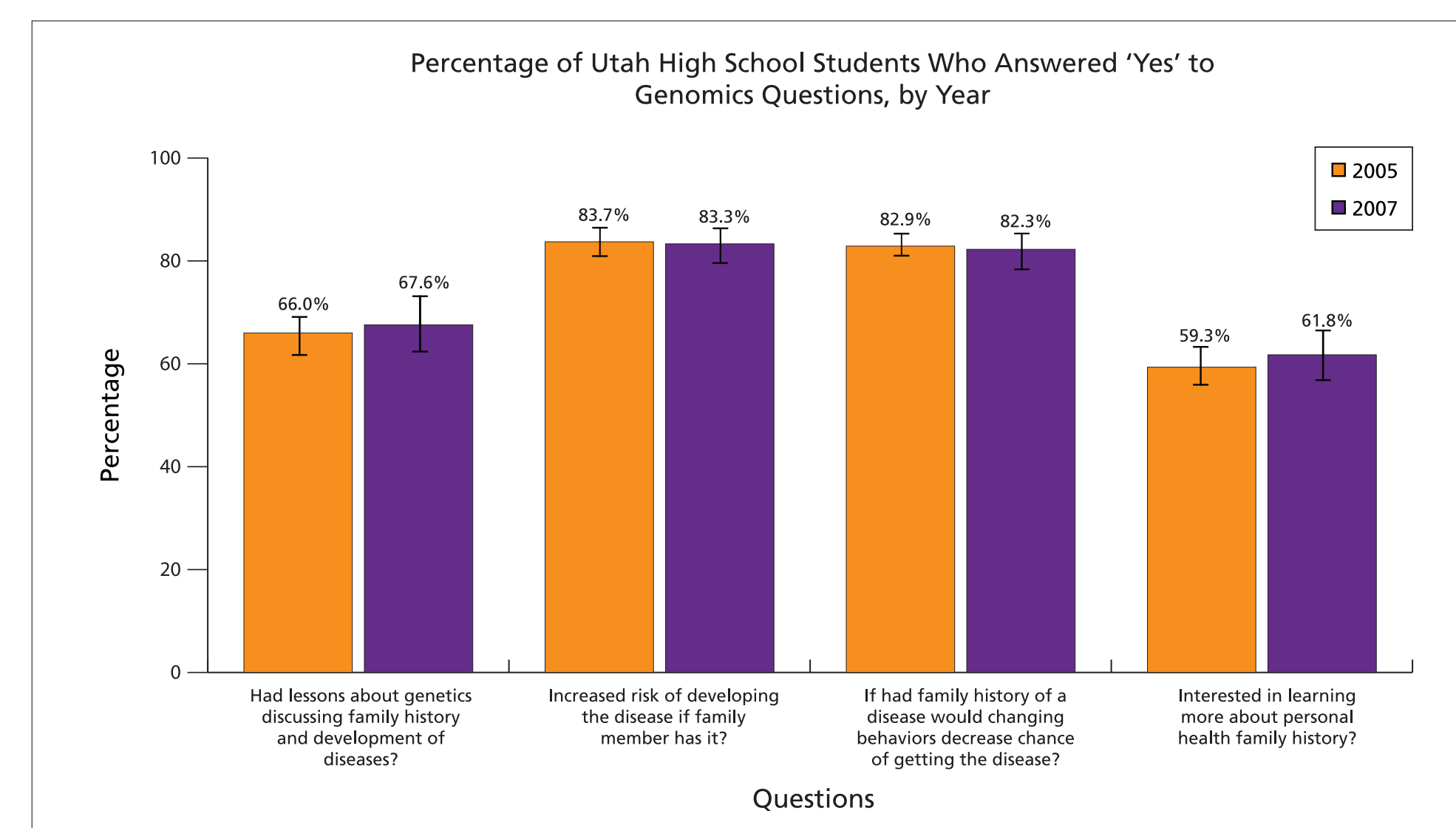


# Public Health Genomics Surveillance: Using Alternative Data Sources

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## Utah Youth Risk Behavior Survey:

The Youth Risk Behavior Survey (YRBS) is comprised of national and state, school-based surveys of 9-12th grade Public high school students and is designed to monitor health risk behaviors among youth in the US. The YRBS is conducted every two years. The Chronic Disease Genomics Program (CDGP) developed four genomics questions for inclusion on the 2005 and 2007 Utah YRBS.



