

Michigan Behavioral Risk Factor Surveillance System

2023 MICHIGAN BRFSS
DATA USERS MEETING

JULY 12TH, 2023

Outline

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- ▶ Michigan Behavioral Risk Factor Surveillance System (MiBRFSS)
- ▶ Michigan Behavioral Risk Factor Survey (MiBRFS)

▶ 2021 MiBRFS Annual Report Highlights

▶ 2022 and 2023 MiBRFS Updates

▶ 2024 MiBRFS Plans

- ▶ CDC Core Questions
- ▶ CDC Optional Module
- ▶ Michigan State-added topics

Michigan BRFSS (MiBRFSS)

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- ▶ The MiBRFSS comprises annual, statewide telephone surveys of Michigan adults aged 18 years and older and is part of the national BRFSS coordinated by the CDC.
- ▶ Only source of state-specific, population-based health estimates among Michigan adults
 - ▶ Health behaviors, medical conditions, and preventive healthcare practices
- ▶ Since 1989, MiBRFSS conducted on an annual basis
 - ▶ Both landline and cell phone started in 2011
 - ▶ Due to methodology changes that took place in 2011, BRFSS estimates from 2011 and moving forward cannot be compared to BRFSS estimates from 2010 and earlier.
- ▶ Respondent source for the Michigan Asthma Call Back Survey (since 2005)
 - ▶ Follow-up survey for respondents that reported ever being diagnosed with asthma.

MiBRFS Questionnaire

► CDC Core questions

- The **fixed core** contains standard questions that are asked by every state each year. There is also a **rotating core**, which consists of questions that are collected every other year by every state. In off years, the rotating core questions are offered as optional modules.

► CDC optional modules

- Each year, the CDC offers a selection of standardized optional modules that states can elect to add to their questionnaire. Data processing for optional modules is completed by the CDC. The CDC requires that, if the modules are used, they must be used in their entirety without any modification. If optional modules are altered, they are considered state-added questions.

► State-Added Questions

- These are questions of special interest to the state that are not offered as optional modules. The CDC does not complete any of the data processing necessary for analysis of state added questions. Additionally, state-added questions are not necessarily comparable to other states. However, state-added questions allow states the flexibility to address their unique health issues.

► www.Michigan.gov/BRFS (2010-2023)

2023 Michigan Behavioral Risk Factor Survey

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Section 61:	Hepatitis C (repeat of Section 45)	70

Summary of CDC BRFS CORE Questions

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Periodicity of Data Collection	Content/Core Section
Annual	<ul style="list-style-type: none"> • General Health • Healthy Days • Healthcare Access • Chronic Disease • Tobacco Use • Alcohol Consumption • Exercise • Immunization • HIV/AIDS
Even-Year Rotating Core	<ul style="list-style-type: none"> • HIV/AIDS • Oral Health • Breast/Cervical Cancer • Prostate Cancer Screening • Colorectal Cancer Screening

Periodicity of Data Collection	Content/Core Section
Odd-Year Rotating Core	<ul style="list-style-type: none"> • Hypertension Awareness • Cholesterol Awareness
Three-Year Core	<ul style="list-style-type: none"> • Seat Belt Use/Drinking and Driving • Immunization (include Shingles) • Sleep • Falls
Four-Year Core	<ul style="list-style-type: none"> • Fruits and Vegetables • Exercise (Physical Activity)

MiBRFS Data Collection

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- ▶ MiBRFS data collection conducted through a contractor
 - ▶ Office for Survey Research at Michigan State University (1996-2020)
 - ▶ ICF Macro Inc. (2021- Present)
- ▶ MiBRFS funding for data collection
 - ▶ Cooperative agreement with the Centers for Disease Control and Prevention (CDC)
 - ▶ ~50% of data collection costs
 - ▶ To support CDC core questions
 - ▶ Other state programs and health organizations
 - ▶ ~50% of data collection costs
 - ▶ To support state-added questions and CDC optional modules

MiBRFS Annual Analysis

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- ▶ Data are weighted by CDC to adjust for the probabilities of selection and a raking weighting factor is used to adjust for the distribution of the Michigan adult population based on eight demographic variables.
 - ▶ Telephone source (landline or cell phone), race/ethnicity, education level, marital status, age by gender, gender by race/ethnicity, age by race/ethnicity, and renter/owner status.
- ▶ All analyses are performed using SAS-callable SUDAAN® to account for the complex sampling design.
 - ▶ If the 95% confidence intervals for two estimates from different subpopulations or survey years did not overlap, they were considered to be statistically different.
 - ▶ Unless otherwise specified, respondents who answered that they did not know or refused to answer were not included in the calculation of estimates.
- ▶ Data suppression rules
 - ▶ A denominator of less than 50 respondents
 - ▶ Relative standard error (RSE) of greater than 30%: $RSE = (\text{Standard Error} / \text{Point Estimate}) * 100$
- ▶ Results are available on MiBRFSS website (www.Michigan.gov/BRFS) and sent out via GovDelivery or email distribution list.
- ▶ Data requests
 - ▶ Estimates not included in the standard tables, please email coordinator with details of request
 - ▶ Raw data requests: MiBRFSS data use agreement process

Michigan BRFSS website

www.Michigan.gov/BRFS

HEALTH RISK BEHAVIORS WITHIN THE STATE OF MICHIGAN

2021 BEHAVIORAL RISK FACTOR SURVEY 35TH ANNUAL REPORT



**Health & Human Services**

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Michigan Behavioral Risk
Factor Surveillance System

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Background

The Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) is composed of annual, state-level telephone surveys of Michigan residents, aged 18 years and older. These annual, state-level surveys, also known as Michigan Behavioral Risk Factor Surveys (MiBRFS) act as the only source of state-specific, population-based estimates of the prevalence of various behaviors, medical conditions, and preventive health care practices among Michigan adults. MiBRFS results are used by public health agencies, academic institutions, non-profit organizations and others to develop and evaluate programs that promote the health of Michigan citizens.

The national [Behavioral Risk Factor Surveillance System](#) (BRFSS) consists of annual surveys (i.e., BRFs) conducted independently by the states, District of Columbia, and U.S. territories, and is coordinated through cooperative agreements with the Centers for Disease Control and Prevention (CDC). The annual Michigan surveys follow the CDC telephone survey protocol for the BRFSS and the annual standardized core questionnaire is used. In addition, the Michigan BRFSS includes about 25 state-added questions each year.

**Michigan Behavioral Risk Factor Surveillance
System (MiBRFSS) Dashboard, 2023**



GRETCHEN WHITMER, GOVERNOR | ELIZABETH HERTEL, DIRECTOR

Publications

Within the sections below, you will find annual Michigan BRFSS questionnaires, as well as annual and multi-year Michigan BRFSS surveillance data focusing on health risk behaviors, health indicators, and chronic diseases both at the state and local level. These sections also include a variety of reports focusing on special analyses that have been conducted using Michigan BRFSS data.

- [Michigan BRFSS Annual Questionnaires](#)
The BRFSS annual questionnaires consist on CDC core questions, optional modules, and state-added questions.
- [Michigan BRFSS Annual Reports](#)
The BRFSS annual reports highlight key health risk behaviors, health indicators, and diseases in Michigan.
- [Michigan BRFSS Standard Tables](#)
The MiBRFSS standard tables present prevalence estimates on health risk behaviors, health indicators, and diseases from the Michigan BRFSS by age group, gender, race, education level, and household income level.
- [Michigan BRFSS Race/Ethnicity Tables](#)
The MiBRFSS race/ethnicity tables provide prevalence estimates on key health risk behaviors, health indicators, and diseases for Michigan's major racial/ethnic populations.
- [Michigan BRFSS Regional and Local Health Department Tables](#)
Region-specific and local health department-specific prevalence estimates for health-risk behaviors, preventive health practices, and chronic conditions are computed using a three to five-year combined MiBRFSS dataset that maximizes the available sample size.
- [Michigan BRFSS Surveillance Briefs](#)
The MiBRFSS Surveillance Brief is a quarterly newsletter highlighting new topical data from the MI BRFSS. The miscellaneous BRFSS reports include other reports and presentations that have been created using BRFSS data.
- [Michigan BRFSS Highlights](#)
The following presentations provide short summaries of the key findings from the most recent Michigan Behavioral Risk Factor Surveys.
 - [2022 Michigan BRFSS Data Users Meeting Presentation Slides](#) (PDF)
 - [2021 Michigan BRFSS Data Users Meeting Presentation Slides](#) (PPT)
 - [2018 Michigan BRFSS Data Users Meeting](#) (PPT)
 - [The Behavioral Risk Factor Surveillance System: Past, Present, and Future](#) (PDF)

2021 MiBRFS Annual Tables

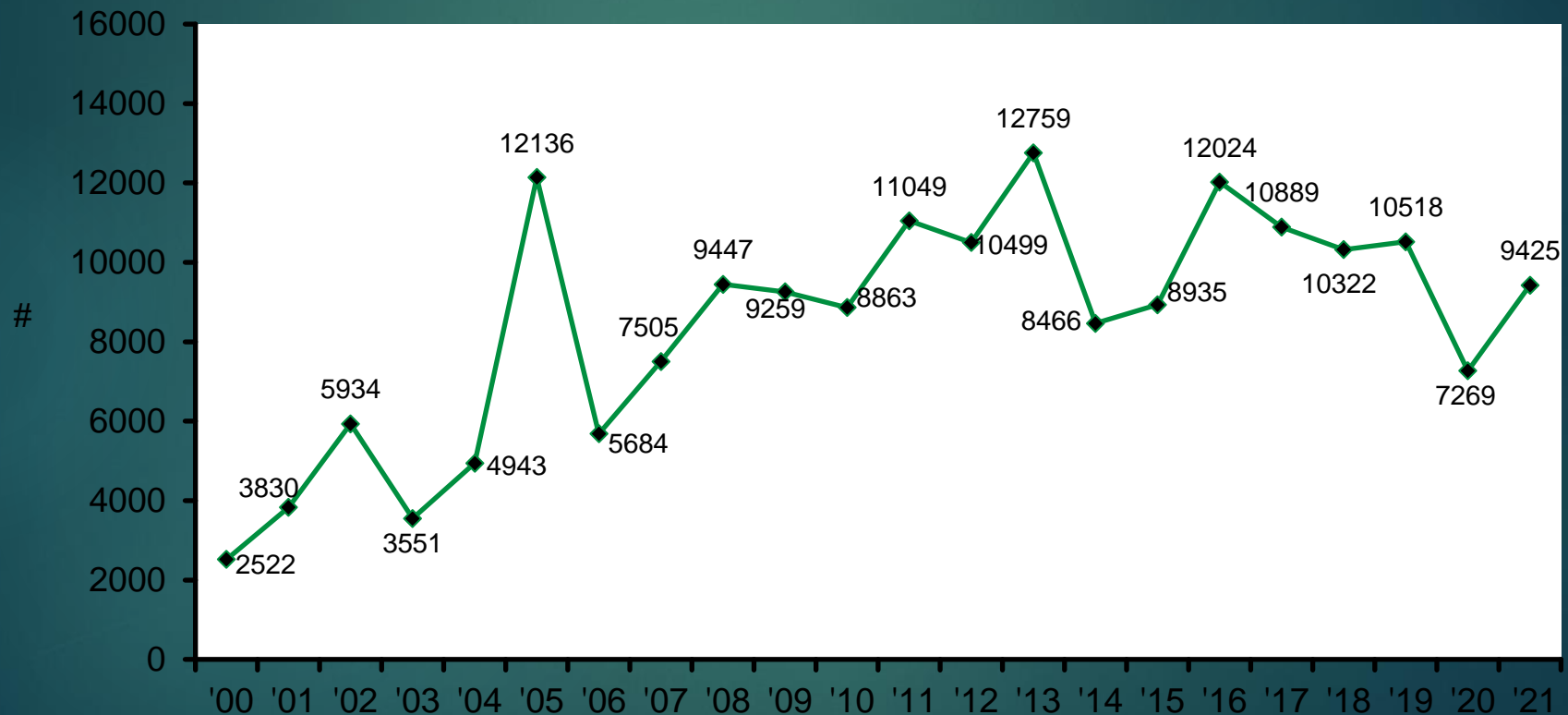
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- ▶ Annual tables are located on the MiBRFSS website
 - ▶ www.michigan.gov/brfs
 - ▶ 2021 MiBRFS Standard Tables
 - ▶ 2021 MiBRFS Age and Gender Tables
 - ▶ 2021 MiBRFS Race/Ethnicity Tables
 - ▶ 2019-2021 Expanded Race/Ethnicity Tables
 - ▶ 2019-2021 Regional and Local Health Department Tables
 - ▶ 2019-2021 Prosperity Region Tables
 - ▶ 2019-2021 Emergency Preparedness Region Tables
- ▶ 2021 state-added question results can be requested via email to the coordinator.

