- Headaches that don't go away with rest, hydration, and Tylenol.
- Vision changes, such as seeing black spots.
- Swelling in the hands and face
- Shortness of breath (or trouble catching your breath) after exercise or when at rest
- Rapid weight gain (gaining 2 or more pounds overnight)

How is HELLP syndrome treated?

- Blood transfusions to treat severe anemia and low platelet count.
- Medicine to lower blood pressure, prevent seizures, and help your baby's lungs mature.
- Hospital stay with fetal monitoring, including:
 - Non-stress testing to measure the fetal heart rate when the baby moves.
 - Biophysical profile: combines an ultrasound with a non-stress test to see the developing baby.
 - Doppler flow studies: a type of ultrasound that uses sound waves to measure the flow of blood through a blood vessel.
 - Lab tests of liver, urine, and blood that may tell if HELLP syndrome is getting worse.
 - You may deliver your baby early if HELLP syndrome gets worse and puts your or your baby's health in danger.

What raises the risk for HELLP syndrome?

We don't know what causes HELLP syndrome, but your risk of getting it is higher if you:

- Had preeclampsia or eclampsia during pregnancy.
- Had HELLP syndrome in a previous pregnancy, or your sister or mother had HELLP syndrome.
- Had an early delivery.



Pre-term labor

What is pre-term labor?

Labor is **pre-term** if it happens more than 3 weeks before your due date.

What problems can pre-term labor cause?

A baby born pre-term may have some of the following health issues, especially if they are born before 34 weeks.

- Breathing problems (respiratory distress syndrome, or RDS). Some babies need a breathing machine (ventilator) or extra oxygen until they can breathe easily on their own.
- Bleeding in the brain
- Digestive problems

What are the signs of pre-term labor?

Labor is sometimes painless, and the symptoms are like normal feelings of pregnancy. It can be hard to know if you're in labor. Often, the only difference is the symptoms increase or they don't go away.

- A change in vaginal discharge. Any change in the color or amount of discharge may be a sign of pre-term labor. If fluid coming from the vagina is watery or bloody, call your care team **right away**.

- More than 4 to 6 contractions, or tightenings, in one hour. These may or may not be painful. To check for contractions, lie down and put your fingertips on your bare belly. If the uterus feels tight and hard (like a clenched fist) and then gets soft again, you are having a contraction.
- Cramps that last for one hour. These are like the cramps you might feel during your period.
- Stomach cramps that last for one hour. You may need to go to the bathroom (move your bowels) more often. Some people also have diarrhea (loose or watery poop).
- Dull backache that lasts for one hour. You may feel this below the waistline. It may come and go, but it doesn't go away when you change position.
- Increased pelvic pressure that lasts for one hour. This is a heavy feeling, as if the baby is pushing down. You may feel an ache in your back, thighs, or lower belly.
- Something doesn't feel right. Trust your instincts and call your care team.

What should I do if I have labor symptoms?

1. Go the bathroom to empty your bladder.
2. Drink 3 glasses of water. If you haven't eaten lately, eat a snack.
3. Lie down on your side for one hour.
4. Feel for contractions or other symptoms. Write down the time each contraction starts.
5. If you have 4 to 6 contractions in one hour, or you still have other symptoms, call your care team.

How do you treat pre-term labor?

If you go into labor before 34 weeks:

- We may give you oral or IV medicine to try to slow or stop contractions. The goal is to delay labor for at least 24 to 48 hours.
- We may give you a steroid medicine called betamethasone (Celestone) to help your baby's lungs. It does not delay labor.
- We will plan for any other care that might be needed, such as moving to a hospital that treats premature infants, if needed.

What should I know about betamethasone?

- Pre-term babies have fewer breathing problems when we use betamethasone.
- It is given in pre-term labor at 24–37 weeks.
- We give this medicine as two shots in the hip muscle 24 hours apart.
 - If you are staying in the hospital, you will receive both doses during your stay.
 - If you are discharged to home, you will need to return for the second dose.
- The benefits of the medicine outweighs the risks of side effects. Possible side effects include:
 - You may feel sore at the site of the shots.
 - If you have diabetes, the drug may raise your blood sugar levels for 1 to 2 weeks after having the last shot. A test of your blood sugar will tell us if this is the case.
 - There are no known long-term side effects in babies exposed to betamethasone.

Early rupture of membranes

What is an early rupture of membranes?

A fetus, or baby, grows inside a sac (membrane) filled with fluid. The sac is commonly called “the bag of water.” When this sac breaks before 37 weeks and labor does not begin within 24 hours, it is called an early rupture.

How is it treated?

We may do the following:

- Keep you in the hospital. We watch for signs of infection by tracking your temperature, pulse, and white blood cell count.
- Closely track the baby’s heartbeat.
- Use ultrasound to see the baby’s growth and how much amniotic fluid is left.
- Give you antibiotics. This reduces the chances of infection for you and your baby. It also helps delay labor.
- Give you medicine to delay your labor and a steroid for your baby’s lungs.
- Limit your activity.

If you have not yet taken childbirth classes, your nurse or a childbirth educator can help you learn about birth and labor.

