

Chapter 2

CDC's Family History Public Health Initiative: 2005 Update



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In early 2002, the Centers for Disease Control and Prevention's (CDC's) Office of Genomics and Disease Prevention (OGDP), in collaboration with several other CDC programs and the National Institutes of Health (NIH), began an initiative to evaluate the use of family history information for the purpose of assessing a person's risk for common diseases and influencing early detection and prevention strategies. The major activities of this initiative include the following:

- Assessing existing strategies that use family history for disease prevention.
- Developing new tools for public health and preventive medicine.
- Developing a long-term research agenda and evaluation process.
- Developing and implementing public health campaigns and provider education.

A brief update of recent accomplishments in this initiative follows.

Family History for the Public

CDC has created a website (www.cdc.gov/genomics/public/famhistMain.htm) intended for the general public that contains fact sheets, slide presentations, case studies, news articles, links, and other resources.

U.S. Surgeon General's Family History Initiative

In 2004, CDC collaborated with the Surgeon General's Office, along with NIH, the Health Resources and Service Administration (HRSA), and other federal agencies, on a campaign to promote the use of family history for disease prevention and health promotion. The campaign calls for Americans to make Thanksgiving Day, a day that families traditionally gather together, the annual National Family History Day. A new tool, "My Family Health Portrait," can be downloaded from the campaign's website (www.hhs.gov/familyhistory) to facilitate the collection of family health history. The tool is also available in print and in both English and Spanish.

MMWR (Mortality and Morbidity Weekly Report)

As part of the effort to promote family history around Thanksgiving, CDC published findings from a recent survey in MMWR showing that although 96% of the public considered knowledge of one's own family health history important to one's personal health, only 30% of the public reported collecting health information from their relatives in order to develop a family health history (1).

Family Healthware™

The Web-based tool Family Healthware™, described in CDC's *Genomics and Population Health: United States 2003* report (2), has been completed and will be evaluated in a clinical trial that began in 2005. The tool collects information about health behaviors, use of screening tests, and health history of a person's first- and second-degree relatives for the following six diseases: coronary heart disease, stroke, diabetes, and colorectal, breast, and ovarian cancer. The software includes algorithms that process the family history data and provide a qualitative assessment of familial risk (strong, moderate, or weak) for each of the six diseases. Another set of algorithms provides recommendations for lifestyle changes and screening tests that are based on a person's reported health behaviors and family history. A printable report includes a pedigree drawing of the family tree, a summary of familial risk for each disease, and personalized prevention recommendations.

Evaluation Study

Beginning this year, three research centers (University of Michigan School of Medicine, Evanston Northwestern Healthcare Research Institute, and Case Western Reserve University School of Medicine) will conduct a study to evaluate the clinical utility of Family Healthware™. The study, consisting of approximately 8,400 patients aged 35–65 years who attend primary care practices, will determine whether family history risk assessment and personalized prevention messages influence health behaviors and use of medical services.

Public Health Research

Family history has been shown to be an independent risk factor for diseases in many research studies, but a systematic evaluation of the validity and utility of family history information for risk assessment and disease prevention on a population basis has not been done. We are currently conducting in-depth analyses of family history as a risk factor for diabetes, heart disease, and cancers using existing data sets (i.e., Healthstyles; National Health and Nutrition Examination Survey; National Cancer Institute Colon Cancer Family Registry; National Heart, Lung, and Blood Institute Multi-Ethnic Study of Atherosclerosis) as well as association studies of family history and preventive behaviors (e.g., diet, exercise, screening). CDC is also working with researchers and public health

programs to improve the quality of family history data by developing standard family history questions and modules for national and state-based health surveys, including the Behavioral Risk Factor Surveillance System.

References

1. Centers for Disease Control and Prevention. Awareness of family health history as a risk factor for disease. MMWR [online] 2004;53(44):1044-1047 [cited 2005 Mar 4]. Available from URL: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5344a5.htm>.
2. Yoon P, Scheuner M. The family history public health initiative. In: Genomics and Population Health: United States 2003. Atlanta (GA): Centers for Disease Control and Prevention, Office of Genomics and Disease Prevention [online] 2003 p. 39-45 [cited 2005 Mar 4]. Available from URL: <http://www.cdc.gov/genomics/activities/ogdp/2003/chap06.htm>.