



Highlights from the Michigan Behavioral Risk Factor Surveillance System

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BRFS vs. BRFSS

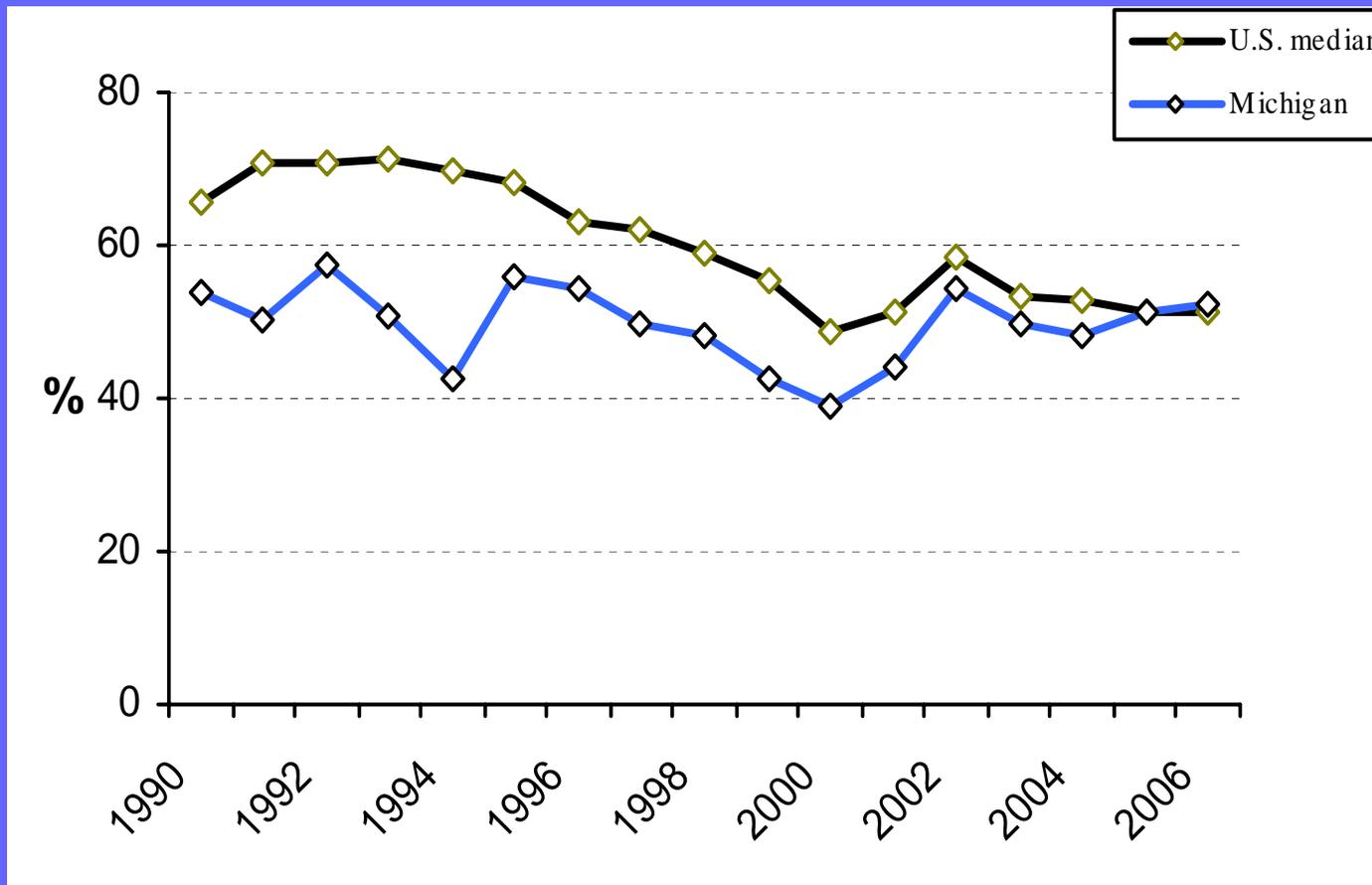
Behavioral Risk Factor Surveys: annual state-level telephone surveys of adults that are coordinated by the CDC and focus on behaviors and risk factors related to the leading causes of mortality and morbidity.

Behavioral Risk Factor Surveillance System (BRFSS): Ongoing collection of BRFS at the state or national level.

