

Monday, February 11, 8:45AM-11:00AM
Plenary Session

National Birth Defects Prevention Study: Exploring the Risk Factors

Moderator: Margaret (Peggy) Honein, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, Atlanta, GA

Jennita Reefhuis, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention, Atlanta, GA

Anna-Maria Siega-Riz, University of North Carolina, School of Public Health, Chapel Hill, NC

Marcia Feldkamp, University of Utah, Salt Lake City, UT

Cynthia Cassell, University of North Carolina, Department of Public Health Services, Charlotte, NC

Kristin Fowles, Salt Lake City, UT

The National Birth Defects Prevention Study (NBDPS) is the largest population-based case control study even conducted in the U.S. on the causes of birth defects. The study was established to help identify genetic and environmental risk factors for major birth defects, and work quickly to translate these findings into prevention and intervention efforts. The study entails three steps; the first is ascertainment of birth defects via population based surveillance systems. Second an extensive maternal interview with detailed questions on exposures and timing of exposures ranging from medications and family history to occupation. Lastly the family is asked to provide buccal swabs that enable us to extract DNA and conduct genetic research. The NBDPS has been collecting data for more than 10 years and has interviewed over 25,000 mothers. We will provide an overview of recent accomplishments, key priorities for 2008, and key findings from a number of recent analyses.

- Jennita Reefhuis will first give you a very brief overview of the study including some of the accomplishments in the past years which include publications on SSRIs and birth defects, obesity and birth defects and thyroid disease and craniosynostosis. Then she will list highlight some of the work that is being done in different exposure areas including infection, occupational, environmental, genetic analysis and the smoking/alcohol/caffeine.
- Anna-Maria Siega-Riz will give a more detailed report on recent and planned analyses related to nutrition, obesity, and diabetes.
- Marcia Feldkamp will highlight work on maternal diseases (e.g. hypertension, thyroid disease) and medications used during pregnancy. This study provides a unique opportunity to study the risk and safety of medications during pregnancy.
- The infrastructure of the NBDPS can also be used for projects outside of the immediate scope. Cynthia Cassell will describe a project that used the infrastructure of the NBDPS to study the cost of cleft lip, cleft palate and cleft lip with or without cleft palate.
- Lastly, an NBDPS participant will share her reasons for participating in the study and give us a parent's perspective of the need for this type of research study on causes of major birth defects.