2021 MiBRFS Results

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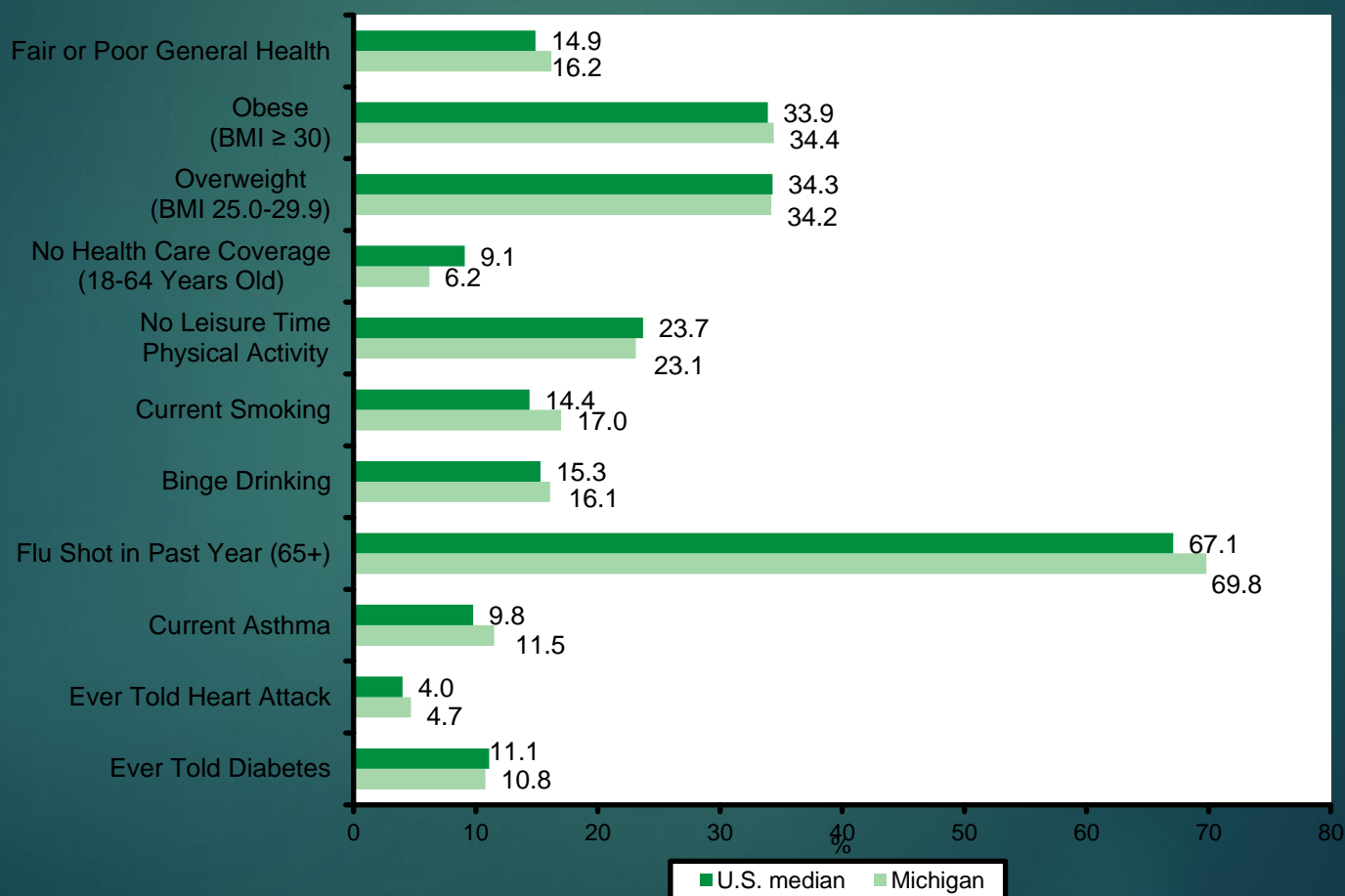
Number of Interviews by Survey Year
Michigan BRFS 2000-2021



2021 MiBRFS Results

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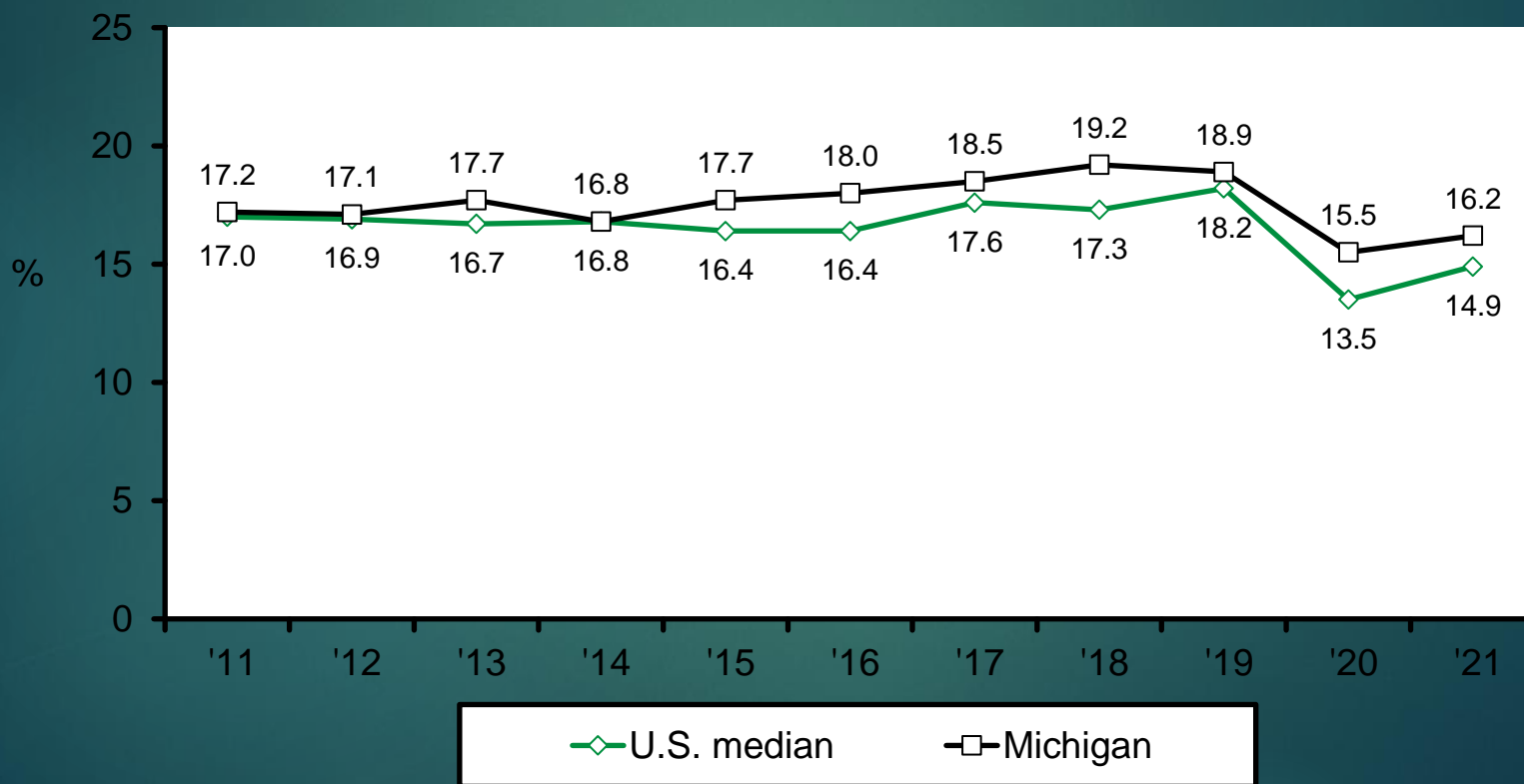
Selected Risk Factors - 2021 CDC BRFSS U.S. vs. Michigan