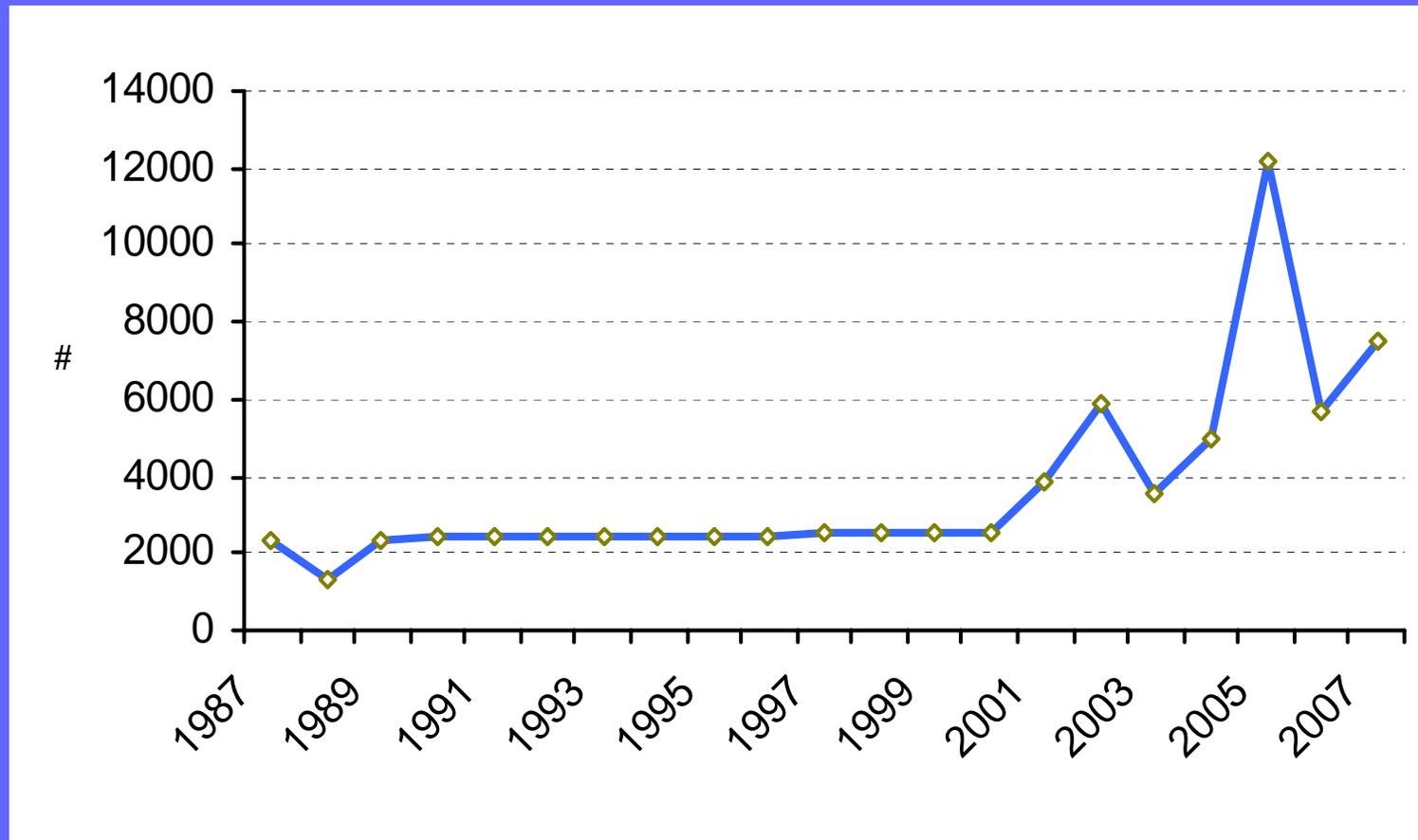
MiBRFS Methodological Highlights

- 1. Good news on response rate**
- 2. Increased sample size**
- 3. Oversampled African Americans (2007)**
- 4. Structure of the annual Michigan Behavioral Risk Factor Surveys (MiBRFS)**
- 5. Call-back methodology**

MiBRFS Response Rate (CASRO) Above National Median For the First Time!



Number of Interviews Michigan BRFSS, 1987-2007

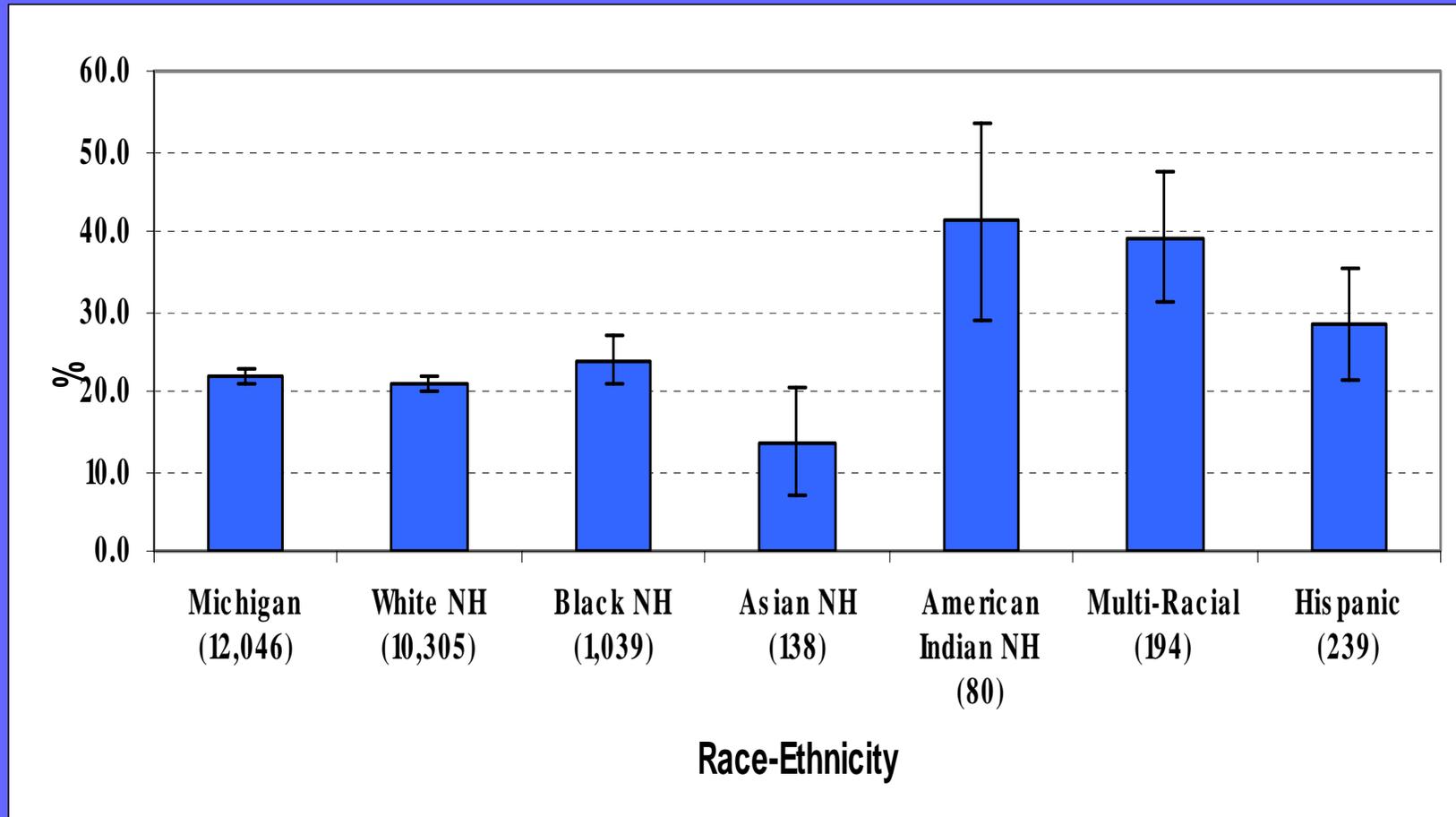


Larger Sample Size

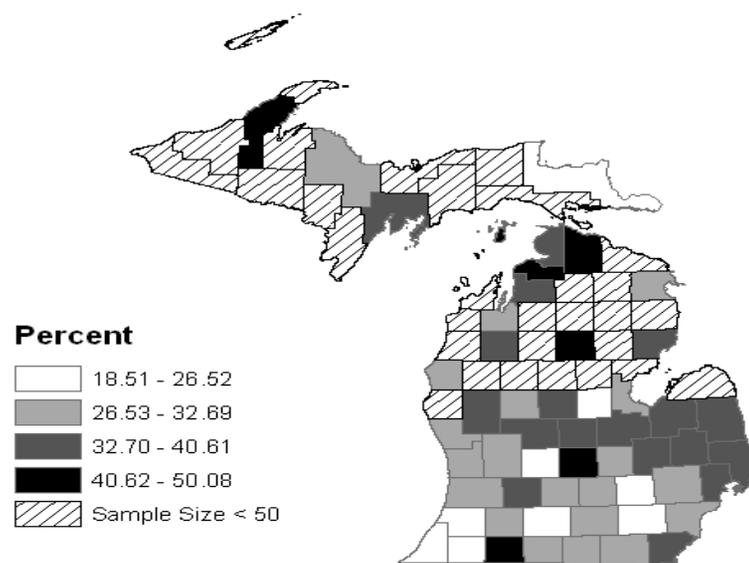
Increased our ability to:

- Calculate more precise estimates,
- Calculate estimates for more subpopulations using a single year of data,
- Ask follow-up questions of those with a low-frequency condition, e.g., epilepsy.