What are the risks of an early rupture?

If your membranes rupture early, your baby will be born sooner than planned. This can create risks like those below.

- **For the parent:**
 - **Infection.** Ruptured membranes increase the risk of infection. The longer the time between the rupture and birth, the greater the risk. We will discuss the plan of care for you and your baby and help you understand the risks.
 - **Placenta abruption:** When the placenta separates from the wall of the uterus before the baby is born. This can cause the parent to lose blood. We will deliver the baby right away by cesarean:
 - **Prolapsed cord:** When the umbilical cord slides down into the vagina ahead of the baby. This can cause poor oxygen flow to the baby. We will deliver the baby right away by cesarean.
- **For the baby:**
 - Problems breathing
 - Unstable body temperature
 - Problems feeding and breathing at the same time.
 - Jaundice, a liver problem that causes yellow skin and eyes.
 - High or low blood sugar levels

If you have any of the problems above, your baby may need to go to the Newborn Intensive Care Unit (NICU) after birth to receive extra medical care.

Know the signs of pre-term labor

Call your provider **right away** if you have any of the signs of pre-term labor listed on [page 7.](#))

Carrying two or more babies

How do I take care of myself during a pregnancy with multiples?

Carrying two or more babies (“multiples”) increases the demands placed on the parent.



Prenatal care

You will need to see your prenatal provider more often than if you were carrying one baby. You will have:

- Extra ultrasounds (pictures made with sound waves) to look at the babies’ positions, size, and growth.
- Tests to check the babies’ heart rates.
- A check-up around week 20 to look for signs of premature labor. Your provider may do this with an internal exam or an ultrasound.

Protect your back from injury

- Do not lift heavy items or children.
- Have children climb into your lap or arms instead of lifting them.
- Lower yourself by bending your knees, not bending at the waist.

Get plenty of rest

Your body will need extra energy to grow your babies.

- Get extra sleep. A nap or two each day will help.
- Use pillows for body support and comfort.
- To get up, use your arms to push yourself up from a side-lying position. Pause and sit on the edge of the couch or bed to make sure that you have your balance before standing.
- Between weeks 20 and 24, your care provider may advise you to cut back on activity and rest more often. This is a good time to arrange for the extra help you’ll need after the babies are born, as you will need more rest.

Eat well

- You will need extra food to grow two or more babies. Your care provider will tell you more about diet and weight gain.
- Making healthy choices in your diet can prevent high blood pressure and gestational diabetes. Here are some tips:
 - Eat several small meals a day instead of three large meals.
 - Include lean protein with every meal.
 - Drink extra fluids like water, juice, and milk.
 - Take prenatal vitamins with at least 30 mg (milligrams) of iron. Low levels of iron may lead to premature birth.
- Meet with a dietitian if you feel it would be helpful.

Prevent digestive problems

To prevent nausea, vomiting, and heartburn:

- Eat small meals.
- Avoid fatty or spicy foods.
- Snack on dry foods, such as crackers.
- Sit up or take walks after meals, if possible.
- Drink fluids between meals, not with meals.

To prevent constipation (trouble pooping):

- Eat a diet rich in fruits, vegetables, and whole grains.
- Drink lots of fluids.
- Exercise, if you can. Walking, swimming, and prenatal yoga are safe exercises. They help keep you flexible and comfortable in pregnancy.

What other problems can occur in a multiple pregnancy?

- High blood pressure. People who carry twins are two times more likely to have high blood pressure. The right diet can help prevent this. Talk to your prenatal provider.
- Gestational diabetes. People who carry two or more babies are at risk for diabetes brought on by pregnancy. If the diabetes is not managed, the babies may grow too large or have breathing problems at birth. The right diet can help prevent gestational diabetes. Talk to your prenatal provider.
- Risks of labor and delivery. When giving birth to more than one baby, the risk for problems during labor increases. The chances of a cesarean birth are higher. Talk to your care provider about your risks.

- Premature birth. About 6 out of 10 sets of twins are born before 37 weeks. With triplets (three babies), more than 9 out of 10 are born before 37 weeks.
- Low birth weight. This may be due to premature birth or poor growth of the babies. Babies born before 32 weeks or who weigh less than 3 ½ pounds are at risk for health problems at birth and throughout life.

Resources for high-risk pregnancies

Fairview Birth and Family Education

612-672-4118

Offers classes in your home or at your hospital bedside to prepare you for birth and parenting.

March of Dimes

www.marchofdimes.org

Information and support for healthy birth.

Minnesota Valley Mothers of Multiples

www.mvmom.org

Email: info@mmom.org

Twin Cities Mothers of Multiples

www.tcmom.org

Email: info@tcmom.org

La Leche League International

www.llli.org

Email info@llli.org or call 800-525-3243

Offers local support groups for people who want to breastfeed.

Books

When You Are Expecting Twins, Triplets, or Quads: Proven Guidelines for a Healthy Multiple Pregnancy, by Barbara Luke, MD, and Tamar Elberlien (2004).

Twinspiration: Real Life Advice from Pregnancy through the First Year, by Cheryl Lage (2006).