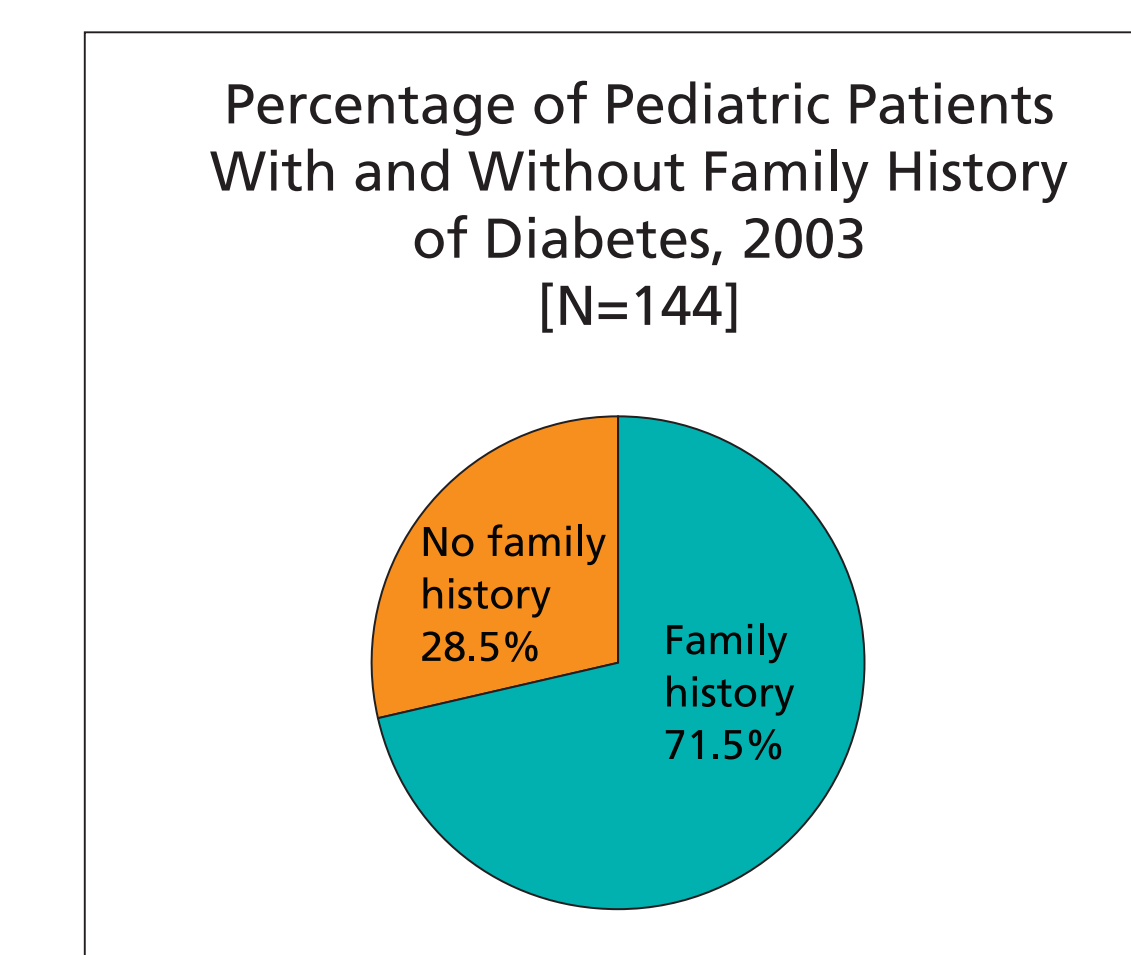
Data Source: Utah Youth Risk Behavior Survey (2005 and 2007).

## Youth Diabetes Registry:

The Utah Diabetes Prevention and Control Program, in collaboration with the Utah Diabetes Center at the University of Utah, formed a registry for pediatric patients with diabetes seen at Utah clinics. Data collected for the registry include information extracted from charts of 174 pediatric patients seen in 2003.

### Results:

Nearly three-fourths of the pediatric patients had a family history of diabetes.