2021 MiBRFS Results

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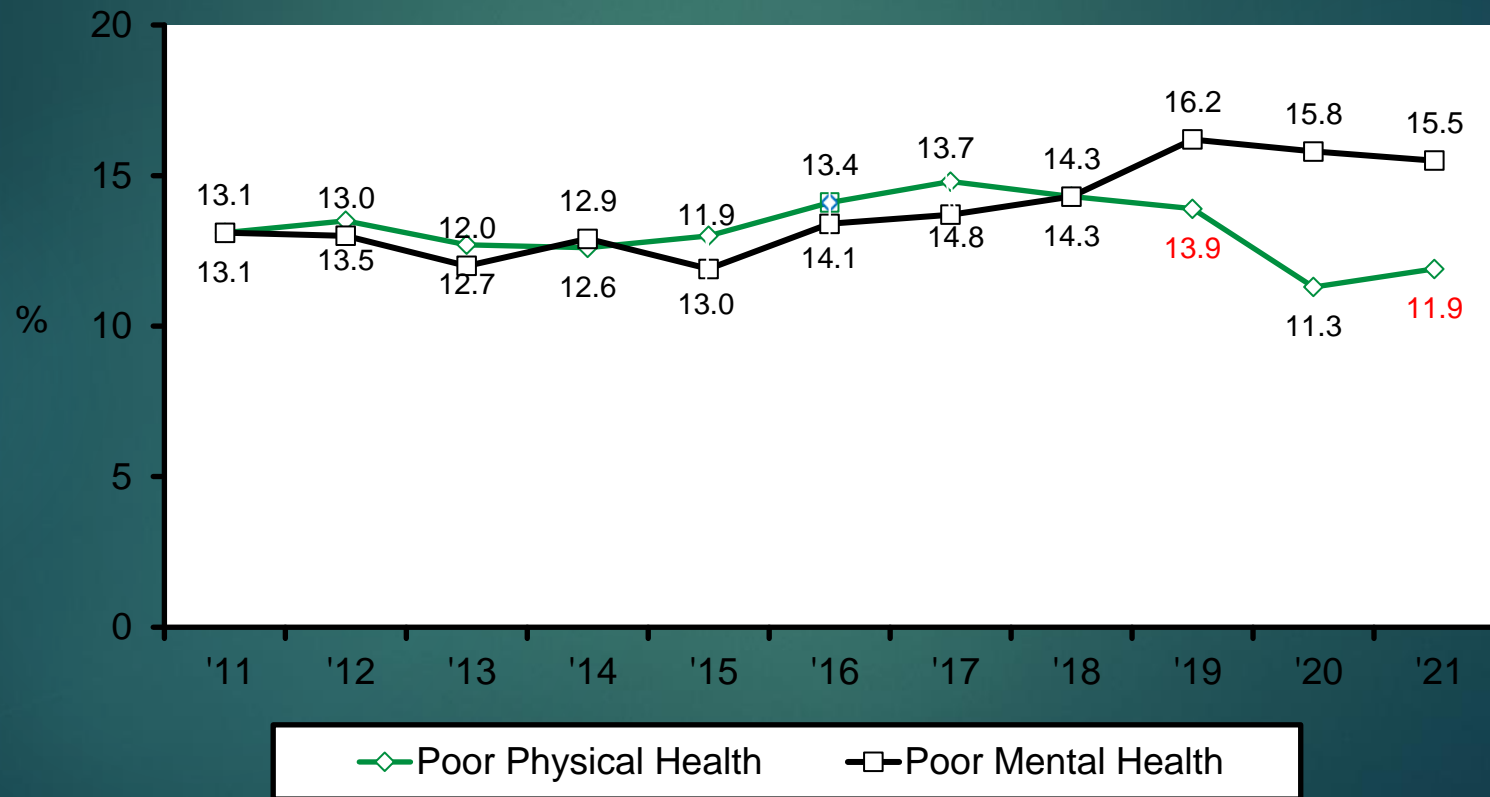
General Health, Fair or Poor U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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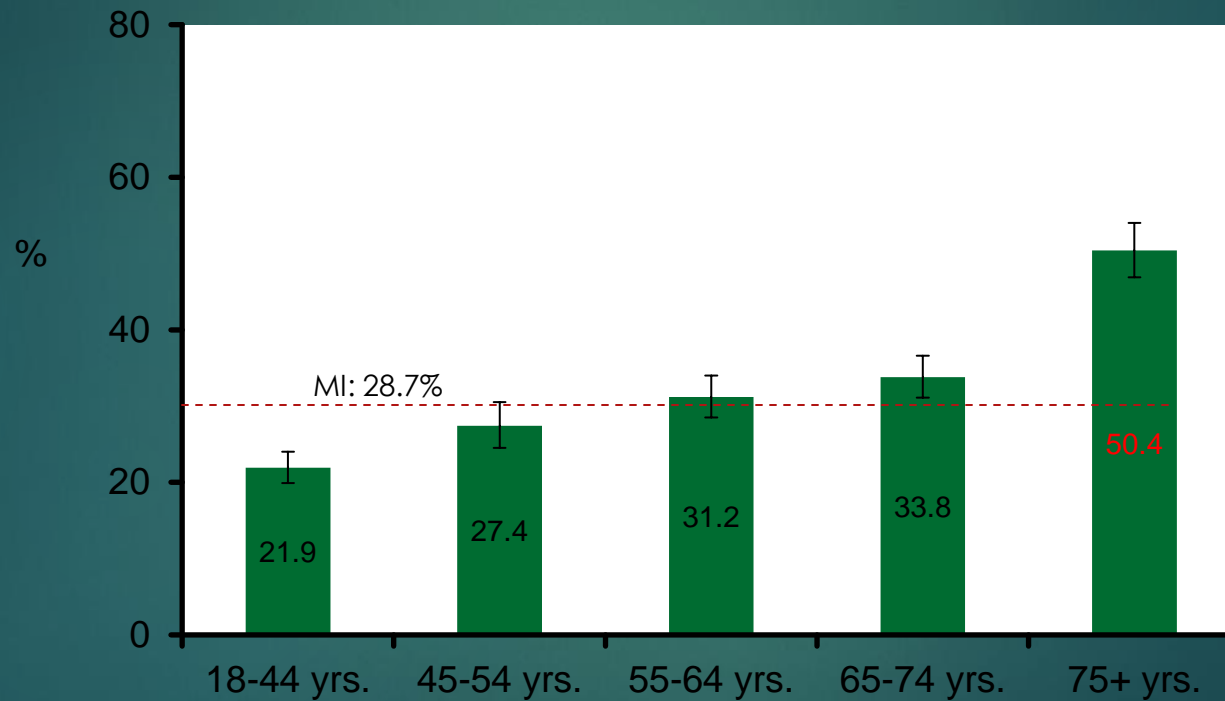
Poor Physical and Mental Health Michigan, 2011-2021



2021 MiBRFS Results

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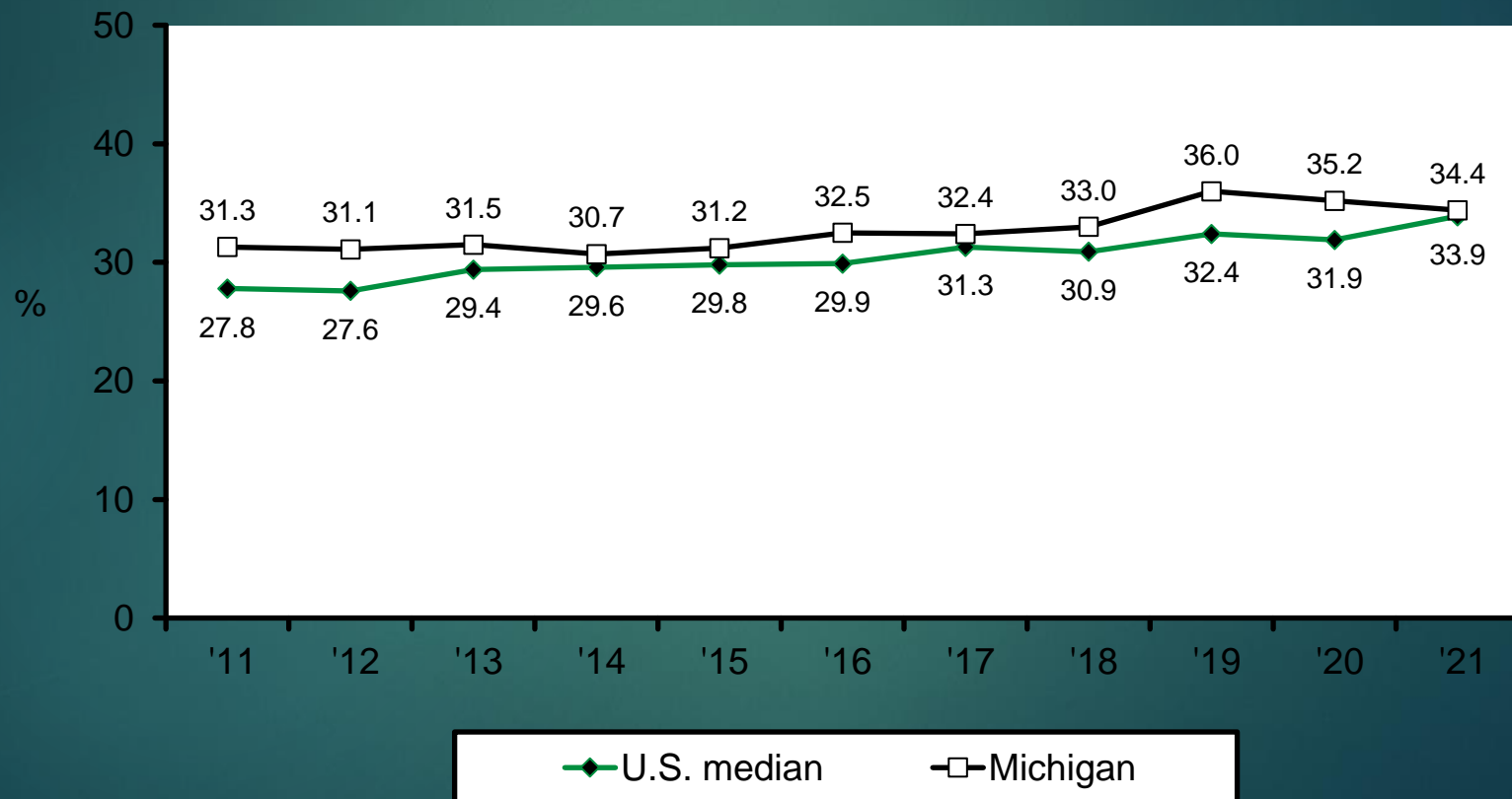
Disability by Age Group Michigan, 2021



