



HEALTH RISK BEHAVIORS OF KANSANS

2015 Kansas Behavioral Risk
Factor Surveillance System

February 2017

Health Risk Behaviors of Kansans 2015

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BRFSS Overview

The Behavioral Risk Factor Surveillance System (BRFSS) is a random digit dial telephone survey of non-institutionalized adults aged 18 years and older living in private residences and college housings with landline and/or cell phone service. If applicable, adult respondents also provide limited data on a randomly selected child in the household via surrogate interview. BRFSS is coordinated and partially funded by the Centers for Disease Control and Prevention and is the largest continuously conducted telephone survey of population health risk in the world. It is conducted in every state, the District of Columbia and several U.S. territories. The first BRFSS survey in Kansas was conducted as a point-in-time survey in 1990. Kansas has conducted BRFSS survey annually since 1992.

The overall goal of BRFSS is to maintain the capacity for conducting population-based health risk surveys via telephone in Kansas. BRFSS data are used for the following:

- Monitoring the leading contributors to morbidity and premature death
- Tracking health status and assessing trends
- Measuring public knowledge, attitudes and opinions
- Program planning
 - Needs assessment
 - Development of goals and objectives
 - Identification of target groups
- Policy development
- Evaluation of public health programs

Data from BRFSS are weighted to account for the complex sample design and non-response bias to ensure the resulting estimates will be representative of the underlying population as a whole as well as for target subpopulations.

Changes in BRFSS survey methodology

In recent years, the proportion of U.S. households with only cellular telephone (cell phone) service has risen steadily. In the first half of 2003 cell phone only service was only 3 percent, but this increased to more than 3 out of every 10 American households (31.6%) during the first half of 2011. In the second half of 2012, nearly 2 out of 5 American households (38.2%) had cellular telephone only service. The demographic characteristics of adults living in cell phone service only households are different. These adults are more likely to be young, males, Hispanics, non-Hispanic African-Americans, living alone or with unrelated adults, living in poverty or near poverty, and renting a home. These changes in phone use impacted traditional random digit dialing landline phone surveys such as BRFSS.

To maintain representativeness, coverage and validity of data, changes in BRFSS survey methodology were made beginning in 2011 by the CDC. These changes include:

1. Use of the dual frame sampling method (landline and cell phone samples) instead of the single frame method (landline phone sample). The sample includes:
 - Adults aged 18 years and older living in a private residences and college housings with landline phone service

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

- Adults aged 18 years and older living in a private residences and college housings with cell phone service
 - Adults aged 18 years and older living in a private residences and college housings with landline and cell phone service (dual users)
2. Use of the Iterative Proportional Fitting weighting method (raking method) in place of the post stratification weighting method to improve the weighting, adjustment and estimation methods. This methodology has adjusted to take into account the dual frame sampling. The raking method adjusted the survey sample for age, sex, race, ethnicity, education level, marital status, home ownership, region, county and telephone type (landline/cell) to increase the representativeness of survey estimates for the general population.

Impact of New Survey Methodology on 2011, 2012, 2013, 2014 and 2015 BRFSS

Changes in the 2011 BRFSS methodology influence the state and national-level prevalence estimates for 2011 and subsequent years. Size and direction of the effect of new methodology on the prevalence estimates varies by health indicators. Changes in the 2011 data are likely to show indications of somewhat higher occurrences of risk behaviors common to younger adults and to certain racial or ethnic minority groups. The absolute increases or decreases in the prevalence estimates of health indicators from 2010 to 2011 BRFSS do not show any real changes in the actual prevalence of diseases, risk factors/behaviors and other health indicators in the general population. These variations in the estimates are caused by the addition of cell phone households to the survey sampling frame and adoption of a new advanced statistical method for weighting of the survey data. The 2015, 2014, 2013, 2012 and 2011 data cannot be compared with data from 2010 and preceding years to examine trends as prevalence estimates cannot be compared and interpreted using data generated from two different methodologies. The 2011 estimates constitute a new baseline for monitoring trends of health indicators.

Analysis, Interpretation and Use of 2015 Kansas BRFSS Data

For analysis, the 2011, 2012, 2013, 2014 and 2015 Kansas BRFSS dataset cannot be combined with those from previous years as sampling and weighting methods are different. The weighted data analysis techniques were used for 2011, 2012, 2013 and 2014 surveys was applied for the 2015 survey. 2015 BRFSS provides prevalence estimates of diseases, risk factors/behaviors and other health indicators for adult Kansans aged 18 years and older. 2015 BRFSS also provides prevalence estimates of health indicators for various socio-demographic subgroups in Kansas. The prevalence estimates from 2015 Kansas BRFSS are representative of non-institutionalized adults aged 18 years and older living in private residences and college housings with landline and/or cell phone service.