Prevalence of Cigarette Smoking 2005 Michigan BRFSS



Prevalence (%) of Dr-Diagnosed Arthritis By County, Michigan Adults, 2005



Structure of the Annual MiBRFS

- **Sample randomly divided into splits of 3,000 with each being administered a different set of state-added questions.**
- **State-added questions may be included in more than 1 split.**

This structure allows for greater flexibility in terms of the total number of state-added questions used and also allows for sample size variations appropriate for the different state-added questions.

Topical Focus

Given adequate total sample size, this structure also allows for the inclusion of a topical focus in the MiBRFS.

For example, in 2007 the MiBRFS collaborated with the Adult Tobacco Survey:

- One split of the questionnaire devoted primarily to ATS.**
- Additional ATS questions on second split (those requiring greater sample size).**
- This type of collaboration can have the advantage of greater resource efficiency.**

Call-Back Methodology

Uses the MiBRFS as a source of respondents for a second survey.

Since 2005, Michigan has conducted an annual asthma survey using this methodology.

- BRFS respondents (or child) with asthma asked to participate.
- Called back within 2 weeks and administered the asthma survey questionnaire.

Random child selection module could be used for other child-related questions, or call-back surveys.

Surveillance Highlights

Positive trends

Cigarette smoking

Colorectal cancer screening

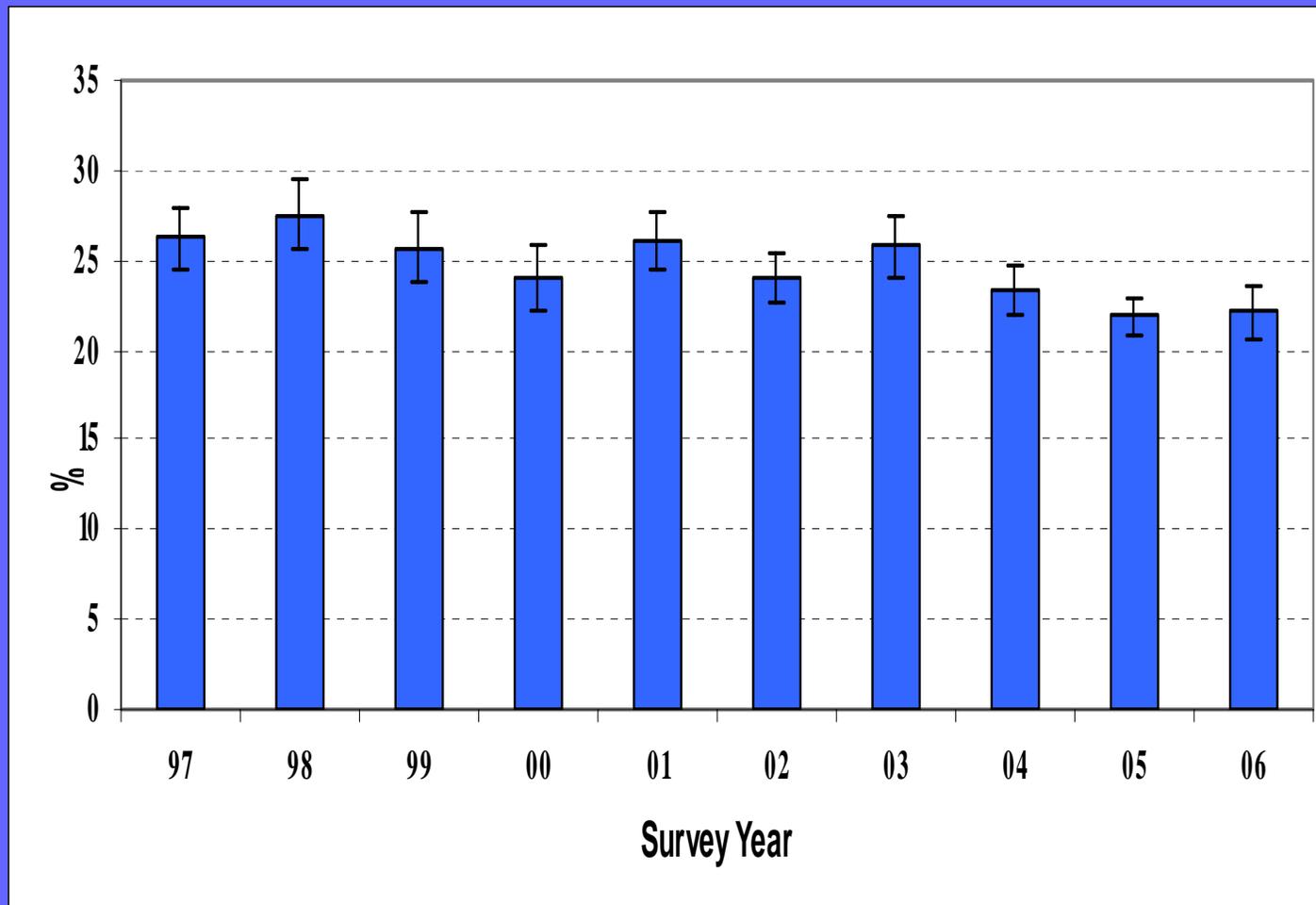
Negative trends

Obesity

Diabetes

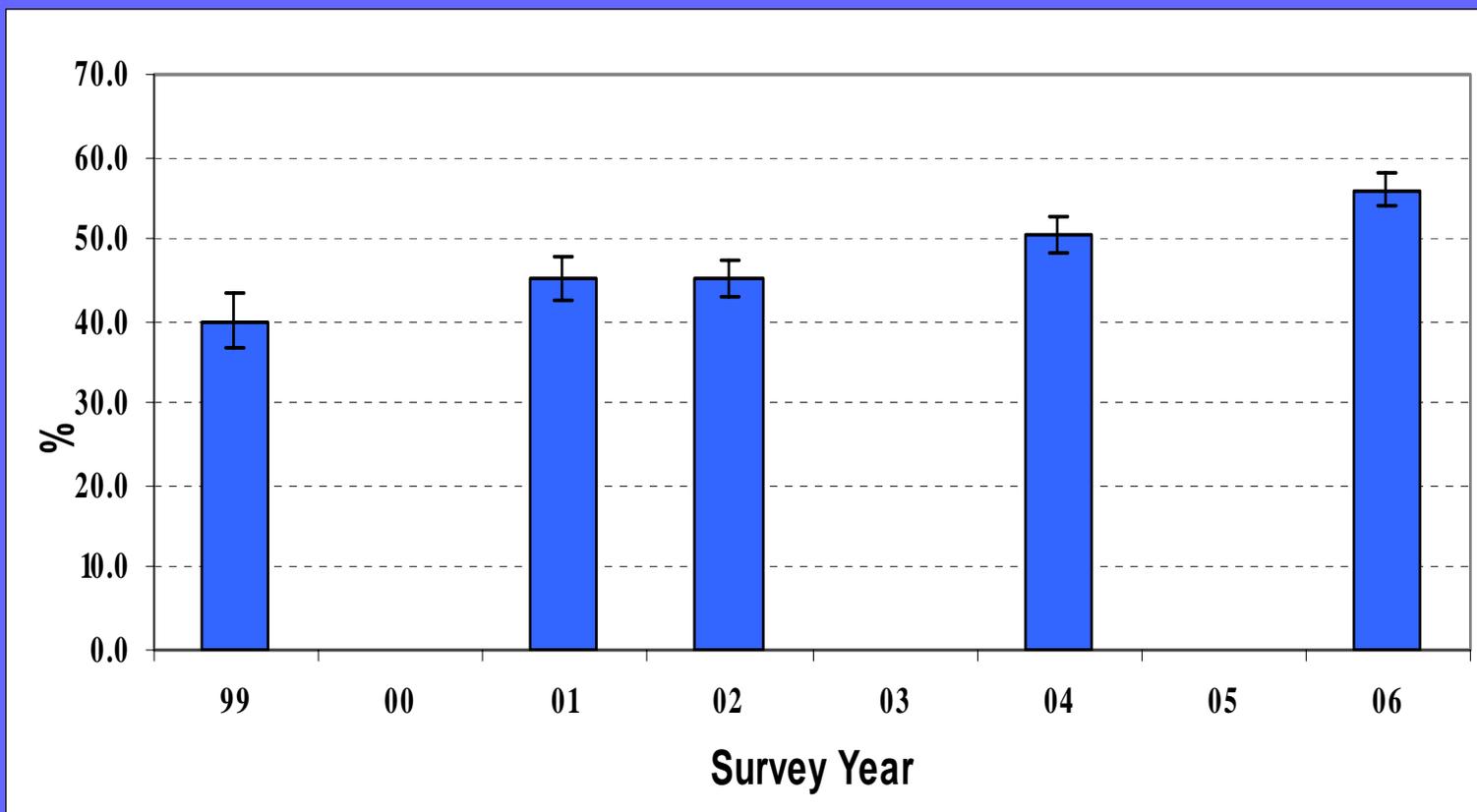
Disability

Prevalence of Current Smoking



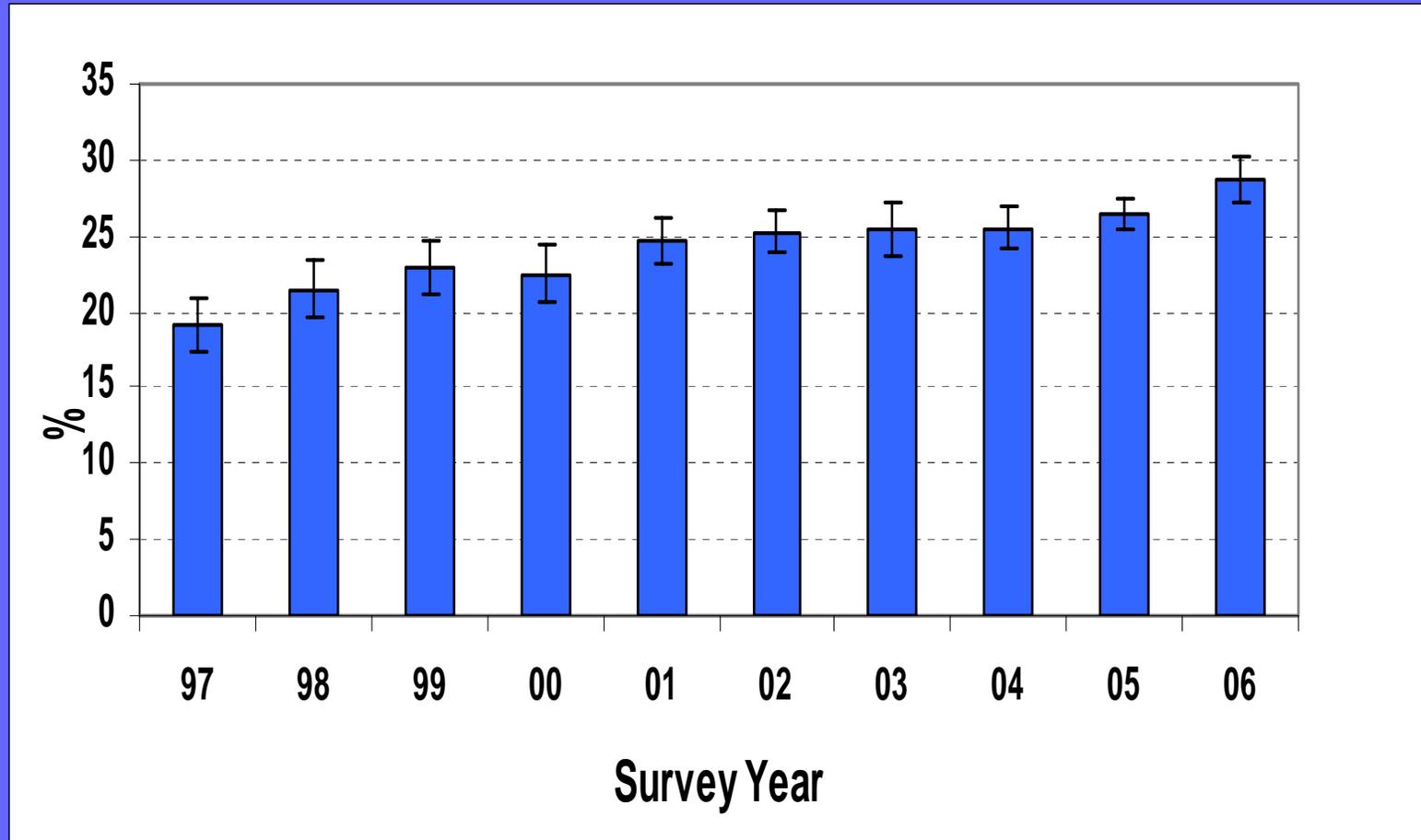
Source: MI BRFSS

Prevalence of Colorectal Cancer Screening: Received Colonoscopy or Sigmoidoscopy in Past 5 Yrs