2021 MiBRFS Results

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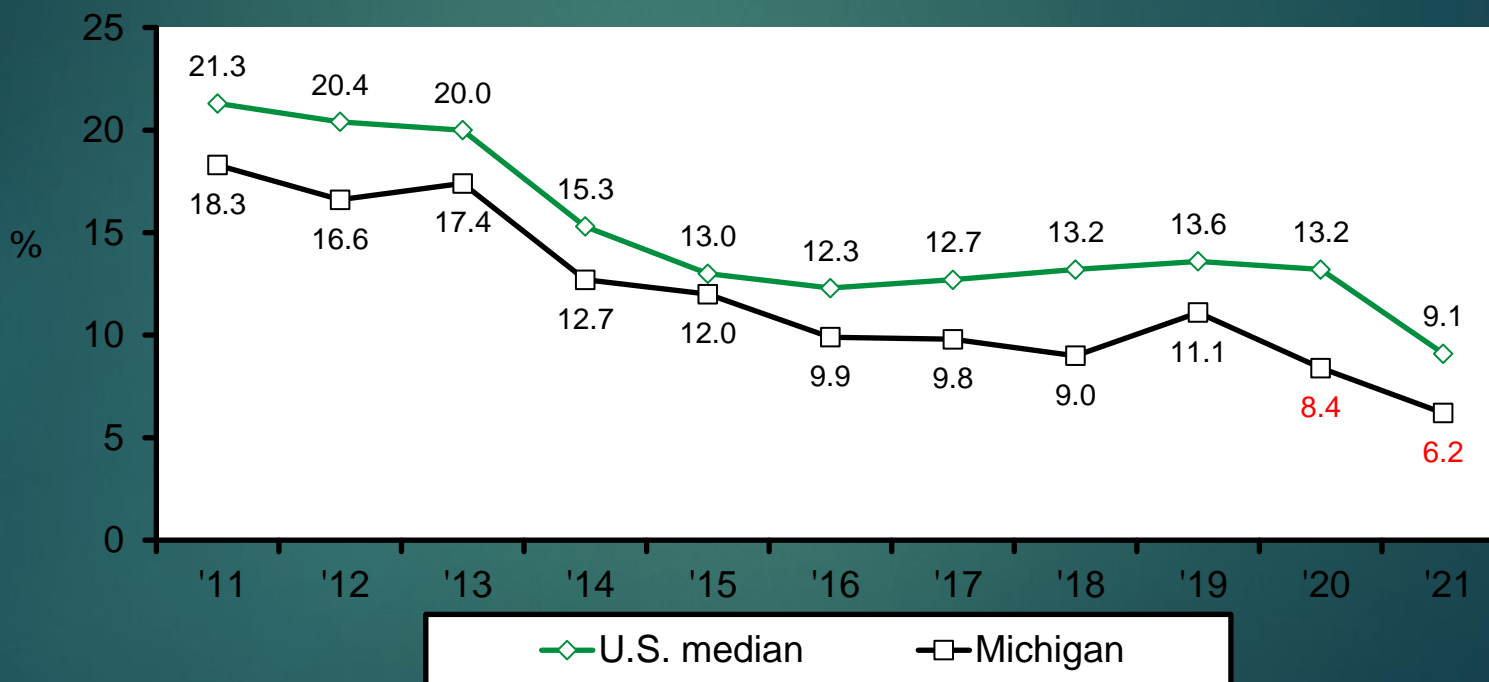
Obesity U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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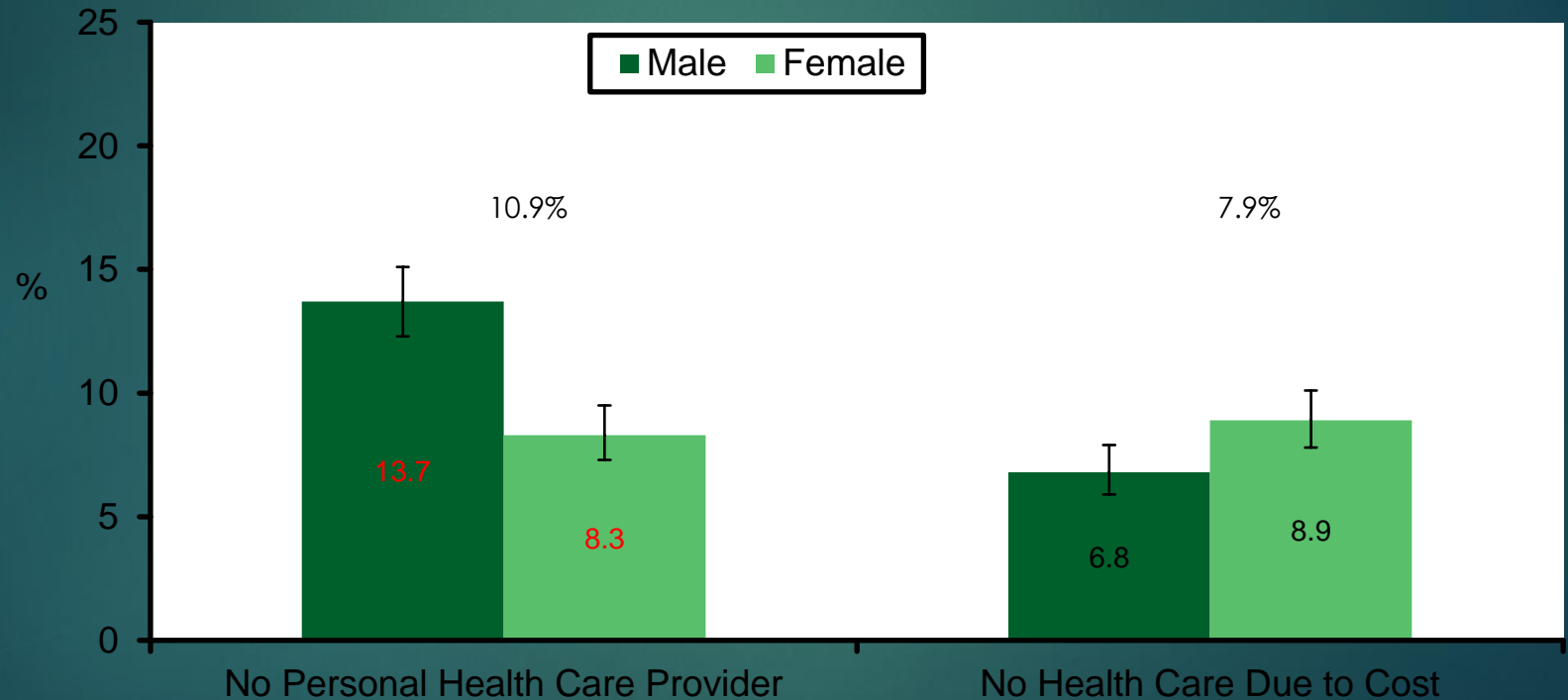
No Health Care Coverage Among Adults Aged 18 to 64 Years U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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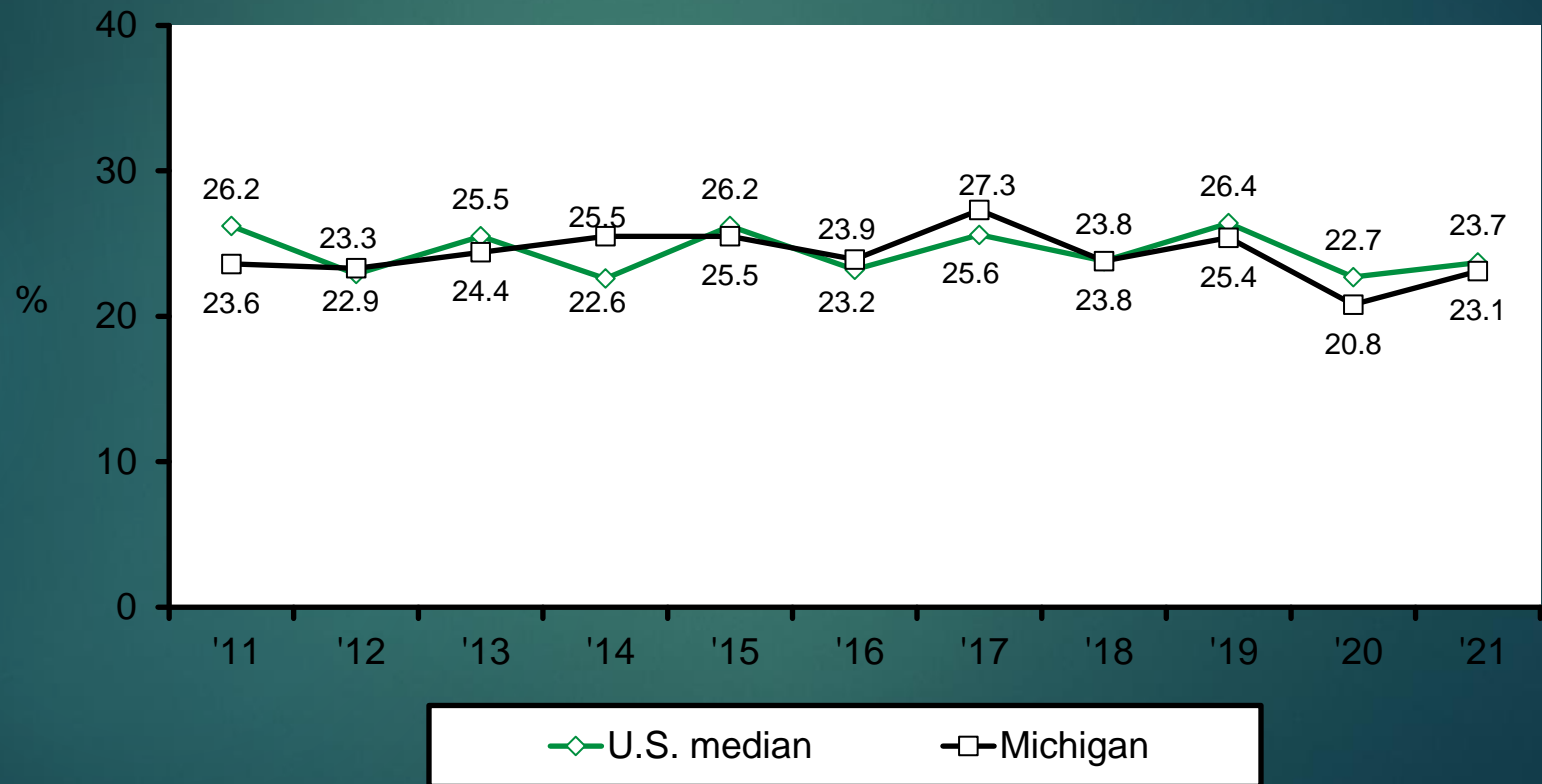
Health Care Access Indicators by Gender Michigan, 2021



