

Gestational Diabetes Mellitus (GDM)- Prevalence and Incidence

What is GDM?

According to the Centers for Disease Control and Prevention (CDC), GDM is a form of glucose intolerance diagnosed in some women during pregnancy. GDM occurs more frequently among African Americans, Hispanic/Latino Americans, and American Indians. It is also more common among obese women and women with a family history of diabetes. During pregnancy, gestational diabetes requires treatment to normalize maternal blood glucose levels to avoid complications in the infant. After pregnancy, five to 10 percent of women with gestational diabetes are found to have type 2 diabetes. Women who have had gestational diabetes have a 20 to 50 percent chance of developing diabetes in the next five to 10 years. Their offspring are at an increased risk for obesity as well as impaired glucose tolerance and type 2 diabetes. GDM may also be associated with intrauterine fetal death, increased frequency of maternal hypertensive disorders and the need for cesarean delivery.

Prevalence (existing plus new cases at one point in time) of Gestational Diabetes Mellitus (GDM):

In 2007, the Behavioral Risk Factor Surveillance Survey (BRFSS) estimated the Virginia prevalence of gestational diabetes to be only 1.5 percent of adult Virginians. Currently, this is not a reliable source of prevalence data for diabetes during pregnancy. The CDC has added a module to the BRFSS system in 2008 that will permit a more reliable estimate of GDM prevalence, beginning in late 2009. The National Diabetes Education Program estimated that the national prevalence of GDM in 2005 was approximately seven percent in women of childbearing age, 15-44 years.

Sources: CDC National Fact Sheet, 2007
http://www.cdc.gov/diabetes/pubs/pdf/ndfs_2007.pdf; VA BRFSS, 2007

Data Note: Percents are weighted towards annual population estimates.

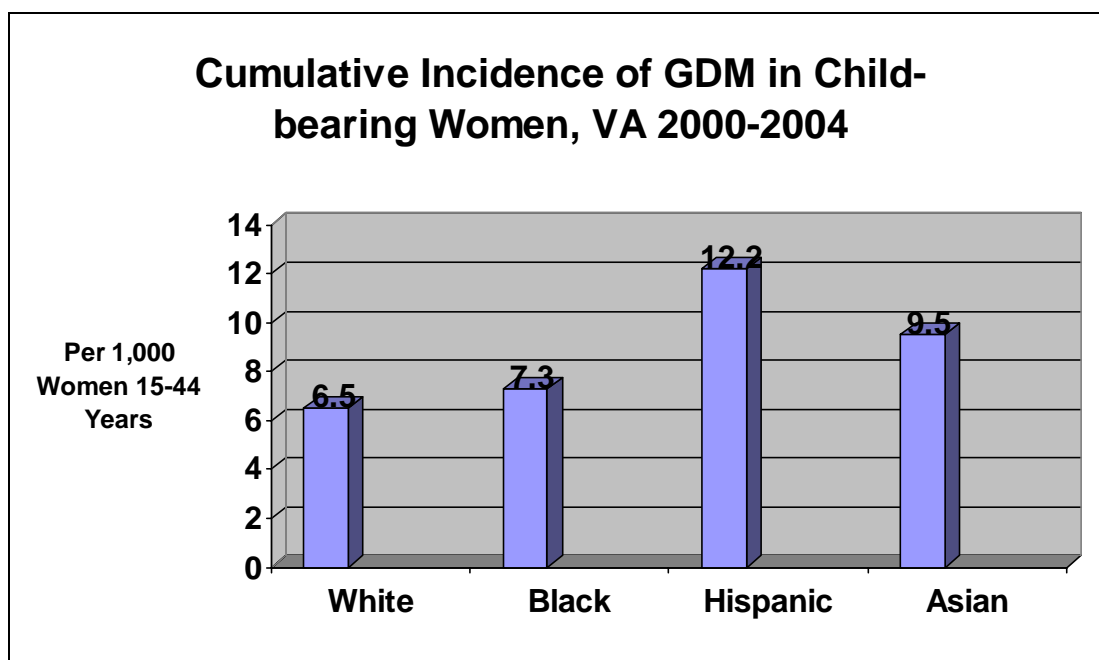
Incidence (new cases) of GDM:

Age-specific incidence rates for women of childbearing ages 15-44 years, indicate that there was a significant increase ($p < .05$) in the incidence of GDM from 2000 (3.8 per 1,000) to 2004 (4.7 per 1,000).

Incidence of Gestational Diabetes in Virginia by Year (per 1,000 women ages 15-44 years)

| | 2000 | 2001 | 2002 | 2003 | 2004 |
|-----------------------|------|------|------|------|------|
| Incidence Rate | 3.8 | 4.3 | 4.4 | 4.4 | 4.7 |

- The age- and race/ethnicity-adjusted yearly cumulative incidence per 1,000 woman ages 15-44 years was highest in the Hispanic population (12.2), followed by Asians (9.5), then blacks (7.3).



- From 2000-2004, C-sections increased in mothers with GDM by 84 percent.
- The mean length of stay for a woman with GDM was three days across the five-year period, but the mean charge per visit increased from \$5,851 in 2000 to \$7,682 in 2004.

Healthy People 2010 Objective:

(5-8) Decrease the proportion of pregnant women with gestational diabetes; no target set.

Source: Virginia Health Information, Inc. Hospital Discharge Dataset, 2000-2004

Data notes: Cumulative incidence rates were aggregated for years 2000-2004; all data include cases of live births containing birth procedure code ICD-9 V-27 and GDM code 648.8-648.84; records for each year were de-duplicated.