

# Connecticut BRFSS Genomics Brief

February 2014

## Family Health History Data Collection in Connecticut

### Background

Family health history (FHH) is widely recognized as offering insight into the shared genetic, environmental, and cultural factors within families, which together influence an individual's susceptibility or resistance to many diseases and medical conditions.<sup>1</sup>

A health care professional can use a patient's family health history to help assess a person's risk of certain diseases and can recommend actions or initiate medical interventions to lower the chance of getting those diseases.

It can be used to help assess risk for common diseases like cancer, heart disease, and diabetes, or health problems like high blood pressure or hypercholesterolemia. A family health history also can provide information about the risk of rarer conditions, such as cystic fibrosis and sickle cell anemia, caused by mutations in a single gene.

Results from the 2004 national HealthStyles survey revealed that 96% of respondents believed family history to be important for their own health, yet only 30% collected health information from their relatives to develop a family health history.<sup>2</sup>

In November 2004, the Surgeon General, in cooperation with other agencies with the U.S. Department of



Health and Human Services, launched a national public health campaign, called the Surgeon General's Family Health History Initiative, to encourage Americans to learn more about their personal family health history and to share this information with their doctors to assist in their medical decision-making.

In 2008, the Connecticut Department of Public Health (DPH) Genomics Office, in collaboration with several other DPH chronic disease programs, created a family health history workbook to



promote the importance of knowing one's FHH. The workbook includes separate inserts for specific chronic diseases and conditions. These workbooks have been

widely disseminated at conferences, health fairs, and workshops in the State.

In order to obtain estimates of public perceptions and practices regarding collection of personal family health history information, the DPH Genomics Office added four state-specific questions to the Behavioral Risk Factor Surveillance System (BRFSS) 2011 survey administered by DPH.

**Table 1. State-added Questions on Family Health History, 2011 Connecticut BRFSS**

Survey Question	Response	%	95% CI*
1) How important do you think knowledge of your family health history is to your personal health?	Very	77.6	76.1 – 79.2
	Somewhat	19.6	18.1 – 21.0
2) Have you ever collected health information from your relatives for the purpose of developing your family health history?	Yes	54.0	52.1 - 55.8
<i>Among those who have collected family history information:</i>			
3) Have you shared your personal record of your family health history with your doctor or health care provider?	Yes	93.3	91.8 - 94.8
4) Have you shared your personal record of your family health history with any family members?	Yes	88.9	87.3 - 90.5

\* CI = Confidence Interval

## Methods

The BRFSS is an annual, statewide telephone survey of Connecticut adults aged 18 years and older that collects demographic information as well as information about various medical conditions, risk behaviors, and preventive health care practices. Four questions related to the collection of FHH were added in 2011 to the Connecticut BRFSS (Table 1). Statewide results are shown in Table 1. Figure 1 provides demographic breakdown results for those respondents indicating that they had collected health information from their relatives. Significant differences among subgroups were determined by comparing their 95% confidence intervals as well as by using Pearson chi-square tests.

## Results

As shown in Table 1, an estimated 97% of Connecticut adults considered their family health history to be ‘very or somewhat’ important for their own health, and 54% reported having collected health information from their relatives for the purpose of developing their FHH. The latter is significantly higher than the 30% of the respondents on the 2004 HealthStyles survey who indicated that they had compiled their FHH.

Among respondents who have compiled their FHH, 93% have shared it with their health care provider and 89% have shared it with other family members.

The percentage of Connecticut adults who have collected FHH information, however, is not consistent among demographic groups.

Those who reported having collected a family health history were more likely to be female, younger than 65 years, very healthy, from households with incomes of \$50,000 or more, to have more than a high school education, and to have a personal healthcare provider (Figure 1). Differences by 'race and ethnicity' were not statistically significant (data not shown).

## Conclusions

Although 97% of Connecticut adults believed family history to be important for their own health, only 54% reported having collected their FHH. Our findings indicate significant differences in FHH collection efforts within demographic groups. The lowest

percentage (41%) was among those without a personal healthcare provider. These findings suggest a greater need to target FHH educational efforts, especially in disadvantaged populations.

The DPH Genomics Office continues to promote the use of FHH as a major risk factor for common chronic diseases of importance to public health.

## References

1. Guttmacher AE, Collins FS, Carmona RH. The family history – more important than ever. *N Engl J Med* 2004; 351:2333-2336.
2. Centers for Disease Control and Prevention: Awareness of family health history as a risk factor for disease -- United States, 2004. *MMWR Morb Mortal Wkly Rep.* 2004; 53:1044-1047.

### For More Information on Family Health History

Connecticut Department of Public Health Genomics Office: <http://www.ct.gov/dph/cwp/view.asp?a=3134&q=389720>

CDC Office of Public Health Genomics: <http://www.cdc.gov/genomics/famhistory/>

Surgeon General's Family Health History Initiative: <http://www.hhs.gov/familyhistory/>

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**Figure 1. Differences in Family Health History Collection, by Selected Characteristics**