2021 MiBRFS Results

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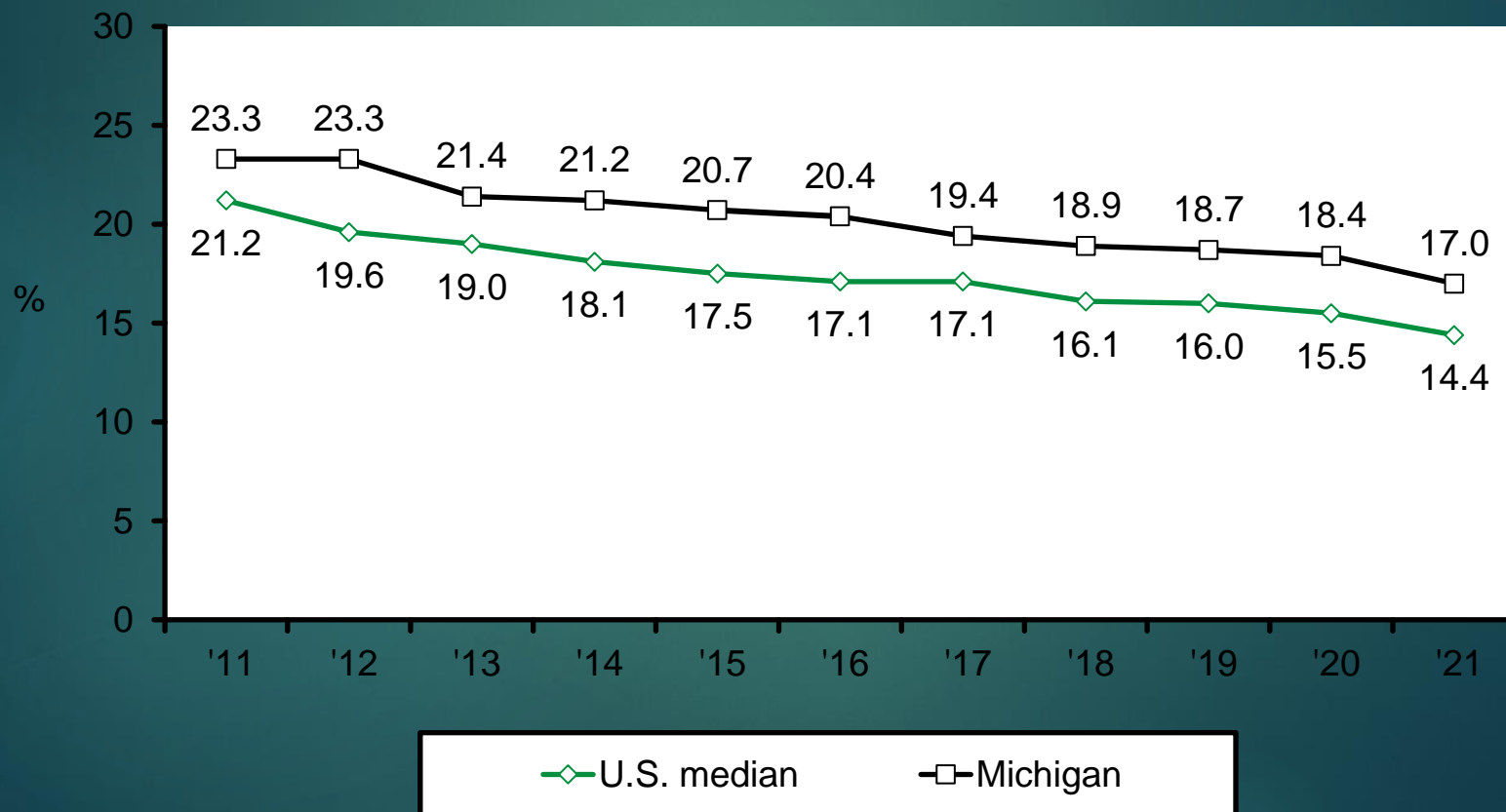
No Leisure Time Physical Activity U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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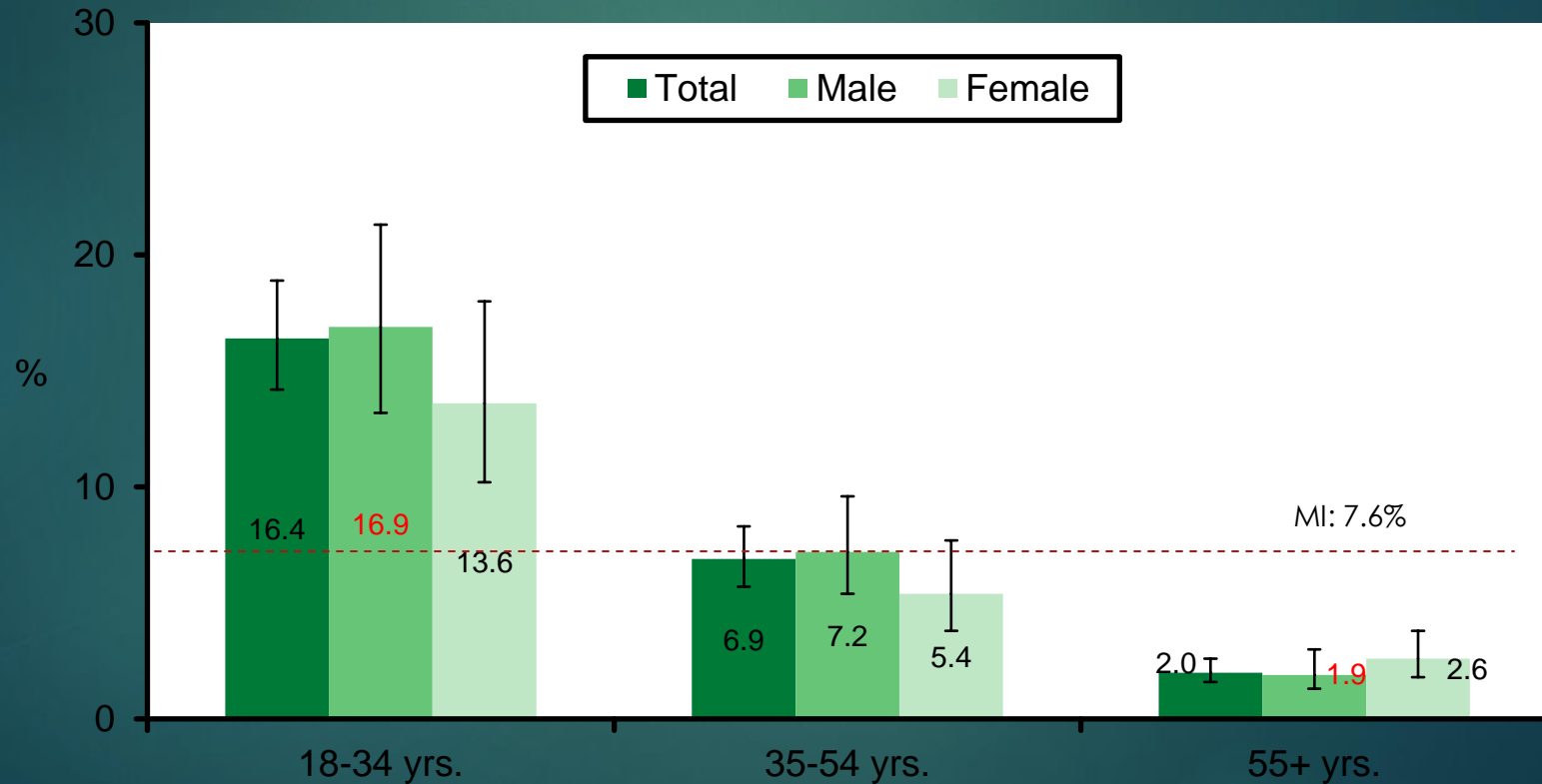
Current Cigarette Smoking U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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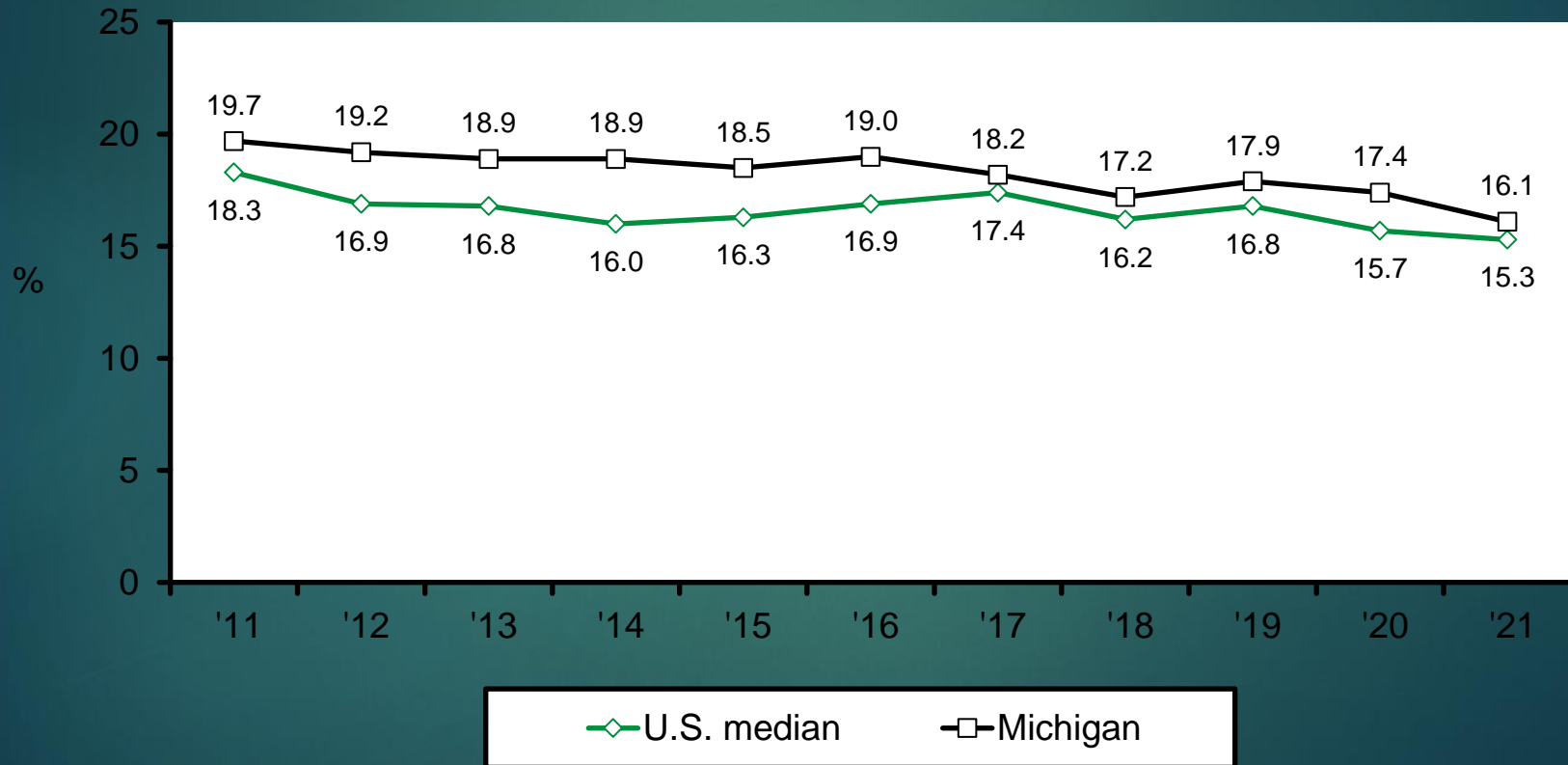
Current E-Cigarette Use by Age and Gender Michigan, 2021



2021 MiBRFS Results

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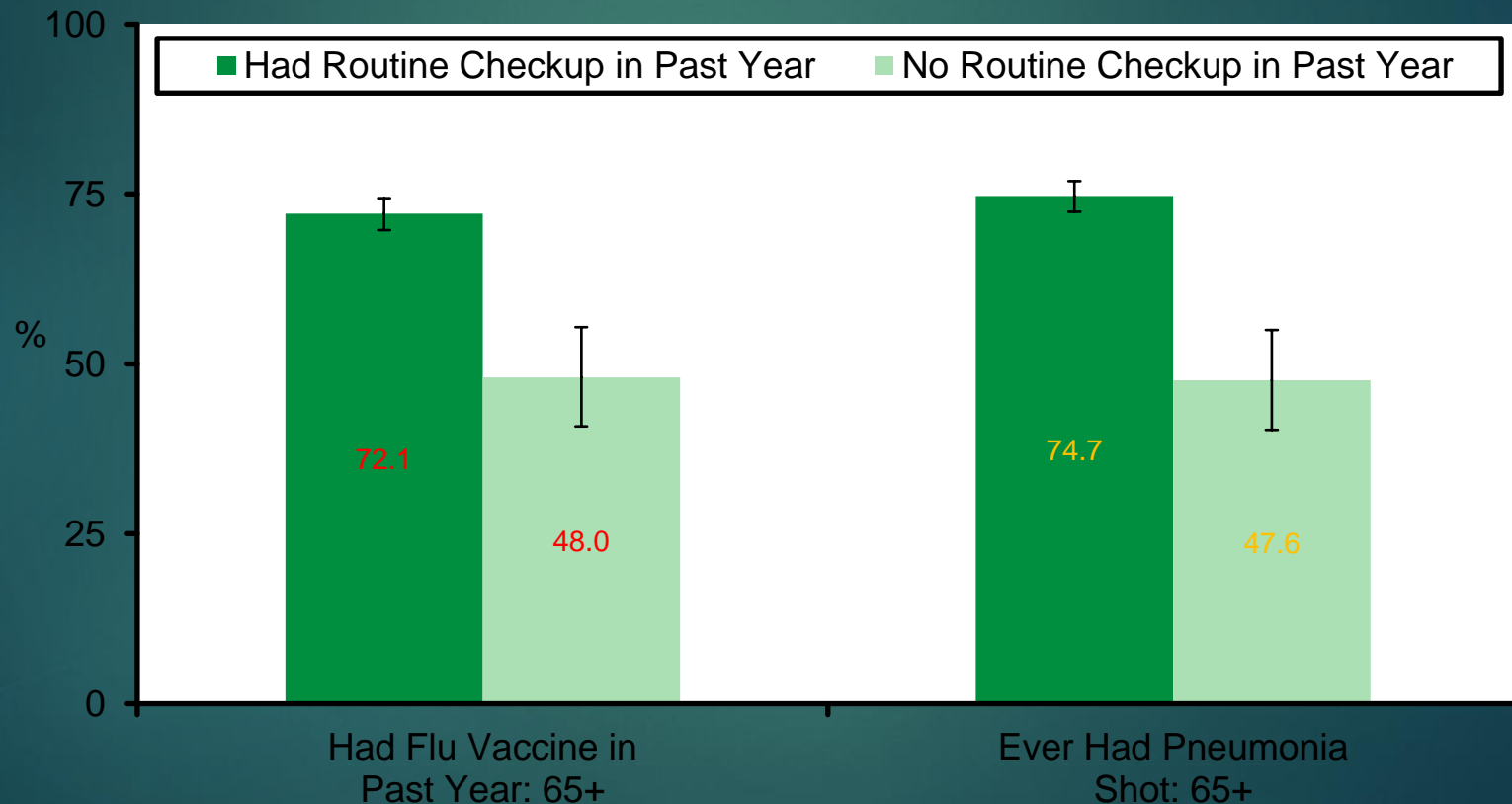
Binge Drinking U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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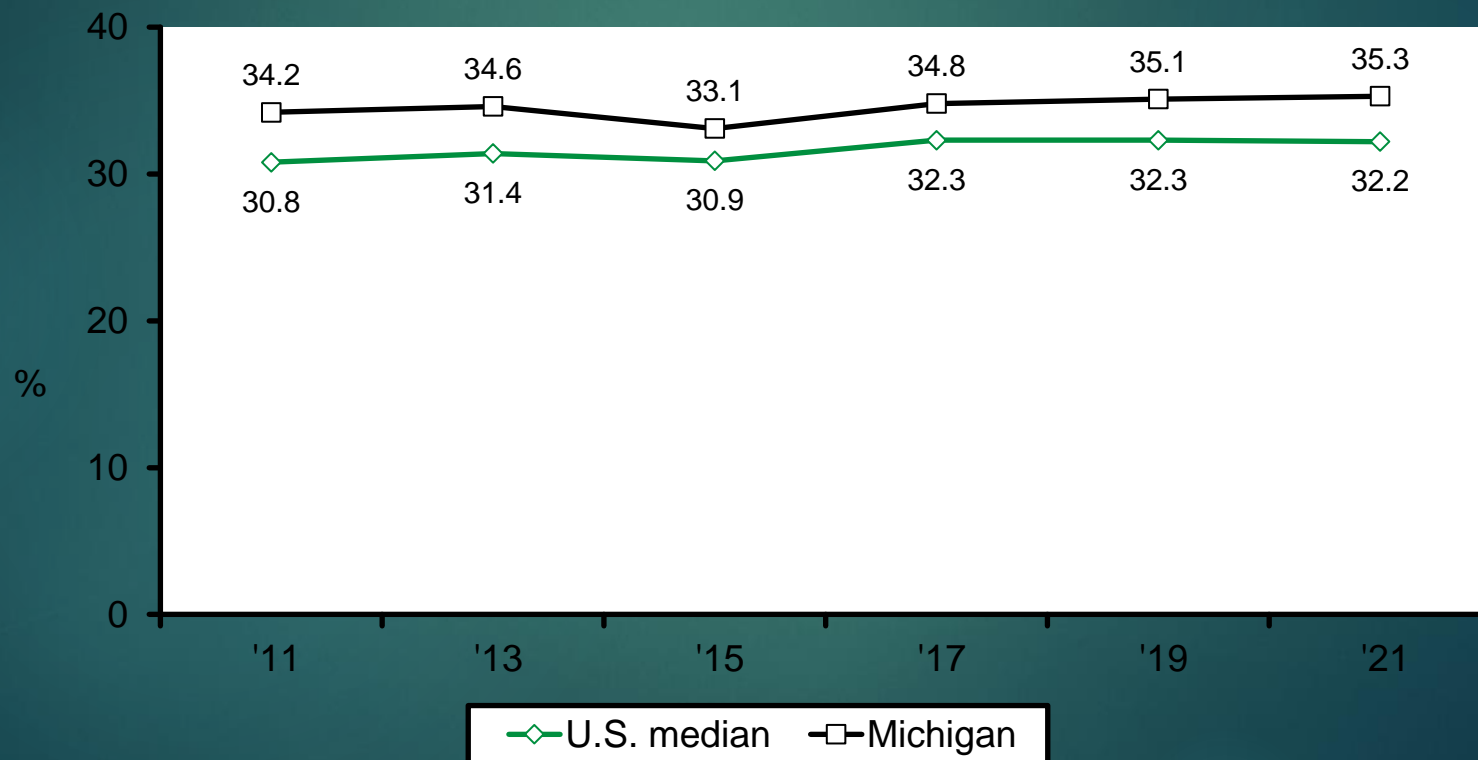
Immunizations by Routine Checkup Status Michigan, 2021



