



Centers for Disease Control and Prevention  
CDC 24/7: Saving Lives. Protecting People.™

## Diabetes & Pregnancy



**Learn how to control your blood sugar before and during pregnancy to help prevent birth defects and other poor outcomes, such as miscarriages or stillbirths.**

### What is diabetes?

Diabetes is a condition in which the body cannot change sugars and starches (carbohydrates) into energy. This happens when the body cannot make enough insulin or cannot use the insulin it makes. As a result, extra sugar in the blood can lead to damage in the blood vessels, eyes, kidneys, heart, and nerves.

There are three common types of diabetes:

- **Type 1 diabetes** is a condition in which the body makes no insulin or so little insulin that the body cannot change blood sugar into energy. Type 1 diabetes usually develops during childhood or adolescence, before a woman gets pregnant.
- **Type 2 diabetes** is a condition in which the body makes too little insulin or cannot use the insulin it makes to change blood sugar into energy. Type 2 diabetes often occurs after childbearing age, although it is becoming more common for childbearing-aged women to develop type 2 diabetes.
- **Gestational diabetes** is a type of diabetes that is first diagnosed in a pregnant woman. Out of every 100 pregnant women in the U.S., two to ten will have gestational diabetes (/diabetes/pubs/estimates11.htm#8). Gestational diabetes usually goes away after pregnancy, but if it does not go away, it is known as type 2 diabetes. Many women who have had gestational diabetes will develop type 2 diabetes later.



### How can diabetes affect my health?

Controlling blood sugar is hard, especially during pregnancy, but it is important work at it. When blood sugar is high most of the time in a woman with diabetes, she might have certain health problems.

A woman with gestational diabetes whose blood sugar stays high has an increased chance of:

- Preeclampsia (high blood pressure, protein in urine, increased swelling)
- Preterm birth (baby born before 37 weeks)
- C-section

In a woman with preexisting diabetes (which includes type 1 and type 2), blood sugar that remains high can trigger or worsen certain health problems, including:

- High blood pressure
- Preeclampsia
- Kidney disease
- Nerve damage
- Heart disease
- Blindness

Also, a woman with preexisting diabetes whose blood sugar remains high has an increased chance of:

- Miscarriage
- Preterm birth
- Stillbirth
- C-section

## How can diabetes affect my baby's health?

Blood sugar that remains high in a woman with gestational diabetes can cause her baby to grow very large (about 9 pounds or more). Being very large makes it hard for the baby to be born through the birth canal and can cause nerve damage to the baby's shoulder during birth. A very large baby has an increased chance of being overweight or obese later in life. Being overweight or obese increases the chance of also having diabetes later in life.

Blood sugar that remains high in a pregnant woman with type 1 or type 2 diabetes can cause her baby to have the following health problems:

- Birth defects, especially of the brain, spine, and heart
- Increased birth weight
- Nerve damage to the shoulder during delivery
- Low blood sugar after birth
- Increased chance of overweight, obesity, and/or diabetes later in life

## What can be done to prevent health problems related to diabetes during pregnancy?

### Women

- **Plan your pregnancy.** If you have diabetes, it is very important for you to get your body ready before you get pregnant. If you are already pregnant, see your doctor right away.
- **See your doctor.** Your doctor needs to look at the effects that diabetes has had on your body already, talk with you about getting and keeping control of your blood sugar, change medications if needed, and plan for frequent follow up.
- **Monitor your blood sugar often.** Pregnancy affects your blood sugar control. You will probably need to check your blood sugar more often than when you are not



pregnant. Talk with your doctor about how often to check your blood sugar.

- **Take your medications on time.** If medications are ordered by a doctor, take them as directed.
- **Control and treat low blood sugar quickly.** Having tight blood sugar control can lead to a chance of low blood sugar at times. Keep a ready source of sugar, such as glucose tablets or gel or hard candy, on hand at all times. Talk with your doctor about how to treat low blood sugar.
- **Follow up with the doctor regularly.** You will need to see your doctor more often than a pregnant woman without diabetes. Together, you can work with your doctor to prevent or catch problems early.
- **If you had gestational diabetes, talk with your doctor about getting your blood sugar checked after delivery and every 1 - 3 years.** About half of all women who had gestational diabetes develop type 2 diabetes later.



## Family and Friends

- Be supportive
- Encourage healthy eating and regular exercise
- Exercise together
- Assist with daily activities to free up time for exercise

## Health Care Provider

- Be encouraging
- Provide easy to read materials to reinforce your instructions
- Encourage continued healthy eating and regular exercise after pregnancy
- Follow through on testing women with gestational diabetes post-delivery and every one to three years

## What is CDC's National Center on Birth Defects and Developmental Disabilities (NCBDDD) doing to address diabetes during pregnancy?

- **Research.** The Centers for Disease Control and Prevention (CDC) manages the Centers for Birth Defects Research and Prevention to collaborate on the National Birth Defects Prevention Study (NBDPS). The NBDPS is one of the largest U.S. studies looking at the risk factors for and potential causes of birth defects.
- **Materials Development.** Through formative research, the CDC found that a lack of knowledge and awareness about the need to control diabetes before and during pregnancy existed among women and healthcare providers. As a result, the CDC created educational materials (<http://www2.cdc.gov/ncbddd/faorder/orderform.htm>) on gestational diabetes and preexisting diabetes and pregnancy, in both English and Spanish.

## Get involved! Be an advocate for healthier babies

- Send a health eCard



(<http://t.cdc.gov/ecards/https://t.cdc.gov/ecard:cardid=303>)

(<https://t.cdc.gov/ecard:cardid=304>)

## More Information

- CDC's Division of Reproductive Health: Gestational Diabetes Mellitus (<http://www.cdc.gov/reproductivehealth/MaternalInfantHealth/PregComplications.htm#2>)
- CDC's National Center on Birth Defects and Developmental Disabilities
  - Diabetes and Pregnancy ([/NCBDDD/pregnancy\\_gateway/diabetes.html](/NCBDDD/pregnancy_gateway/diabetes.html))
  - Diabetes Information (</diabetes>)
  - Pregnancy Information ([/ncbddd/pregnancy\\_gateway](/ncbddd/pregnancy_gateway))
  - Free diabetes and pregnancy materials (<http://www2.cdc.gov/ncbddd/faorder/orderform.htm>)
- CDC's Diabetes and Women's Health (</diabetes/consumer/groups.htm>)
- National Diabetes Education Program - gestational diabetes campaign, "It's Never Too Early...to Prevent Diabetes" (<http://ndep.nih.gov/publications/OnlineVersion.aspx?NdepId=NDEP-88>)  (<http://www.cdc.gov/Other/disclaimer.html>)
- CDC's Diabetes and Public Health Resources - Eat Right (</diabetes/consumer/eatright.htm>)
- Podcast on gestational diabetes (<http://www2c.cdc.gov/podcasts/player.asp?f=7235>)

CDC works 24/7 saving lives and protecting people from health threats to have a more secure nation. A US federal agency, CDC helps make the healthy choice the easy choice by putting science and prevention into action. CDC works to help people live longer, healthier and more productive lives.

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