

# Gestational Diabetes in Michigan 2011 – The Facts

## What is Gestational Diabetes?<sup>1</sup>

- Gestational diabetes is high blood sugar that is first diagnosed during pregnancy. This is different than women who have already been diagnosed with diabetes and become pregnant.
- Without treatment, gestational diabetes can increase the risk of:
  - miscarriage or preterm birth
  - pre-eclampsia for the mother (a dangerous increase in blood pressure)
  - prolonged yellowing of the baby's skin and eyes (jaundice)
  - large-sized babies (macrosomia)
  - delivery complications due to the larger size of the baby
  - obesity and developing diabetes later in life for the baby
- Gestational diabetes typically goes away after giving birth, but women who had gestational diabetes have a 35 – 60% chance of developing diabetes within the next 10 – 20 years.<sup>2</sup>

## National Gestational Diabetes Facts

- 1 in 16 pregnant women have diabetes (gestational or pre-existing).<sup>3</sup>
- Gestational diabetes is more common in:<sup>1</sup>
  - African American, Hispanic and American Indian women
  - overweight and obese women
  - women with a family history of diabetes
  - women older than 25
  - women who had gestational diabetes in a past pregnancy
  - women who had a stillbirth or previous baby weighing over 9 pounds
- 32% of pregnant women are not screened for gestational diabetes during pregnancy.<sup>4</sup>
- Gestational diabetes increases hospital costs by 18%, while pre-existing diabetes during pregnancy increases hospital costs by 55%.<sup>2</sup>
- 36% of gestational diabetes-related costs and 43% of pre-existing diabetes during pregnancy costs are covered by government programs (primarily Medicaid).<sup>2</sup>
- 81% of women with gestational diabetes lack the recommended post-partum test for diabetes.<sup>3</sup>
- Immediately after pregnancy, 5 – 10% of women with gestational diabetes are found to have diabetes (usually Type 2).<sup>2</sup>

Changes to screening guidelines for Gestational Diabetes will reduce health risks to mothers and babies.

Under the new diagnostic criteria, as much as 18% of pregnancies may be identified with gestational diabetes.<sup>2</sup>

*See back for changes in guidelines.*

## Michigan Gestational Diabetes Facts

- Roughly 1 in 10 pregnant Michigan women have diabetes (gestational or pre-existing).
- Gestational diabetes costs Michigan an estimated \$32 million annually.<sup>5</sup>

Table. Self-reported diabetes prevalence during pregnancy in Michigan, 2006-2008.<sup>6</sup>

Type of Diabetes	%	95%CI
Gestational Diabetes	8.6	7.7 - 9.6
<i>By Race/Ethnicity</i>		
White	7.8	6.7 - 9.1
Black	9.3	7.9 - 11.0
Hispanic/Other	18.3	13.4 - 24.5
<i>By Parity</i>		
Primiparous	7.7	6.4 - 9.2
Multiparous	9.3	8.0 - 10.7
Pre-Existing Diabetes	1.2	0.8 - 1.6
<b>Total Diabetes During Pregnancy</b>	<b>9.8</b>	<b>8.8 - 10.8</b>

## Changes in Gestational Diabetes Mellitus (GDM) Standards of Care

NEW 2011 Clinical Practice Recommendations <sup>7</sup>	Old 2010 Clinical Practice Recommendations <sup>8</sup>
Screen for undiagnosed type 2 diabetes at the first prenatal visit in those with risk factors, using standard diagnostic criteria.	Women at very high risk should be screened for diabetes as soon as possible after the confirmation of pregnancy, using standard diagnostic testing.
In pregnant women not known to have diabetes, screen for GDM at 24-28 weeks of gestation, using a 75-g-2-h OGTT and new diagnostic cut points.	In pregnant women with greater than low risk, screen for GDM at 24-28 weeks of gestation, using a 75-g-2-h OGTT and new diagnostic cut points.
<p>The diagnosis of GDM is made when any of the following plasma glucose values are exceeded:</p> <p>Fasting cut point: <math>\geq 92</math> mg/dl</p> <p>1-hour OGTT cut point: <math>\geq 180</math> mg/dl</p> <p>2-hour OGTT cut point: <math>\geq 153</math> mg/dl</p>	<p>At least two of the following plasma glucose values must be found to make a diagnosis of GDM:</p> <p>Fasting cut point: <math>\geq 95</math> mg/dl</p> <p>1-hour OGTT cut point: <math>\geq 180</math> mg/dl</p> <p>2-hour OGTT cut point: <math>\geq 155</math> mg/dl</p> <p>3-hour OGTT cut point: <math>\geq 140</math> mg/dl</p>
Screen women with GDM for persistent diabetes 6-12 weeks postpartum.	Women with GDM should be screened for diabetes 6-12 weeks postpartum and should be followed up with subsequent screening for the development of diabetes or pre-diabetes.
Women with a history of GDM should have lifelong screening for the development of diabetes or pre-diabetes every 3 years.	Women with GDM should be screened for diabetes 6-12 weeks postpartum and should be followed up with subsequent screening for the development of diabetes or pre-diabetes.

**For more diabetes information in Michigan, please visit [www.michigan.gov/diabetes](http://www.michigan.gov/diabetes)**

<sup>1</sup> *What I need to know about Gestational Diabetes*. NIH Publication No. 06–5129. April 2006. National Diabetes Information Clearinghouse, National Institutes of Health of the U.S. Department of Health and Human Services. <http://diabetes.niddk.nih.gov/dm/pubs/gestational/index.htm>.

<sup>2</sup> Centers for Disease Control and Prevention. National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.

<sup>3</sup> *One in 16 Women Hospitalized for Childbirth Has Diabetes*. AHRQ News and Numbers, December 15, 2010. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/news/nn/nn121510.htm>

<sup>4</sup> Blatt AJ, Nakamoto JM, Kaufman HW. Gaps in diabetes screening during pregnancy and postpartum. *Obstetrics & Gynecology* 117(1): 61-68, 2011.

<sup>5</sup> The GDM estimate from the 2008 Michigan Pregnancy Risk Monitoring System was multiplied by the number of live births in 2008 from the Michigan Natality Statistics and multiplied by \$443 per person GDM cost from Chen et al. *Pop Health Manage* 12(3): 165-174, 2009. Michigan Department of Community Health (MDCH).

<sup>6</sup> *Michigan Pregnancy Risk Assessment Monitoring System*. Lansing, MI: U.S. Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology, Michigan Department of Community Health, 2006-2008.

<sup>7</sup> American Diabetes Association. *Standards of Medical Care in Diabetes – 2011*. *Diabetes Care* 34(s1): S11-S61, 2011.

<sup>8</sup> American Diabetes Association. *Standards of Medical Care in Diabetes – 2010*. *Diabetes Care* 33(s1): S11-S61, 2010.