2021 MiBRFS Results

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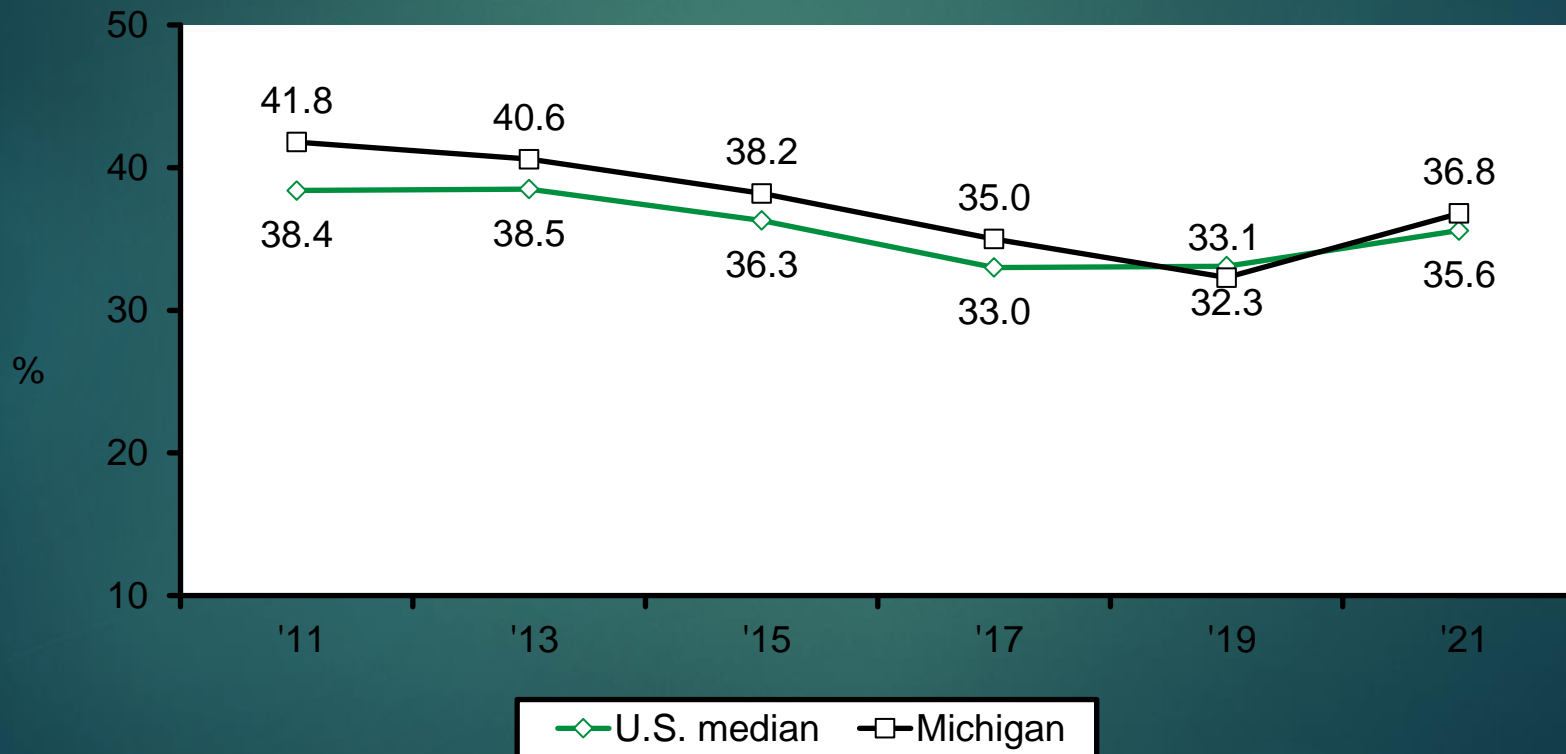
Ever Told High Blood Pressure U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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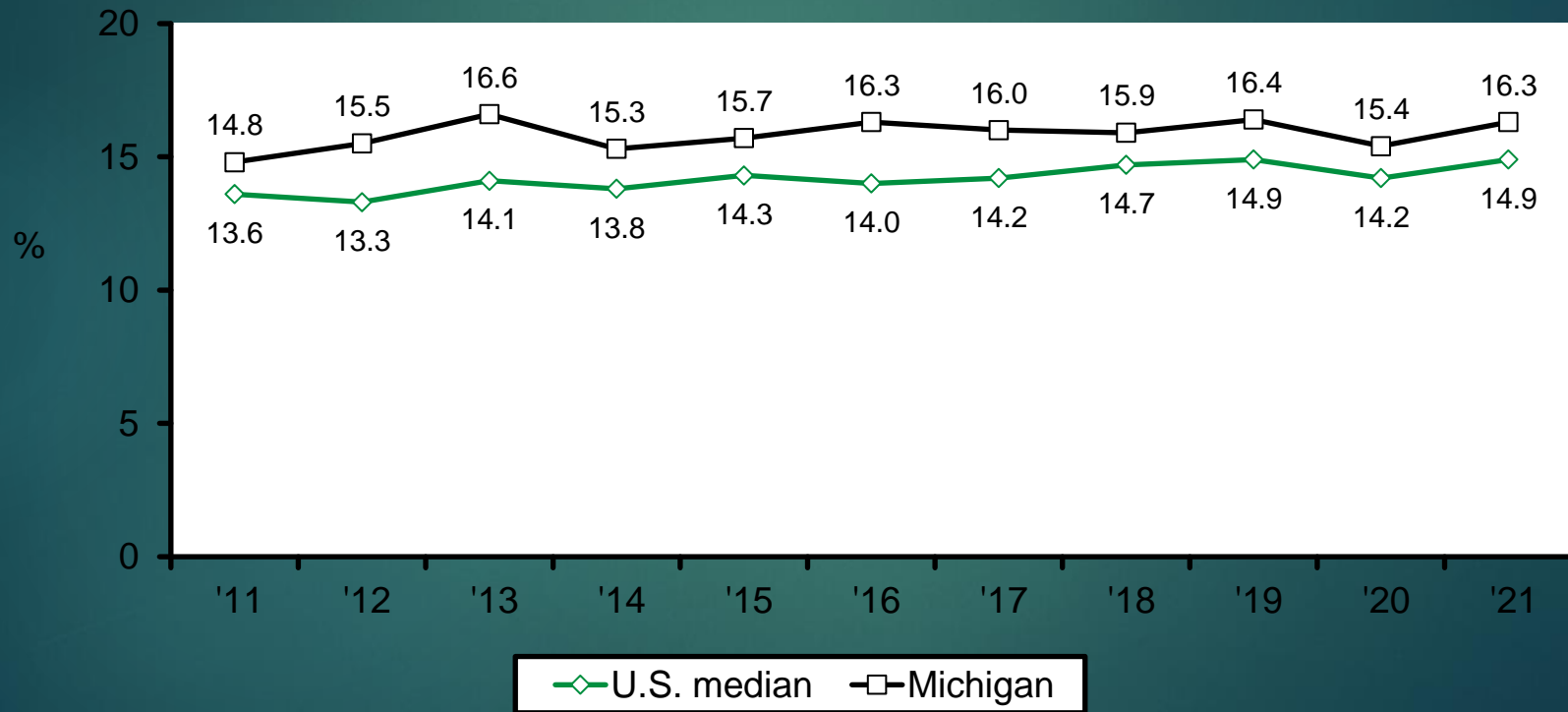
Ever Told High Cholesterol U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