Source: MI BRFSS

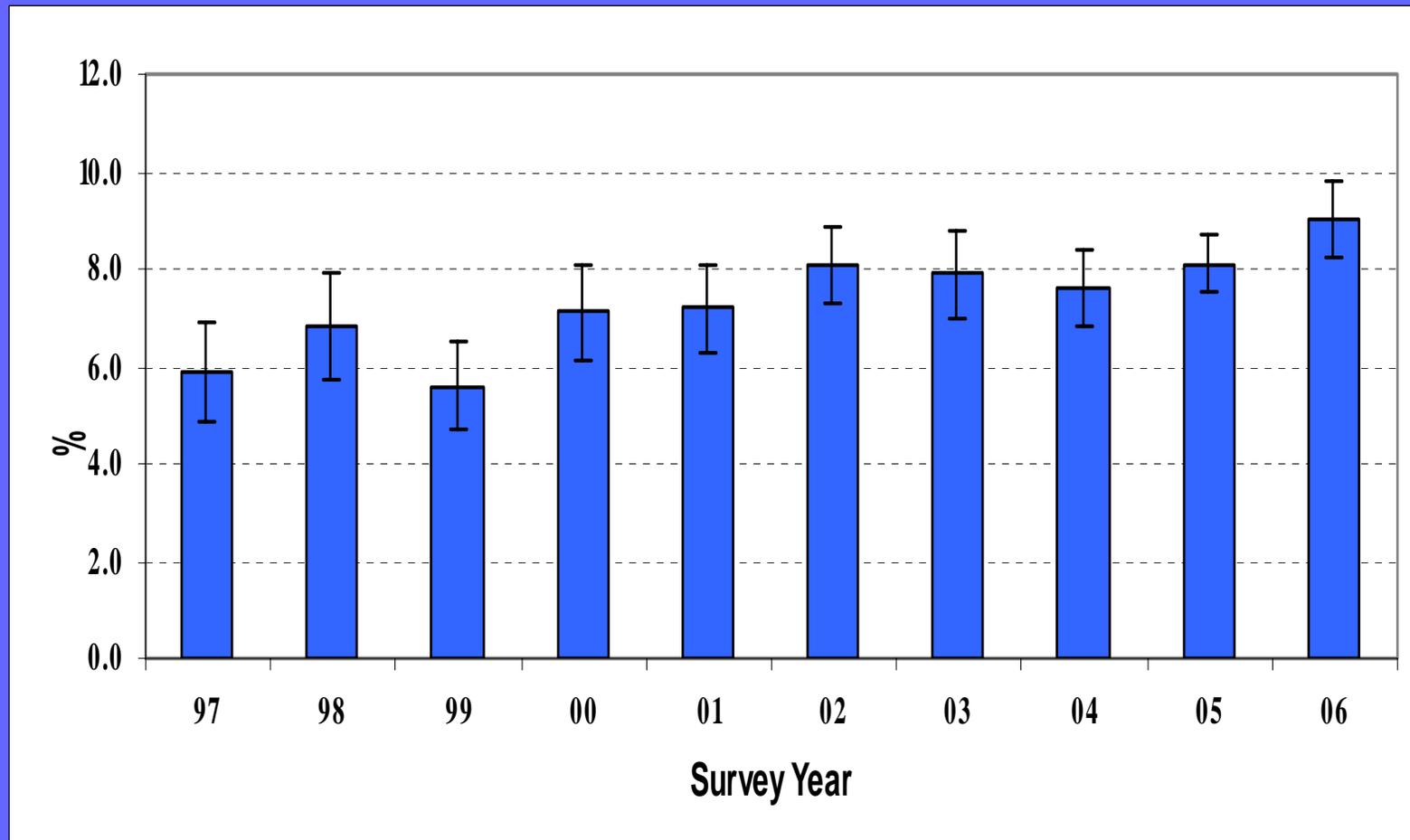
Prevalence of Obesity*



* BMI \geq 30.0.