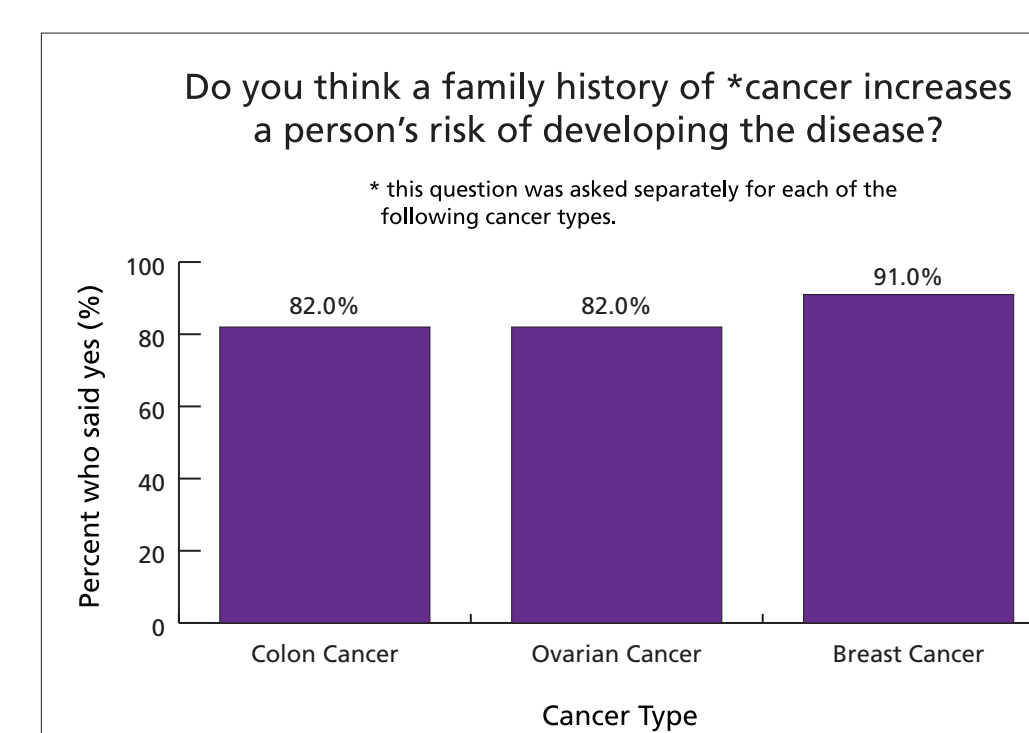
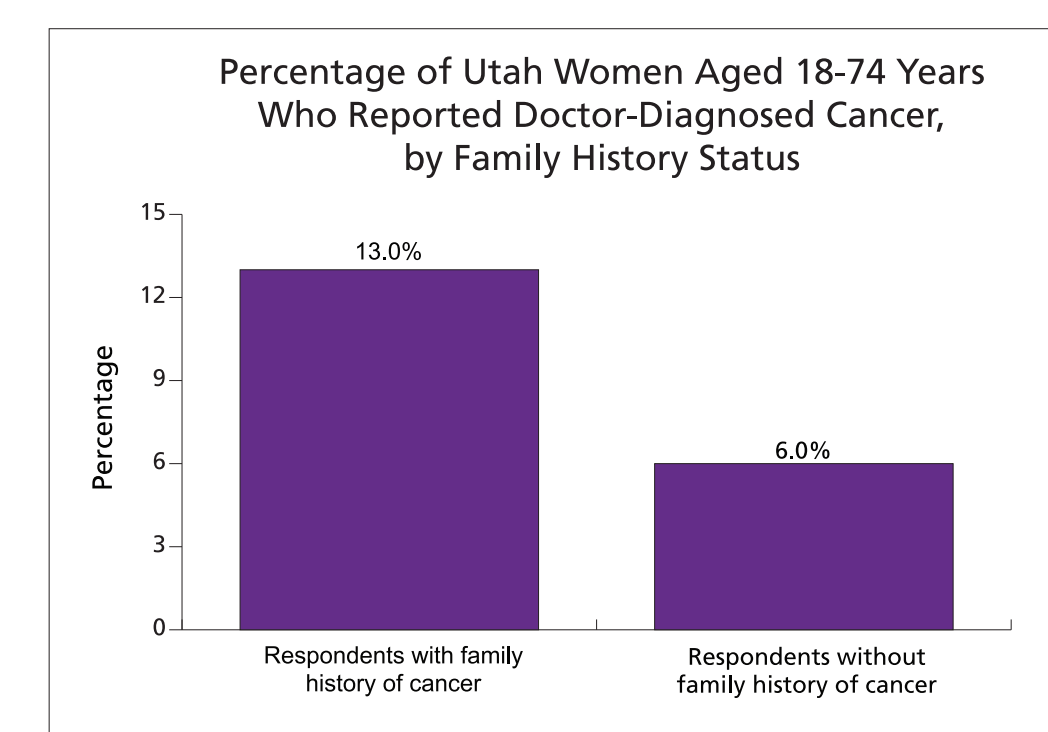
Data Source: Youth Diabetes Registry Report (2003), Utah Diabetes Prevention and Control Program

## Utah Cancer Control Program:

An analysis of the Utah Cancer Control Program's (UCCP) database was conducted by the CDGP to identify family history data sources:

### 1. Women's Health Survey 2007:

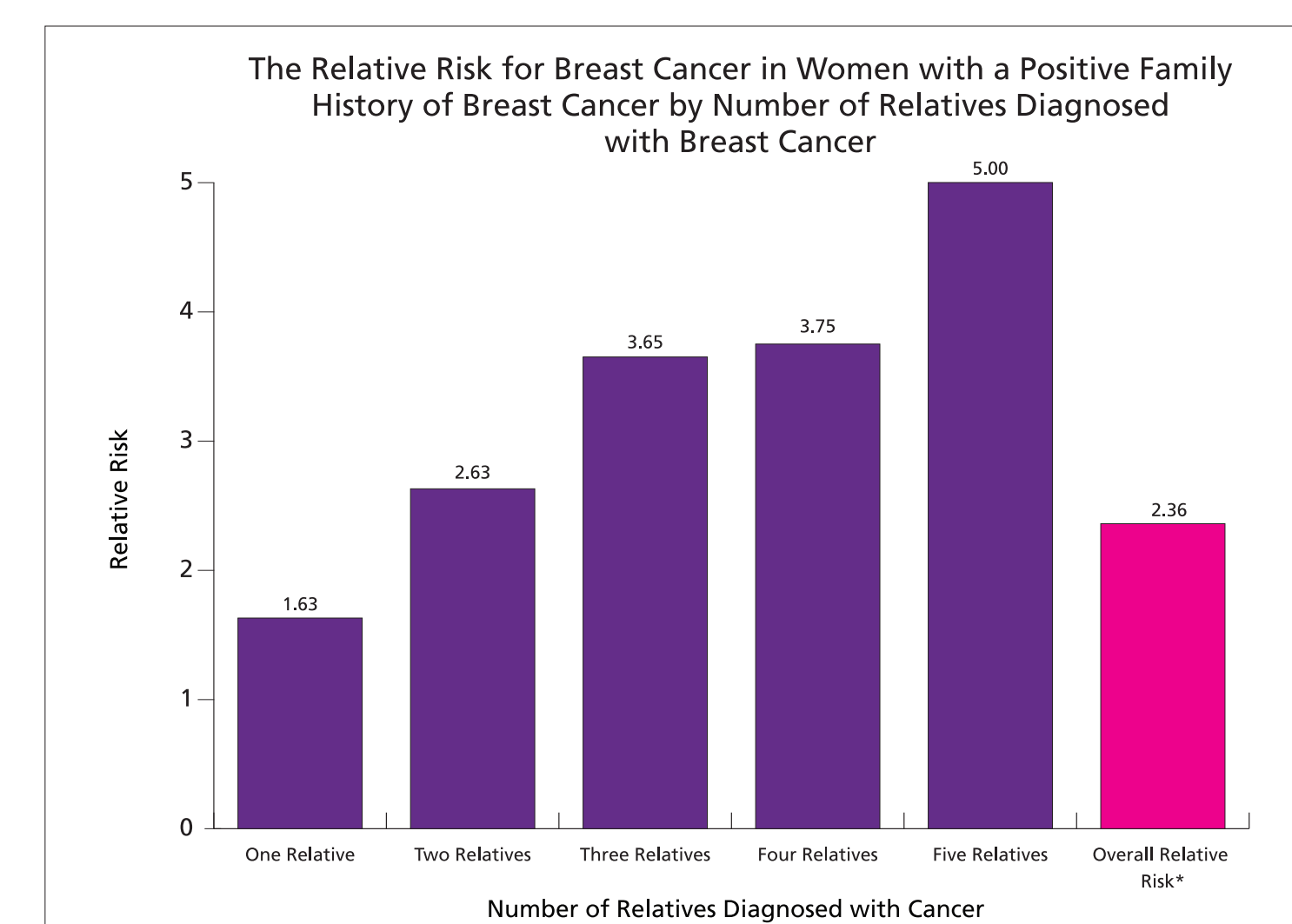
- Gathered information from women residing in Utah (ages 18 to 74) regarding cancer and other health concerns.
- 1,014 interviews were completed with survey respondents.



Data Source: Women's Health Survey (2007), Utah Cancer Control Program.

### 2. Enrollment forms:

- Medical History and Examination Form and Mammography Voucher Form.
- Collects family history information on breast and colorectal cancer from women who enroll in UCCP services throughout the state.



\*Relative Risk regardless of relatives diagnosed with Breast Cancer = 2.36

Data Source: Utah Cancer Control Program.

## Utah Population Database:

The Utah Population Database (UPDB) contains genealogical information on more than 15 million individuals through Utah birth and death, marriage, divorce, cancer and driver license records (Idaho cancer records also included).

The CDGP formed a strong academic-practice relationship with genetic epidemiologists and researchers at the University of Utah and conducted an analysis of colorectal cancer and asthma data available in the UPDB.

### Results:

- Pedigree analysis was conducted to determine the genetic disease load for the state for those at risk for development of colon cancer and asthma due to family history.
- Of the 10,112 patients with diagnosis of colorectal cancer before age 40, the relative risk for first-degree relatives was 3.85.
- Of 14,434 patients with asthma, the relative risk for first-degree relatives was 3.24.

Data Source: Utah Chronic Disease Genomics Program

## Utah Chronic Disease Genomics Program