25

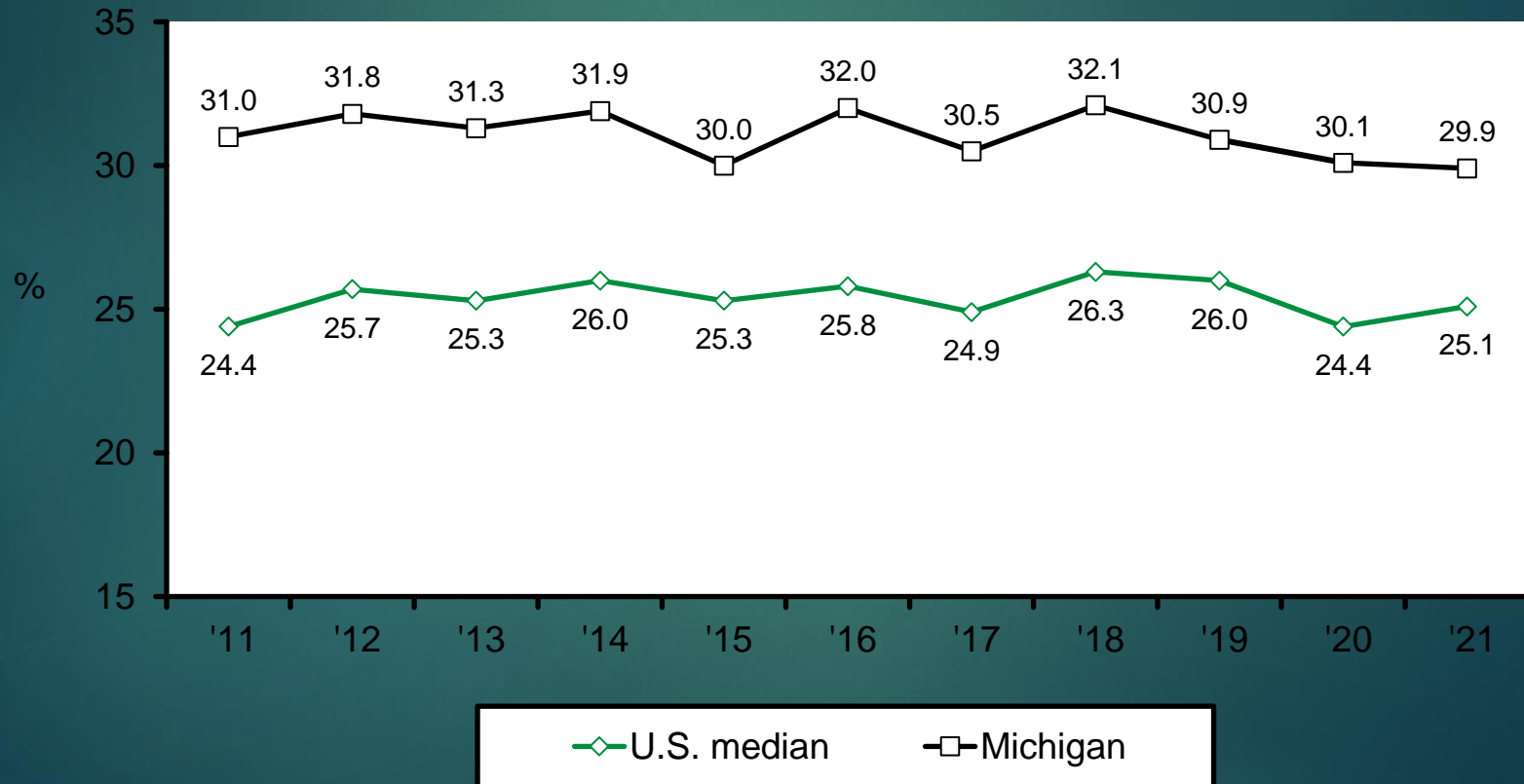
Lifetime Adult Asthma U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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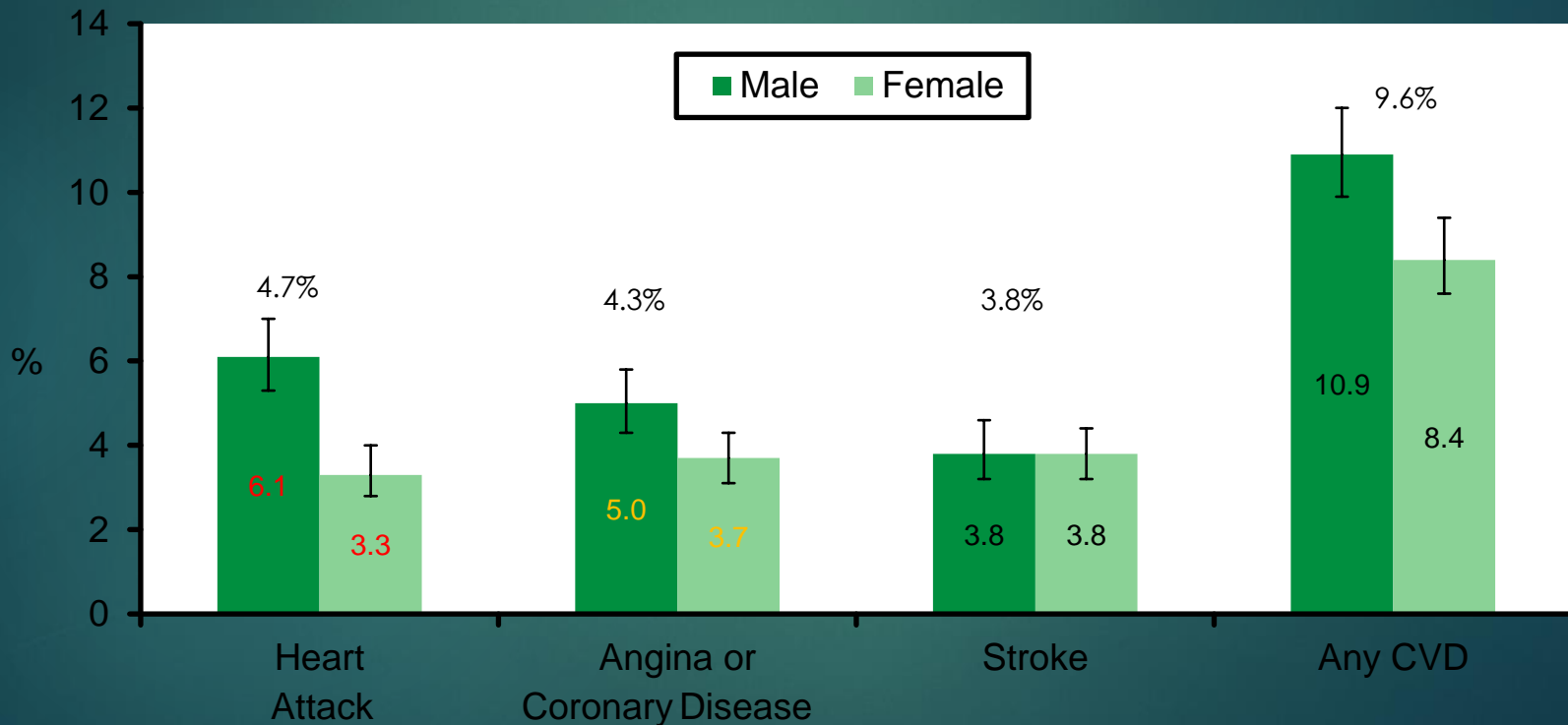
Ever Told Arthritis U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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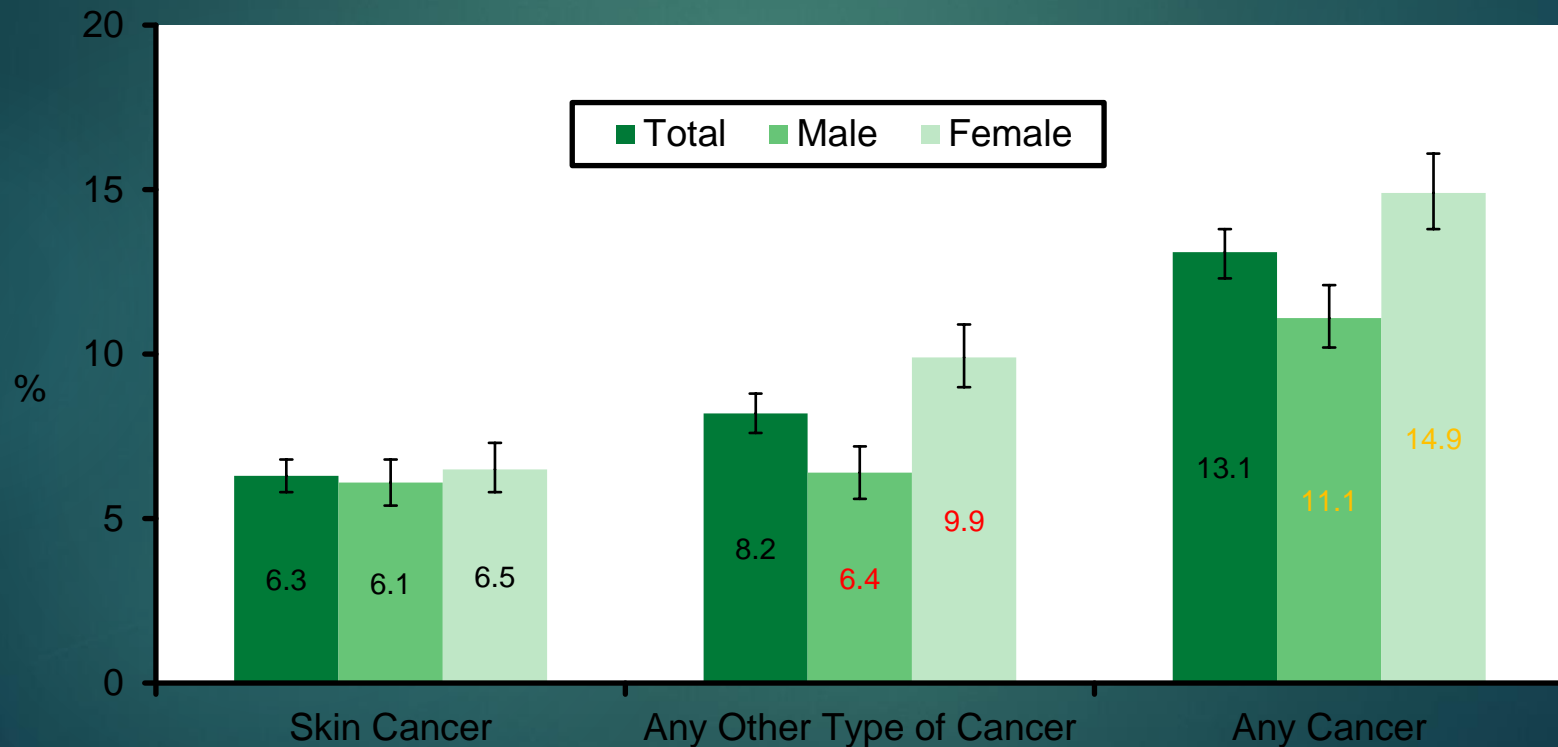
Cardiovascular Disease by Gender Michigan, 2021



2021 MiBRFS Results

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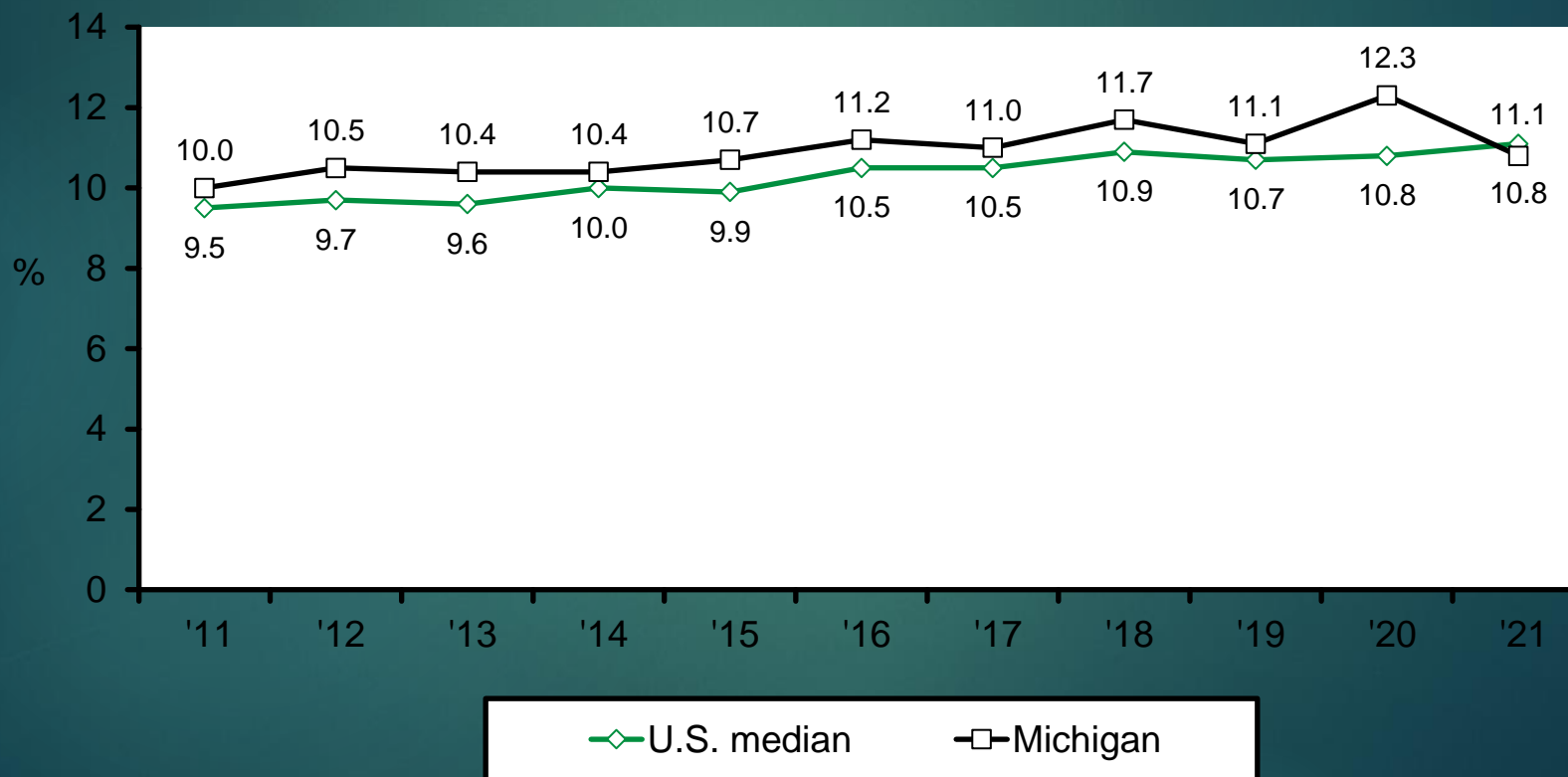
Ever Told Cancer by Gender Michigan, 2021