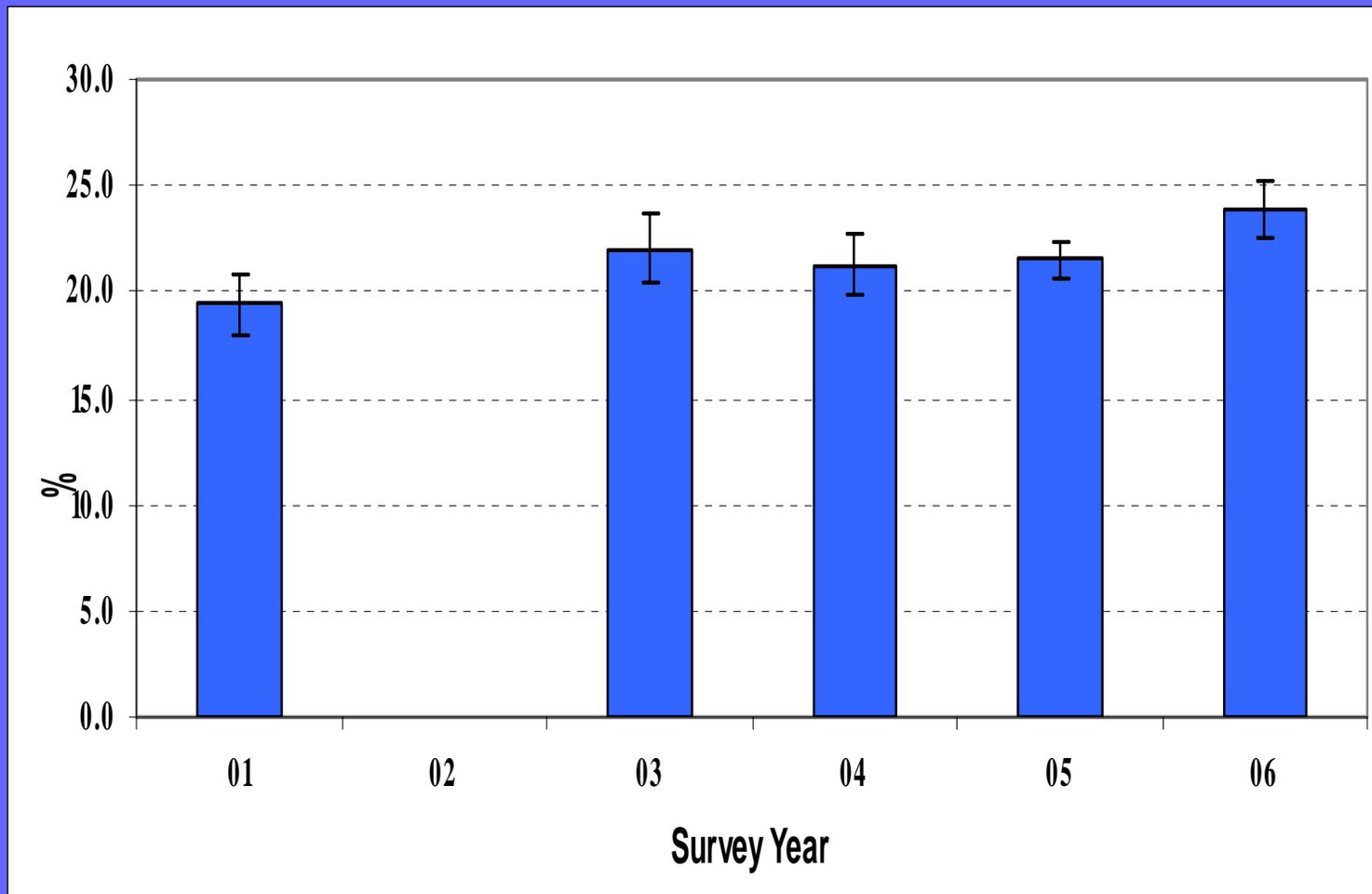
Source: MI BRFSS

Prevalence of Diabetes



Source: MI BRFSS

Prevalence of Having a Disability



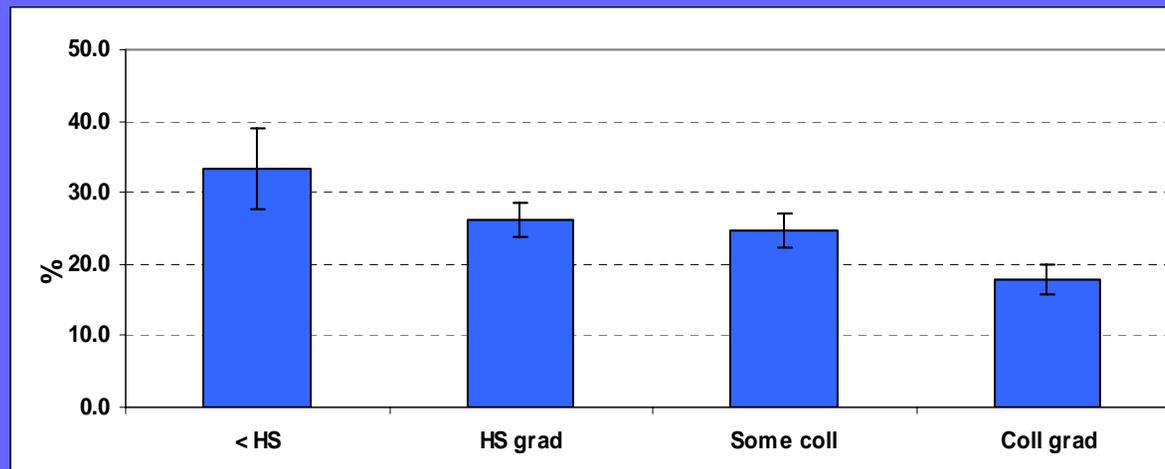
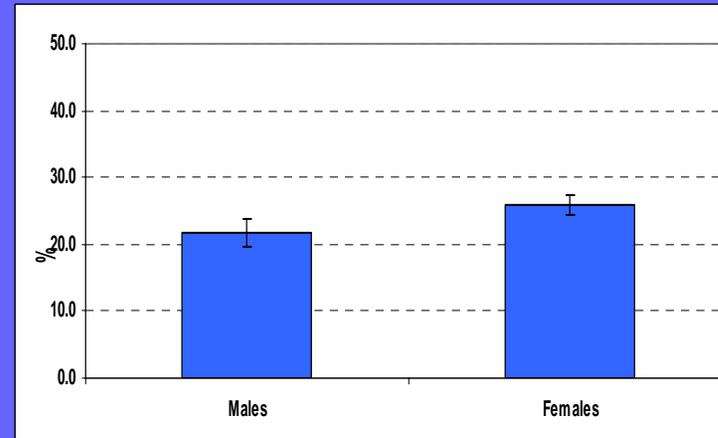
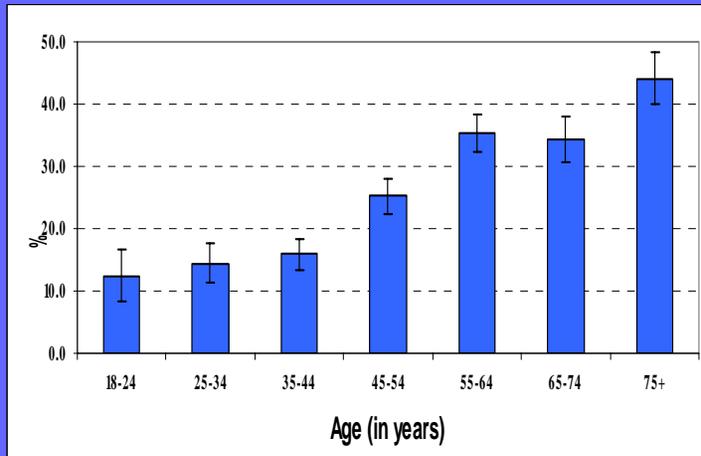
Source: MI BRFSS

Other Highlights

A closer look at persons with a disability.

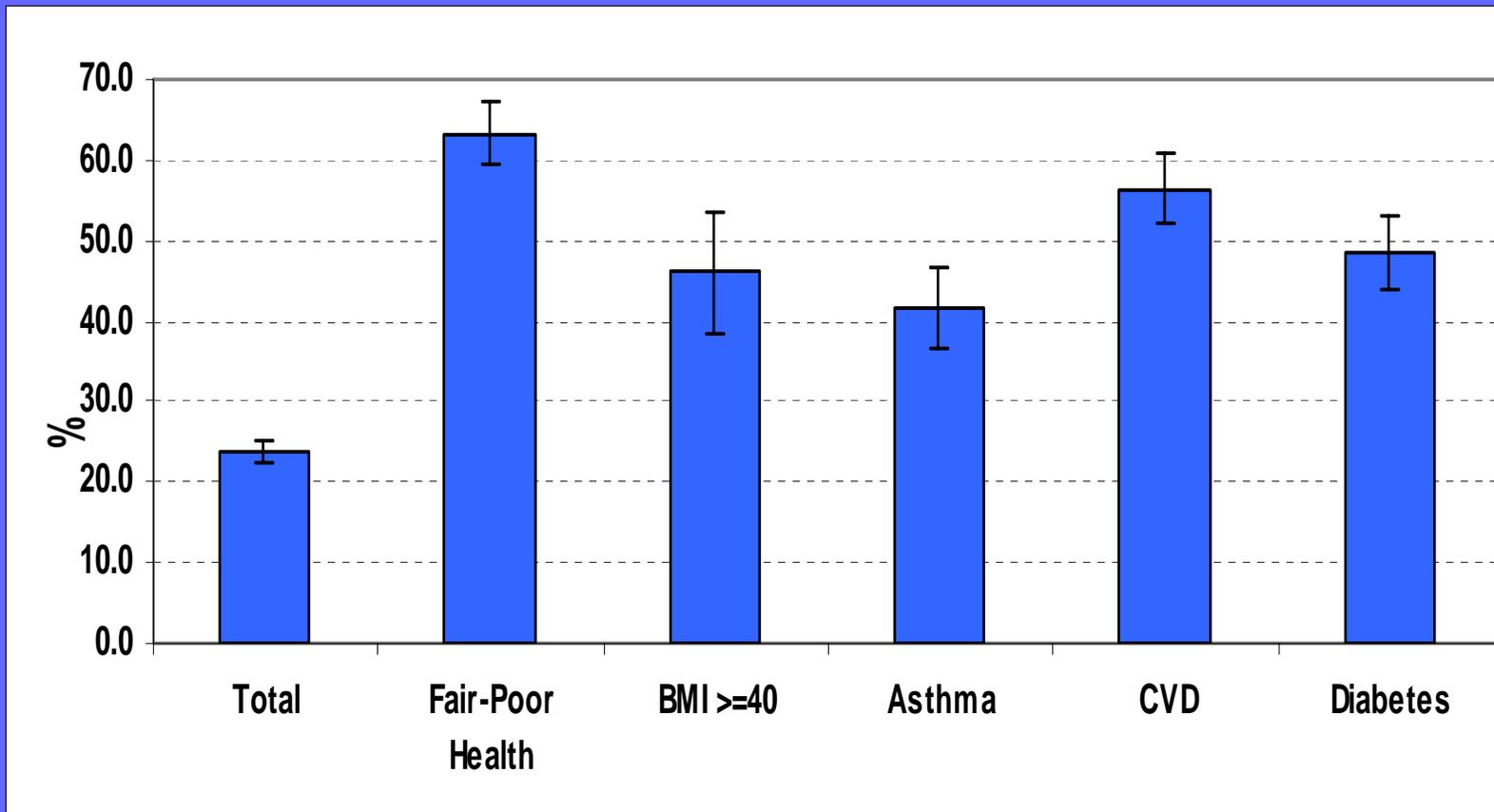
Michigan-specific estimates of the prevalence of current depression.

