

Public Health Genomics and Birth Defects Prevention and Follow-up

Our Vision

“Improved health outcomes and enhanced quality of life for the people of Michigan through appropriate use of genetic information, technology, and services”

Core Function and Mission

The Genomics Unit provides assessment, policy development and assurance related to birth defects, genetic disorders, and the use of genomics in public health programs. Program activities help to:

- ◆ Coordinate educational activities that increase genetic literacy
- ◆ Facilitate early identification and treatment of individuals with birth defects, heritable disorders and genetic susceptibilities
- ◆ Foster collaboration to integrate advances in genomic science throughout public health and other systems of care

Key Program Activities

Public Health Genomics

- ◆ Coordinate the use of genomics in core public health activities across chronic disease, laboratory and environmental health programs
- ◆ Expand the use and evaluation of targeted risk assessment strategies based on genomic tools such as family health history
- ◆ Utilize public health databases and surveillance systems to better understand and address the genetic burden of common chronic diseases
- ◆ Assess the feasibility of population genetic studies using dried newborn blood spots

Birth Defects Prevention and Follow-up

- ◆ Foster awareness of preconceptional health, folic acid and other birth defect prevention strategies
- ◆ Promote integration of a genetics component within child health programs
- ◆ Collaborate with the Birth Defects Registry to assure that children with birth defects and their families are linked with available services including a medical home

Genetics Education and Resource Center

- ◆ Michigan-specific information on topics relating to birth defects and genetics available at: www.MIGeneticsConnection.org
- ◆ Presentations, workshops and exhibits to educate the health workforce, policy makers and the public about the role of family history and genetic risk factors
- ◆ Partner in Michigan’s Family-to-Family Health Information and Education Center



Clinical Genetic Services

- ◆ Partnership with Newborn Screening, Children’s Special Health Care Services, and chronic disease programs to assure statewide availability and accessibility of risk assessment and genetic services through public health systems and a network of genetic centers and outreach sites

Special Projects

- ◆ Birth Defects and Genetic Conditions Toolkit: Resources for Michigan Families and Professionals
- ◆ Birth Defects Prevention Month
- ◆ Diabetes and Genomics Education Modules
- ◆ Dried Blood Spot BioTrust initiative
- ◆ Early On® Genetics Education curriculum and CD-ROM
- ◆ Family History Resource Kit for Health Care Providers
- ◆ “Genetics to Genomics” Teacher Workshops
- ◆ Michigan Cancer Genetics Alliance
- ◆ Multivitamin Distribution (March of Dimes grant)
- ◆ Neural tube defect family history and folic acid follow-up study
- ◆ Region 4 Genetics Collaborative
- ◆ State Genetics Plan
- ◆ Sudden Cardiac Death Surveillance Program

Pamphlets and Informational Materials

1. A State Plan for Michigan: Genetics Through the Life Cycle: Improving Health and Preventing Disease, 2003-2008
2. Babies with Birth Defects: Referral Guide for Michigan Hospitals
3. Family health history fact cards (6)
4. “Family History and Your Health” newsletters
5. Genetic syndrome fact sheets (15)
6. Guide to Genetics Referral
7. Informed Consent for Genetic Testing
8. It’s time...know your family’s health history poster
9. Look and Feel Your Best with Folic Acid
10. Michigan Genetic Counseling Services
11. Monitoring Infants and Children with Special Health Needs: Birth Defects Prevalence and Mortality in Michigan, 1992-2002
12. Preventing Birth Defects: Important Information for Michigan Families
13. Resources for Families of Infants and Toddlers with Special Needs
14. Special Care for Special Kids: A Guide for Michigan Families

Publications/ Poster Presentations

- ◆ Genomics and public health: development of Web-based training tools for increasing genomic awareness. *Prev Chronic Dis*, April 2005. www.cdc.gov/pcd/issues/2005/apr/04_0133.htm
- ◆ Collaboration between Birth Defects Registry and Early Hearing Detection and Intervention Program: Better Case Identification, Reporting and Referral Services, Michigan 1997-2003 Data. NBDPN Annual Conference, 2006.
- ◆ Family History of Premature Heart Attack or Stroke, Michigan WISEWOMAN Program. CDC National Health Promotion Conference, 2006.
- ◆ Incorporating Genomics into Existing State Level Cancer Surveillance System. CDC National Health Promotion Conference, 2006.
- ◆ Innovative Partnership to Strengthen Diabetes Health Promotion and Birth Defects Prevention. CDC National Health Promotion Conference, 2006.
- ◆ January is Birth Defects Prevention Month! Local Liaison Report. 2006; January: 12-13.
- ◆ Survey of Dietetic and Nursing Professionals in Michigan Reveals a Need for Continuing Education on the Role of Folic Acid in Preventing Neural Tube Defects. NBDPN National Meeting 2006.
- ◆ Barriers to Access: Results from Focus Groups to Identify Genetic Service Needs in the Community. *Community Genet* 2007; 10:10-18.
- ◆ Exploring the Enrollment of Children with Birth Defects into Children’s Special Health Care Services in Michigan. NBDPN Annual Conference, 2007.
- ◆ Folic Acid Outreach and Multivitamin Distribution in Selected Michigan Counties at High Risk for Neural Tube Defects. NBDPN Annual Conference 2007.



Contact Us

Call the offices of the state genetics coordinator toll free at 1-866-852-1247 or (517) 335-8887. Please e-mail genetics@michigan.gov with questions pertaining to genetics and genomics; or BDRFollowup@michigan.gov for birth defects information.