2021 MiBRFS Results

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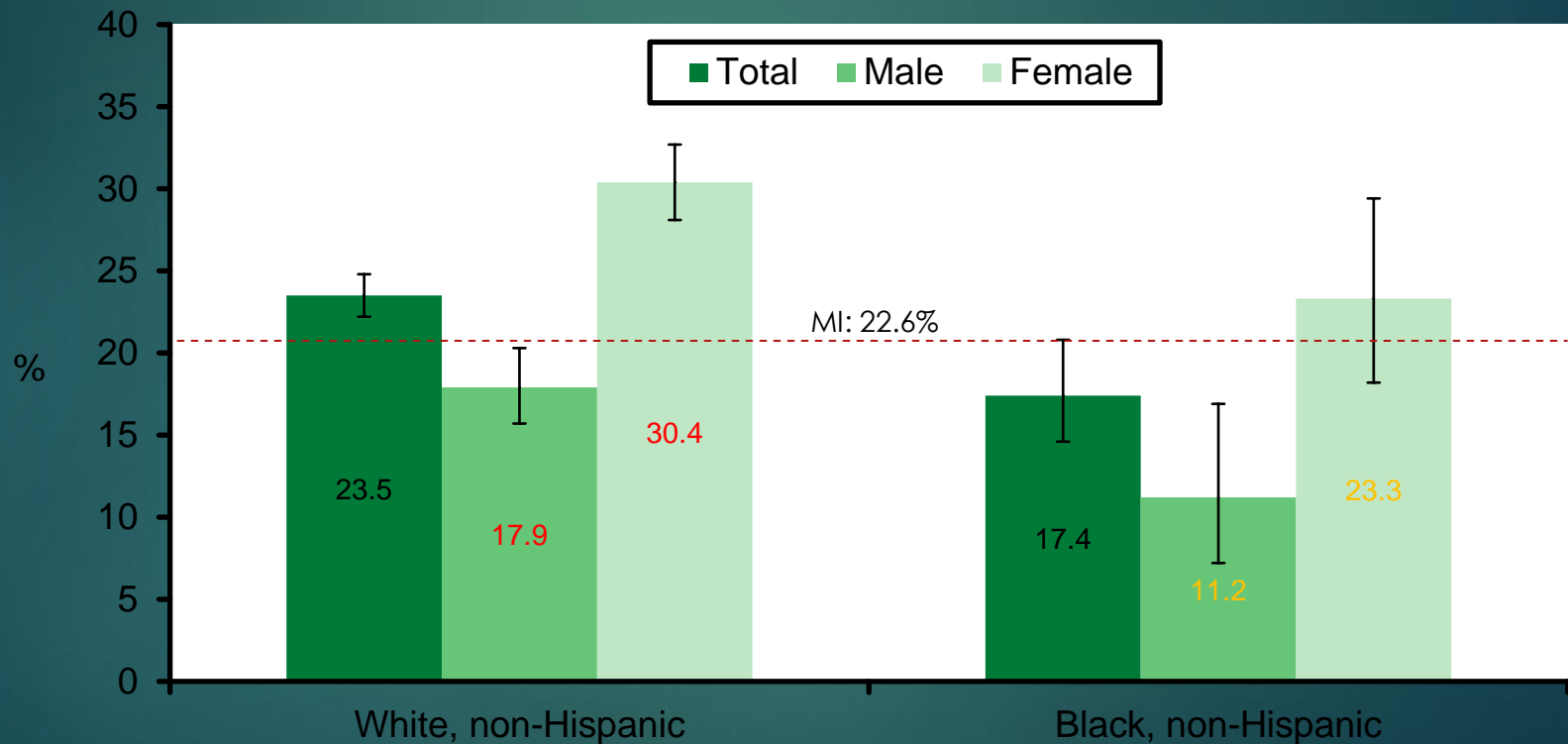
Ever Told Diabetes U.S. vs. Michigan, 2011-2021



2021 MiBRFS Results

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Depression by Race and Gender Michigan, 2021



2022 MiBRFS Status Update

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▶ Survey Statistics

- ▶ 7,764 completed interviews
- ▶ Landline = 2,331
- ▶ Cell Phone = 5,433

▶ Asthma Call Back Survey

- ▶ Completed 806 interviews (724 adults and 82 children)

▶ Public use data expected to be available in August or September of 2023.

▶ MDHHS Standard Tables expected to be available November/December 2023 at www.michigan.gov/brfs.

2023 MiBRFS Status Update

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- ▶ 2023 Survey Target Numbers
 - ▶ Completed = 7,500 interviews (30/70 split)
 - ▶ Landline = 2,256
 - ▶ Cell Phone = 5,244
- ▶ Current Survey Progress (as of July 10th, 2023)
 - ▶ Completed = 4,671 (57%) interviews
 - ▶ Landline = 1,525 (62%)
 - ▶ Cell Phone = 3,146 (54%)
- ▶ Asthma Call Back Survey is also being conducted in 2023
 - ▶ Target: 800 completed interviews
 - ▶ Progress: 565 (71%) completed interviews (516 adults, 49 children)

CDC BRFS Core Topics

Planning 2021-2026

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	2021	2022	2023	2024	2025	2026
Health Status	√	√	√	√	√	√
Healthy Days	√	√	√	√	√	√
Health Care Access	√	√	√	√	√	√
Exercise	√	√	√	√	√	√
Hypertension	√		√		√	
Cholesterol	√		√		√	
Chronic Conditions	√	√	√	√	√	√
Arthritis	√					
Demographics	√	√	√	√	√	√
Disability	√	√	√	√	√	√
Tobacco Use	√	√	√	√	√	√
Alcohol	√	√	√	√	√	√
Immunization	√	√	√	√	√	√

CDC BRFS Core Topics

Planning 2021-2026 (Cont'd)

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	2021	2022	2023	2024	2025	2026
H.I.V./AIDS	√	√	√	√	√	√
Falls			√			√
Physical Activity			√			
Breast and Cervical Cancer		√		√		√
Prostate Cancer		√		√		√
Colorectal Cancer		√		√		√
Drinking Driving/ Seat Belt Use			√			√
Inadequate Sleep		√			√	
Oral Health		√		√		√
Fruits and Vegetables	√				√	

2024 CDC BRFSS Core Topics

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1: Health Status

2: Healthy Days

3: Health Care Access

4: Exercise

5: Oral Health

6: Chronic Health Conditions

7: Demographics

8: Disability

9: Breast and Cervical Cancer
Screening

10: Colorectal Cancer Screening

11: Tobacco Use

12: Lung Cancer Screening

13: Alcohol Consumption

14: Immunization

15: H.I.V./AIDS

2024 CDC BRFS

Optional Modules

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- | | |
|---|--|
| 1: Prediabetes | 15: Social Determinants and Health Equity |
| 2: Diabetes | 16: Reactions to Race |
| 3: Arthritis | 17: Marijuana Use |
| 4: Shingles Vaccination | 18: Tobacco Cessation |
| 5: HPV - Vaccination | 19: Other Tobacco Use |
| 6: Tetanus Vaccination | 20: Sugar-Sweetened Beverage |
| 7: Heart Attack and Stroke | 21: Firearm Safety |
| 8: Cancer Survivorship: Type of Cancer | 22: Industry and Occupation |
| 9: Cancer Survivorship: Course of Treatment | 23: Random Child Selection |
| 10: Cancer Survivorship: Pain Management | 24: Childhood Asthma Prevalence |
| 11: Prostate Cancer Screening | 25: Sex at Birth |
| 12: Cognitive Decline | 26: Sexual Orientation and Gender Identity |
| 13: Caregiver | 27: Family Planning |
| 14: Adverse Childhood Experiences | |

2024 MiBRFS

State-Added Questions

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- ▶ In 2024, we will continue to ask programs that have state-added questions included within the MiBRFS to contribute financially towards the conduct and analysis of the survey.
- ▶ Question costs (per split of ~ 2,500)
 - ▶ < 20% of respondents = \$2,500 per question
 - ▶ ≥ 20% of respondents = \$3,000 per question
- ▶ For those interested in adding specific questions to the 2024 MiBRFS, please submit the State-added Question Proposal form to TianY@michigan.gov by August 11th, 2023.

2024 Michigan Behavioral Risk Factor Survey (MiBRFS) State-Added Question / Regional Oversample Proposal Form

If you are interested in having specific questions added to the 2024 MiBRFS or conducting a regional oversample within the 2024 survey year, please complete this form and submit it to Yan Tian (TianY@michigan.gov) by **Friday, August 11th, 2023**.

In 2024, we will continue to ask programs that have state-added questions included within the MiBRFS to contribute financially towards the conduct and analysis of the survey. For each questionnaire split on which the questions are included, funded programs will be asked to contribute **\$2,500** for each question asked of less than 20% of respondents and **\$3,000** each for all other questions. The costs associated with regional oversamples vary depending on the goals of each oversample and thus will need to be discussed further with MiBRFS staff before exact costs can be determined.

The list of potential 2024 MiBRFS state-added questions and regional oversamples will be compiled and discussed in further detail as part of the 2022 Michigan BRFSS Data Users Meeting presentation that will be scheduled on **Wednesday, July 12th, 2023**.

Topic: _____

Name of Requester: _____ Bureau/Division: _____

Phone : _____ E-mail: _____

How will these data be used from a program or policy aspect?

What is the target population from whom you want to collect this data?

What data are currently available on these issues/populations and what would data from the BRFSS provide that is not provided by these other sources?

If you are proposing a regional oversample only, please skip to the last question.

Approximately how many questions do you think are needed?

Expected number of questionnaire splits for these questions, if available:

- ☐ 1 split = 2,500 - 3,500 interviews (if questions are asked of the entire adult population)
- ☐ 2 splits = 5,000 - 7,000 interviews (if questions are asked of the entire adult population)
- ☐ 3 splits = 7,500 - 10,500 interviews (if questions are asked of the entire adult population)

2024 MiBRFS

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State-Added Topics (with CDC Funding)

Module Name	# Questions	# Splits
Family Planning	3	3
Firearms Safety Practice	3	3
Other Tobacco Products	3	2
Sugar-sweetened Beverage	2	3
Cancer Survivorship: Type of Cancer	3	3
Prostate Cancer Screening	5	3
Reaction to Race	6	2
Social Determinants of Health	10	2

MiBRFSS Questions

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- ▶ Questions related to the MiBRFSS Data Users Presentation
- ▶ Have interest in state-added question proposals for the 2024 or future survey
- ▶ Need further information on other MiBRFSS-related topics
- ▶ Contact Yan Tian
 - ▶ Michigan BRFSS Coordinator/Epidemiologist
 - ▶ TianY@michigan.gov
 - ▶ 517-335-8144

Contact Information

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Michigan BRFSS Director:

Mary Kleyn, KleynM@michigan.gov

Michigan BRFSS Financial Specialist:

Sarah Razak, RazakS@michigan.gov

Michigan BRFSS Coordinator/Epidemiologist:

Yan Tian, TianY@Michigan.gov

Michigan BRFSS website: www.Michigan.gov/BRFS