Prevalence of Having a Disability by Demographics



Source: 2006 MI BRFS

Prevalence of Disability Among Those With Other Conditions



Source: 2006 MI BRFS

Depression

**In 2006, we included the CDC optional
Anxiety and Depression Module.**

**8 questions based on the Patient Health
Questionnaire 8 (PHQ-8)**

**2 questions about doctor-diagnosed
depressive and anxiety disorders**

Depression – PHQ-8

“Over the last 2 weeks, how many days have you

... had little interest or pleasure in doing things?”

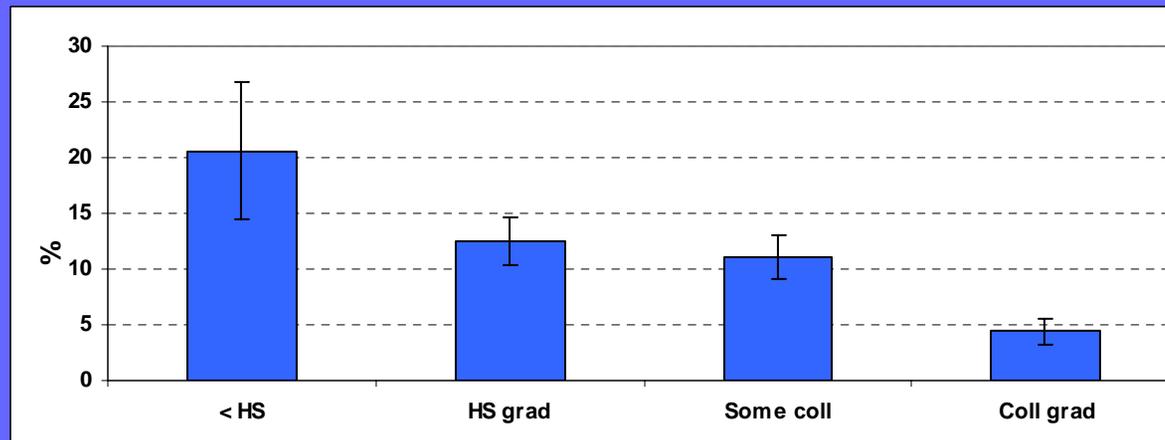
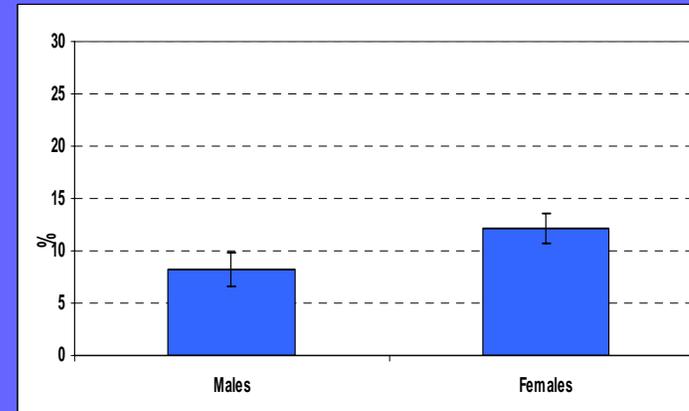
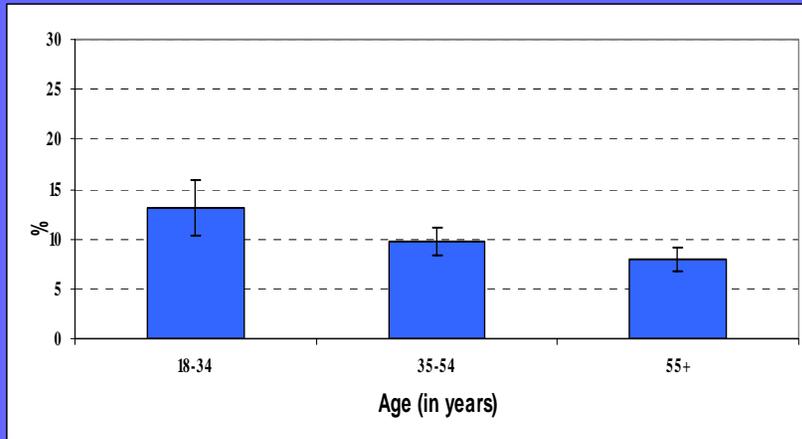
... felt down, depressed, or hopeless?”

... had trouble falling or staying asleep, or sleeping too much?”

Responses allocated points and summed into a Depression Severity Scale.

