

Health Care Provider Sample Letter

Dear Health Care Professional:

As you may know, birth defects are a leading cause of infant mortality. The costs, both monetary and non-monetary, to individuals, families, communities and the health care industry are high. In (*Your State*), approximately (###) babies are born with a birth defect each year. Nationwide, 120,000 babies are affected annually. To raise awareness of strategies that reduce the risk for birth defects, January is designated National Birth Defects Prevention Month.

Diabetes mellitus is both a leading public health concern in the United States and a strong risk factor for birth defects. Pregestational diabetes mellitus (PGDM) in women of childbearing age has doubled in the last 10 years, now affecting about 2.5% or 1.3 million nationwide. Numerous studies show the association between maternal diabetes and wide range of birth defects. A recent study by Correa et al. confirmed that PGDM type 1 or type 2 in mother is associated with increased risk for a wide range of birth defects. The rates of central nervous system defects, heart defects, limb deficiencies, urogenital anomalies and orofacial clefts are all increased. Furthermore, while the risk for isolated birth defects is increased approximately three times, the risk for multiple defects is increased approximately eight times over background in the offspring of women with PGDM. Major congenital malformations are the leading cause of mortality and serious morbidity in infants of mothers with PGDM.

Because half of all pregnancies are unplanned, women need to hear about the reproductive risks of diabetes to themselves and future offspring starting at puberty. There is no threshold for hemoglobin A1C values below which risk disappears. However, women who optimize glycemic control *prior* to conception can lower the chance of birth defects to near the general population risk. That's the importance of incorporating these strategies into practice:

- **Explain the risk of birth defects** and potential risk reduction with glycemic control. Encourage the use of effective contraception until glycemic control is optimized
- **Assess current medication use** and need to adjust. Statins and ACE inhibitors, for example, are contraindicated in pregnancy.
- **Obtain baseline glycosylated hemoglobin concentration** (Hgb A1C) and work to achieve hemoglobin A1C levels as close to normal as possible (<7%) *prior* to conception (<7.5% for teen women, 13-19 years old). Support postpartum women in their need to maintain glycemic control.
- **Refer to a diabetes education center** and/or endocrinologist. Model preconception care programs are multidisciplinary and support self-management with diet, intensified insulin therapy and self-monitoring of blood glucose levels
- **Recommend use of 400 mcg *prior to conception***; some recommend 1 mg folic acid *prior to conception* and throughout the first trimester
- **Measure height and weight *before conception*** or at the initial prenatal visit to allow for calculation of BMI. Consider screening obese women for gestational diabetes during the first trimester. Counsel pregnant women to control optimal weight gain during pregnancy. Counsel postpartum women to achieve a healthy weight.

Another 5-9% of women of reproductive age experience gestational diabetes (GDM). Rates of both PGDM and GDM increase dramatically with increasing maternal age and weight. Nearly 9 in 10 of these women are

overweight or obese. Obesity itself increases the risk of pregnancy complications and adverse outcomes. The rates of both PGDM and GDM in Asian, Black and Hispanic women are disproportionately high. The increasingly high rates of obesity, metabolic syndrome and gestational diabetes among women of childbearing age heighten the importance of addressing these risk factors at every encounter.

You make a difference in the lives of (*your State*) families and communities when you stress the benefits of maintaining glycemic control and achieving a healthy weight at every opportunity. The National Birth Defects Prevention Network encourages you to review this information and reach out to your patients. If you have questions or would like more information, please contact _____ (*public health/ surveillance program/MCH program/Birth Defects/Genetics Programs*) or visit the National Birth Defects Prevention Network at www.nbdpn.org.

Sincerely,

References

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