

# The Ohio Gestational Diabetes Mellitus (GDM) Collaboration:

## Working to Prevent or Delay Type 2 Diabetes among Women with a History of Gestational Diabetes

### Key Goals

- Advance how we protect and improve the health of Ohioans through maternal and child health and chronic disease program partnerships.
- Educate the public and health care providers that women with a history of GDM are at high risk for type 2 diabetes and need regular screening to prevent future health complications and costs.
- Fill knowledge gaps about GDM healthcare practices, and women's experiences in Ohio.
- Enable ODH to develop effective resources and implement successful programs and policies.



Healthy  
hio

Gestational diabetes mellitus (GDM) is a disease with health implications across a woman's life span. Her health before pregnancy influences her risk of having GDM, while GDM affects her future health and the short- and long-term health of her children.

Public health programs conventionally focus on narrow population groups such as young women, pregnant women, older adults, or on specific diseases. However, a more global approach across the lifespan can impact long-term outcomes to improve health. In Ohio, a collaborative group is adopting this approach and improving the ways we preserve, protect and promote the health of Ohioans.

The Division of Family and Community Health Services, Office of Healthy Ohio, and the State Epidemiology Office form the Ohio Department of Health's (ODH) collaborative team. The group also includes Ohio Medicaid as an additional partner. The team formed in the spring of 2010 when ODH competitively applied and was selected to participate in a national, year-long learning collaborative with two other states. The collaborative receives technical assistance



from the project sponsors: the National Association of Chronic Disease Directors, the Association of Maternal and Child Health Programs, and the Centers for Disease Control and Prevention (CDC) while also sharing ideas with and learning from the Missouri and West Virginia teams.

Working together, the ODH team has pooled resources, skills, and enthusiasm to do more for Ohioans than any one program could accomplish alone. The team's key objectives focus on improving preventive healthcare provision in Ohio in accordance with national guidelines; increasing the public's knowledge about gestational diabetes, reducing the risks, and increasing access to preventive care; and improving the understanding of the epidemiology of gestational diabetes in Ohio by increasing the availability, use and dissemination of public health data.

**Gestational Diabetes Mellitus (GDM)** is a type of diabetes, or glucose intolerance, that develops during pregnancy. It occurs in 2-10 percent of pregnancies in the United States as well as Ohio and is closely associated with long term health issues for both the mother and infant. In Ohio alone, GDM is responsible for approximately 9,000 pregnancy complications each year.

### Health Risks for Mom

- Preeclampsia (high blood pressure during pregnancy)
- Cesarean section
- GDM in future pregnancies
- Type 2 diabetes

### Health Risks for Baby

- Large birth size
- Birth injury
- Cesarean delivery
- Childhood obesity
- High blood pressure
- Type 2 diabetes

## GDM Facts

- *Women diagnosed with GDM during pregnancy are more likely to develop type 2 diabetes, with up to 60 percent developing type 2 in the following 10 years.*
- *Post-partum glucose tolerance screening followed by screening at least every one to three years is recommended for early detection of type 2 diabetes. Lifestyle counseling and education about future risk is recommended to prevent or delay type 2 diabetes.*
- *One case study found that women who failed to return for screening were more likely to have more severe GDM in following pregnancies as well as a higher pre-pregnancy weight.*
- *Despite recommendations, many women fail to return for post-partum blood sugar testing. In a study of the Ohio Medicaid population, only 46 percent of women kept their post-partum appointments.*

## Key Accomplishments

### Raising Awareness Among Healthcare Providers and the Public

- During National Diabetes Month, the Title V and the Ohio Diabetes Programs partnered to raise GDM awareness among their partners and the public by providing:
  - \* Public service announcements on radio stations across Ohio.
  - \* A GDM feature article in the Ohio Diabetes Prevention and Control newsletter which was sent to more than 1000 partners.
  - \* ODH Web site features.
  - \* Social media messages on Facebook and Twitter.
- ODH updated its GDM clinical protocols for CFHS clinics.

- Team members presented to public health partners including diabetes, birth defects and women's health groups,
- Posters were created that were nationally recognized by the National Diabetes Education Program; these were sent to Title V & Title X clinics, WIC, FQHCs and other providers.
- ODH published a GDM fact sheet highlighting data from the Pregnancy Risk Assessment Monitoring System (PRAMS).
- ODH became a text4baby partner to bring free text messages about a healthy pregnancy and baby to women in Ohio.

### Filling Knowledge Gaps about GDM in Ohio, Healthcare Practices & Women's Experiences

Title V and the Diabetes Program are combining resources to conduct focus groups to learn how to best reach women with a history of GDM. In order to understand how to improve care for women with a history of GDM, ODH received help from the CDC and Case Western Reserve University to survey over 1000 Ohio healthcare providers. Additional GDM questions were added to the Ohio Behavioral Risk Factor Surveillance System (BRFSS) survey for further risk factor and prevalence evaluation.

### Future Directions

The collaborative aims to increase the number of women who received post-partum screening and education for type 2 diabetes so that health risks are addressed early and effectively.

To accomplish this, the ODH GDM collaborative will work through Ohio's Title V programs, WIC, Diabetes Prevention and Control, Medicaid and with non-governmental partners to improve the quality of healthcare to prevent or manage future disease.

The collaborative's improvement efforts will be informed by results from the healthcare provider sur-

vey and focus groups with women who had GDM as well as a data book its members are compiling from existing GDM cases among various surveillance systems at ODH.

Limited surveillance data suggest that the number of hospitalizations with GDM in Ohio are increasing. This is perhaps fueled by increasing prevalence and severity of maternal obesity and to a smaller extent, by the rising numbers of pregnancies in older women.

Medicaid is billed as the primary payer for 25 percent of all births

in Ohio and approximately 35 percent of all GDM deliveries. Among women known to have a history of GDM, avoiding uncontrolled type 2 diabetes and severe GDM in future pregnancies will control healthcare costs.

By collaborating together, the Title V and chronic disease programs have accomplished more than either would have alone. The collaborative is poised to impact the health of Ohioans by preventing the devastating effects of type 2 diabetes among women who are at an increased risk.

## Sources

"The Ohio Department of Health Gestational Diabetes Project." Ohio Diabetes Prevention and Control Program, Fall 2010: 1-2.

"Ohio PRAMS Fact Sheet: Gestational Diabetes Mellitus." Ohio Pregnancy Risk Assessment Monitoring System, <http://www.odh.ohio.gov/ASSETS/EB57AB3B94B04B13859E67B4AAC3B79E/GDM%20FS.pdf>

The American College of Obstetricians and Gynecologists. Practice Bulletin Number 30. Gestational Diabetes. September, 2001.

Ferrara A. Increasing prevalence of gestational diabetes mellitus. *Diabetes Care* 2007; 30:S141-146.

Hunt KL, Conway DL. Who returns for postpartum glucose screening following gestational diabetes mellitus? *Am J Obstetr Gynecol* 2008;198: 404.e1-404.e6