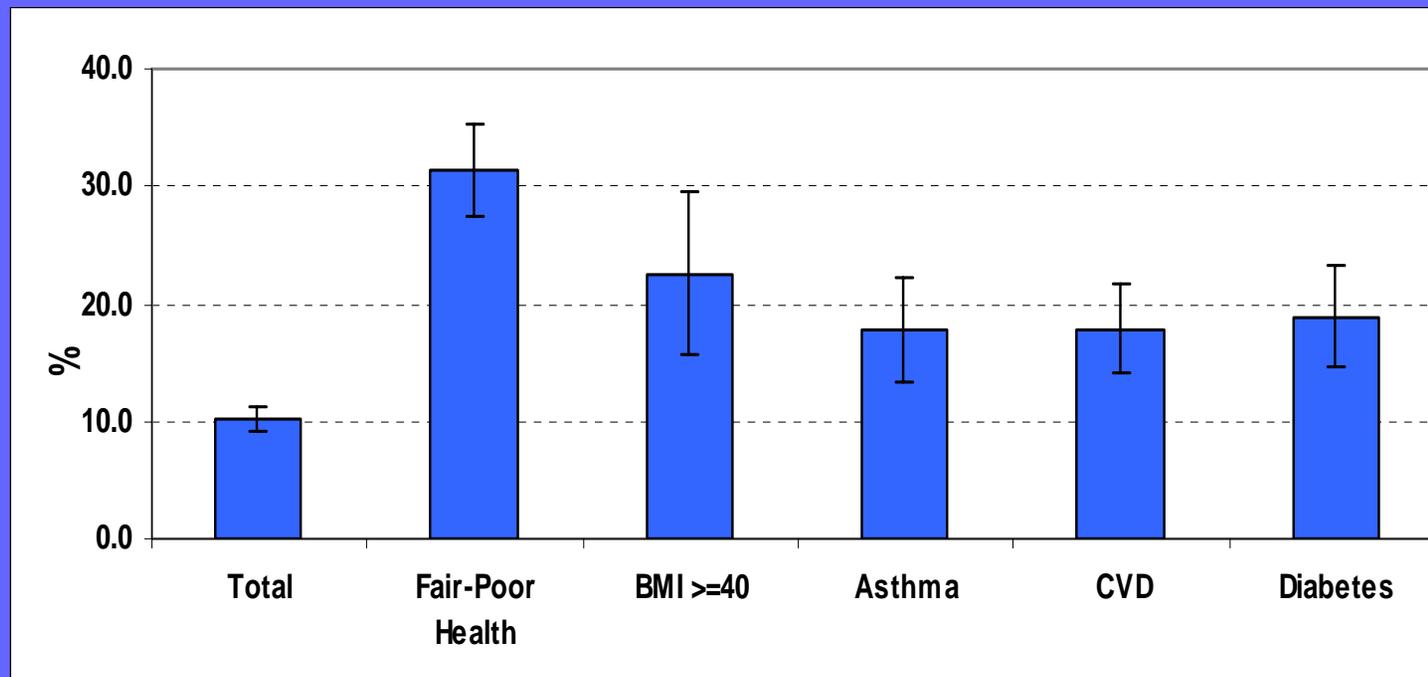
Depression: DSS \geq 10.

Prevalence of Current Depression by Demographics



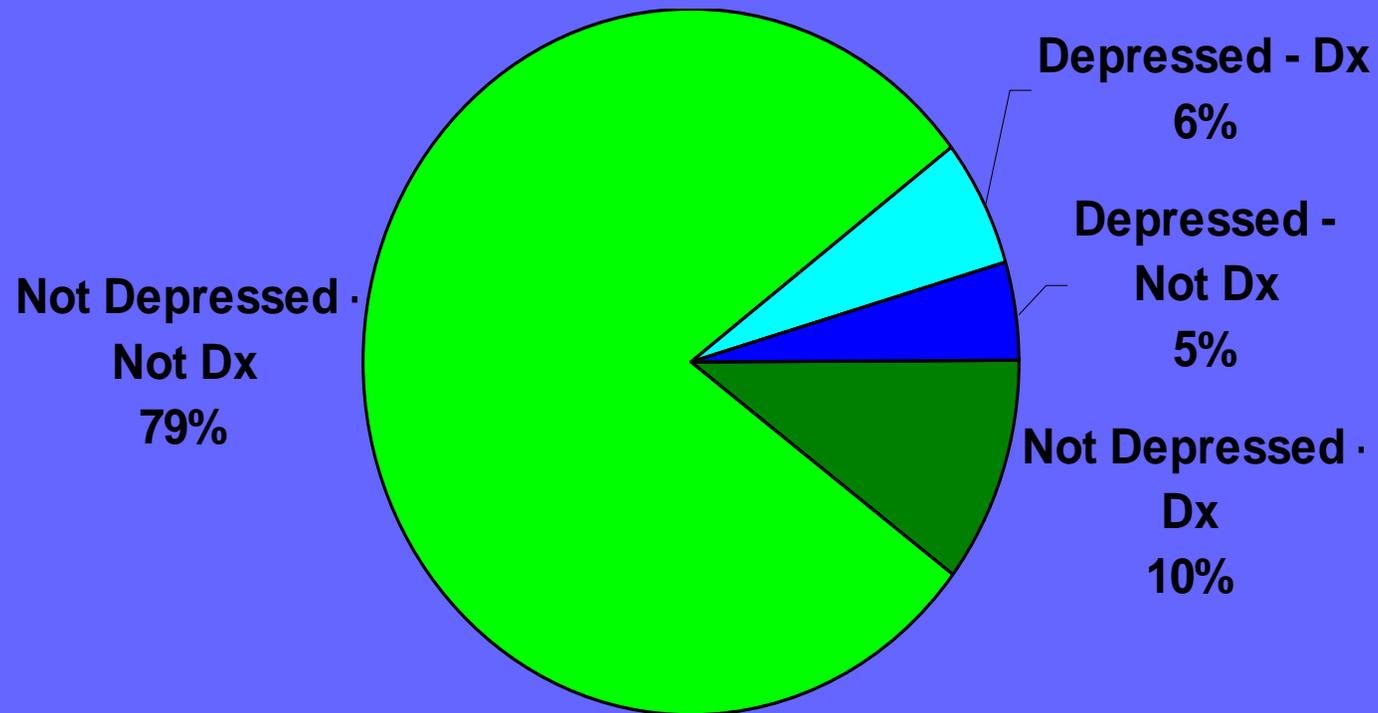
Source: 2006 MI BRFS

Prevalence of Current Depression Among Those With Other Conditions



Source: 2006 MI BRFS

Current Depression by Doctor-Diagnosis



Source: 2006 MI BRFS

Next Year

In 2008, we plan to have a total sample size of 6,000, composed of 2 splits of state-added questions, and an oversample of African Americans.

Will include CDC optional modules on diabetes, vision impairment, binge drinking, random child selection, and child asthma.

Will conduct a pilot study using a cell phone sample.

Future Years

We plan to consider:

- oversampling other subpopulations**
- offering a Spanish language option**
- employing call-back methodology to survey other subgroups, e.g., persons with children in their household, persons with epilepsy.**
- collaborating with other surveys (e.g. ATS) to collect survey-based information more efficiently.**

Summary

Monitor risk factor prevalence to detect trends.

Examine risk factor prevalence by demographic and geographic detail.

Address emerging topics such as epilepsy and depression.

Address emerging methodological issues such as cell phone coverage.

Acknowledgements

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- Michigan adults