

Family History of Colorectal Cancer: Risk Perception and Risk Reduction Behaviors – Michigan Behavioral Risk Factor Survey, 2005



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BACKGROUND

- An estimated **5570 new colorectal cancer (CRC) cases**, and **1750 CRC deaths** will occur in Michigan in 2007. Colorectal cancer is the 3rd most common cancer and 3rd most common cause of cancer death for both men and women in Michigan and the U.S.¹ The absolute risk of CRC by age 79 is 4%.²
- About 25% of individuals with CRC have a family history of the disease. A **family history** of CRC in a first-degree relative (parent, sibling, child) **more than doubles a person's risk** of developing the disease. This risk increases with closer degree of relationship, number of affected relatives, and with younger age of diagnosis of the affected relative(s).²
- Having a family history** of CRC **may motivate** some individuals to make **lifestyle changes**, such as earlier cancer screening, to try and prevent themselves from developing the disease.^{3,4}

OBJECTIVES

In 2005, family health history questions regarding CRC were included in the Michigan Behavioral Risk Factor Surveillance System (BRFSS) in an effort to:

- Estimate the prevalence of Michigan adults with at least one first-degree relative with CRC
- Assess and compare perception of personal CRC risk and willingness to make preventative behavioral changes for those with and without a family history of CRC

METHODS

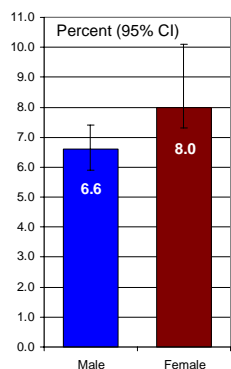
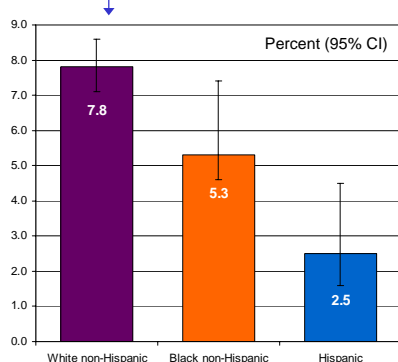
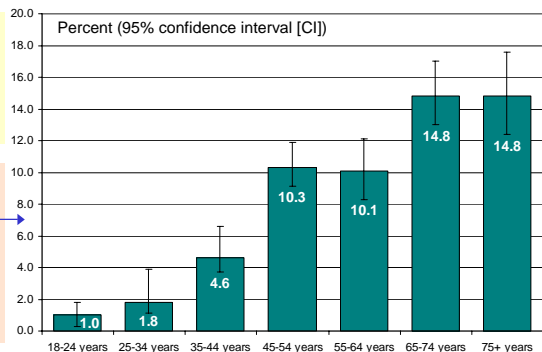
- BRFSS is comprised of state-based, random-digit-dialed telephone surveys of the non-institutionalized, U.S. civilian population aged ≥ 18 years.
- In 2005, Michigan added questions about family history of colorectal cancer to a randomly selected half (n = 5,826) of the total sample.
- Respondents were asked whether any of their first-degree relatives had ever been diagnosed with colorectal cancer, what they thought their own chances of developing colorectal cancer were, and whether they would make (or had made) any lifestyle changes in an attempt to prevent colorectal cancer.

RESULTS

Figures 1, 2 & 3: "Have any of your **immediate family members**, including your parents, brothers and sisters, and your children, ever **been told** by a doctor or other health care professional that **they have colon or rectal cancer**?" MI 2005 BRFSS (n=5,826)

An estimated **7.3%** of Michigan adults have at least one first-degree relative with CRC.

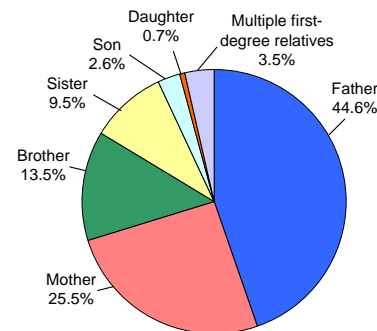
Reporting of **family history of CRC increased with age**, and was higher among white non-Hispanics than Hispanics.



RESULTS

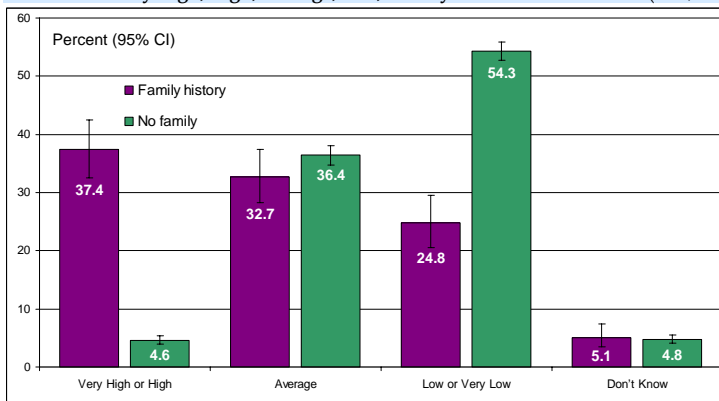
Among those with a family history of CRC, **more respondents reported a male relative** as having the disease than a female relative.

Figure 4: "What is their relationship to you?" MI 2005 BRFSS (n=521)



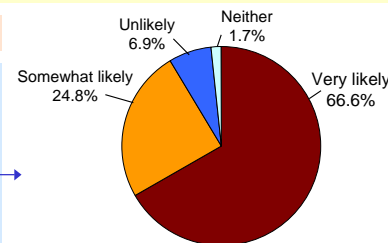
A **higher proportion of those with a family history thought their disease risk was high or very high**, than those without a family history.

Figure 5: "Do you think your chances of getting colon or rectal cancer in your lifetime are very high, high, average, low, or very low?" MI 2005 BRFSS (n=5,824)



Among those with a family history of CRC, over half (55.6%) stated they had made lifestyle changes to try and prevent the disease.

For those without a family history: Figure 6: "If you learned that you had a family history of colon or rectal cancer, how likely would you be to make lifestyle changes... to try and prevent yourself from getting the disease?" MI 2005 BRFSS (n = 5,061)



CONCLUSIONS

- In this survey, 37% of respondents with a family history of CRC perceived their personal disease risk to be higher than average. Although these individuals were more likely to report a higher perceived risk than those without a family history, it remains that **almost two-thirds (62.6%) of individuals with at least one first degree relative with CRC did not perceive their risk to be increased**.
- Heightened perceptions of risk may motivate some individuals to participate in health promotion or disease prevention behaviors.
 - Over half of respondents with a family history of CRC reported making a lifestyle change** in an attempt to prevent the disease.
 - A significant majority of respondents (91.4%) who did not report a family history of the disease **stated that they would be somewhat or very likely to make lifestyle changes if they learned a family member had CRC**.
- Our findings support the utilization of family health history not only as a risk assessment tool, but also as a focal point from which to educate and motivate individuals to proactively participate in healthy lifestyle choices and cancer screening and prevention efforts.

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