

Diabetes in Kentucky Gestational Diabetes



In 2005, approximately 8.9 percent of Kentucky's adult population had been diagnosed with **diabetes**. **Diabetes** is the number one cause of disability for Kentuckians and the fifth leading cause of death by disease. Among the 50 states, Kentucky ranks seventh for having the highest number in the adult population diagnosed with **diabetes**. The cost of **diabetes** in both life and medical care is alarming. In 2002 approximately 2.9 billion dollars was spent on treating **diabetes** in Kentucky. Preventing this catastrophic disease is a priority. An estimated 40.1 percent of Kentuckians (adults aged 40 to 74) have pre-diabetes and may develop type 2 **diabetes** within 10 years if they do not change lifestyle habits. Identifying those at risk for **diabetes** is one of the keys to reducing both the disease and cost of this disease in Kentucky.

What is gestational diabetes?

Gestational diabetes is diabetes diagnosed for the first time during pregnancy. The placenta produces hormones that help the baby develop but these same hormones also block the mother's **insulin** from working very well in her body. **Insulin** is a hormone that helps the glucose in the blood enter the body's cells, where it is either used immediately for energy or stored for later use. Without **insulin**, the blood glucose builds up in the bloodstream and cause damage to the heart, blood vessels, eyes, kidneys, and nerves. When the mother's body cannot make or use enough **insulin**, the glucose cannot enter into her body's cells and the sugar builds up in her body. This causes too much blood glucose to pass through the placenta to the baby raising the baby's blood glucose. This can cause problems for the mother and the baby. Approximately 4 percent of all pregnant women will develop **gestational diabetes**.

What are the signs and symptoms of gestational diabetes?

- Frequent urination (having to go to the bathroom more often than usual for no apparent reason).
- Excessive thirst (even after drinking an adequate amount).
- Fatigue (feeling tired).
- Extreme hunger (when you normally should not be hungry).
- Unusual weight loss (not explained by dieting or increased physical activity).
- Blurred vision resulting from fluid leaking into the lens of the eye from elevated blood glucose. This condition causes the lens of the eye to swell making it unable to focus

properly. This condition may occur at the onset of diabetes or during periods when blood glucose fluctuates. It passes with time or when blood glucose levels decrease.

- Dry, itchy skin.
- Tingling or numbness in feet (may be a sign of damage to the blood vessels or nerves in your feet due to undiagnosed or untreated **diabetes**).

These signs and symptoms may indicate **diabetes** (although you may have no signs and symptoms). Your health care provider is the **ONLY ONE** who can make the diagnosis. **DO NOT** rely on symptoms only.

What are the risk factors for gestational diabetes?

Being:

- Overweight or obese.
- 25 years of age or greater.
- A member of a high risk ethnic population (Native American, Hispanic, Asian, or Chinese).

Having:

- A previous history of **gestational diabetes** or abnormal glucose tolerance.
- A family history of **diabetes**.

Or:

- Had a baby who died before birth.

Complications of gestational diabetes

Gestational diabetes affects both mother and baby. The high level of glucose in the mother's blood results in a high level of glucose in the baby's blood. This causes the baby's pancreas to produce more **insulin**. Since **insulin** is a growth hormone, it stimulates the baby's growth, causing an increase in fat being stored in the baby's organs, chest, and shoulders. This may make the baby too large to be delivered normally without injuring the arms or shoulders. The baby's pancreas will continue to make extra **insulin** right after birth, which may cause the baby to have to be treated for low blood sugar or **hypoglycemia**.

Other risk factors to the baby include:

- Being born early risking underdeveloped lungs.
- Liver problems such as **jaundice** (yellow skin discoloration resulting from high levels of **bilirubin**).
- Stillbirth.

Other risk factors to the mother include:

- High blood pressure or **preeclampsia**.
- Increased chance of bladder or vaginal infections.
- Too much fluid around the baby which may make the abdomen large and push on the lungs, causing shortness of breath and/or a more difficult delivery.

How to prevent and manage gestational diabetes

- Maintain a healthy weight for pregnancy.
- Maintain healthy eating habits and choices during pregnancy which includes adequate calories and nutrients to support a healthy pregnancy and baby. All women diagnosed

with **gestational diabetes** should get counseling from a registered dietitian experienced in **gestational diabetes**.

- Consult your health care provider for individual recommendations on physical activity.
- Have regular doctor checkups.
- Monitor blood glucose and check urine for **ketones** at home if recommended by your health care provider. FYI: **Ketones** occur when the body burns fat for energy instead of glucose and can appear when insufficient calories are consumed.
- Promptly report any new health problem to your health care provider.
- Know the signs of, risk factors for, and prevention of diabetes.
- Have a diabetes screening six to twelve weeks after giving birth.

References

American Diabetes Association (2007) Gestational diabetes. Available online at <http://www.diabetes.org/gestational-diabetes.jsp>.

Centers for Disease Control and Prevention (2005) Preventing chronic diseases: investing wisely in health, preventing diabetes and its complications. Available online at <http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/pdf/diabetes.pdf>.

Centers for Disease Control and Prevention (2006) Prevention research centers: diabetes prevention and control. Available online at <http://www.cdc.gov/prc/pdf/PRCdiabetesfactsheetsummer2006.pdf>.

Kentucky Department of Public Health (2007) Diabetes Prevention and Control Program. Available online at <http://chfs.ky.gov/dph/ach/diabetes.htm>.

Kentucky Department of Public Health (2005) Kentucky Diabetes Fact Sheet. Available online at <http://chfs.ky.gov/dph/ach/cd/diabetesfactsheets.htm>.

Kentucky Department of Public Health (2005) Impact of diabetes on the Commonwealth of Kentucky. Available online at <http://chfs.ky.gov/NR/rdonlyres/6C9E500DE-C771-4305-BDE1-ACA63E9DA972/0/BurdenDoc05.pdf>.

This is a publication in a five-part series on diabetes. Other publications in this series are:

- General diabetes information: HSW-PAR.814
- Pre-diabetes: HSW-PAR.815
- Type 1 diabetes: HSW-PAR.816
- Type 2 diabetes: HSW-PAR.817

Peggy Riley, RN, MSN
Extension Health Specialist for Nursing

November 2007

Copyright © 2007 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the authors(s) and include this copyright notice.

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin.

UK
UNIVERSITY
OF KENTUCKY
Health Education
through
Extension Leadership