2015 BRFSS data can be reliably used for: examining and monitoring the burden of public health issues in Kansas, planning and evaluation of public health programs to address these issues, public health decision making, leveraging funding opportunities and public education.

For more information about the Kansas BRFSS, including questionnaires and data results for 2015 and previous years, please visit: <http://www.kdheks.gov/brfss/index.html>.

Executive Summary

Healthy People 2020 (HP 2020) is a comprehensive nationwide set of goals and objectives related to health promotion and disease prevention. In Healthy People 2020, a set of Leading Health Indicators was selected based on their relevance to broad public health topics and availability of data to measure their progress. The indicators serve as a snapshot of the nation's progress toward improving the overall health of the population.

The 12 Leading Health Indicators are:

- Access to Health Services
- Clinical Preventive Services
- Environmental Quality
- Injury and Violence
- Maternal, Infant and Child Health
- Mental Health
- Nutrition, Physical Activity and Obesity
- Oral Health
- Reproductive and Sexual Health
- Social Determinants
- Substance Abuse
- Tobacco

2015 Kansas BRFSS collected data on several Healthy People 2020 topics. This report examines the Kansas data in context with the targets set for several Healthy People 2020 objectives.

Report Highlights

Access to Health Services

- The percentage of Kansas adults aged 18 to 64 years with no health care coverage was significantly **higher** among adults in lower education groups compared with adults in higher education groups.
- The percentage of Kansas adults aged 18 years and older with no personal health care provider was significantly **higher** among males compared with females.

Healthy People 2020 Objectives:

- *Increase the proportion of persons with medical insurance to 100%. Kansas 2015: 87.2%. Kansas has **not yet met** the HP 2020 target.*
- *Increase the proportion of persons with a usual primary care provider to 83.9%. Kansas 2015: 79.9%. Kansas has **not yet met** the HP 2020 target.*

Injury and Violence

- The percentage of Kansas adults aged 18 years and older who did not always wear a seat belt when they drove or rode in a car was significantly **higher** among younger adults compared with adults in older age groups.

Healthy People 2020 Objective:

- *Increase use of safety belts to 92.0%. Kansas 2015: 83.0%. Kansas has **not yet met** the HP 2020 target.*

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Clinical Preventive Services

- The percentage of Kansas adults aged 18 years and older who did not get immunized against influenza during the past 12 months was significantly **higher** among adults with no insurance compared with adults with insurance.
- The percentage of Kansas adults aged 65 years and older who never received a pneumonia vaccination was significantly **higher** among males compared with females.

Healthy People 2020 Objectives:

- *Increase the percentage of adults aged 18 years and older who are vaccinated annually against seasonal influenza to 70.0%. Kansas 2015: 57.4%. Kansas has not yet met the HP 2020 target.*
- *Increase the percentage of noninstitutionalized adults aged 65 years and older who are vaccinated against pneumococcal disease to 90.0%. Kansas 2015: 73.8%. Kansas has not yet met the HP 2020 target.*

Nutrition, Physical Activity and Obesity

- The percentage of Kansas adults aged 18 years and older who were obese was significantly **higher** among non-Hispanic African-Americans compared with non-Hispanic whites and other/multi-race (age-adjusted prevalence).
- The percentage of Kansas adults aged 18 years and older who did not participate in leisure-time physical activity in the past 30 days was significantly **higher** among older adults compared with adults in younger age groups.
- The percentage of Kansas adults aged 18 years and older that did not participate in any recommended physical activity (aerobic and strengthening) was significantly **higher** among females compared with males.
- The percentage of Kansas adults aged 18 years and older that did not participate in recommended physical activity (aerobic and/or strengthening) was significantly **higher** among Adults living with a disability compared with adults living without a disability.
- The percentage of Kansas adults aged 18 years and older who did not consume fruit at least once per day was significantly **higher** among adults with no insurance compared with adults with insurance.
- The percentage of Kansas adults aged 18 years and older who did not consume vegetables at least once per day was significantly **higher** among adults 18 to 24 years old compared with adults in older age groups.

Healthy People 2020 Objectives:

- *Reduce the proportion of adults who are obese to 30.5%. Kansas 2015: 34.2%. Kansas has not met the HP 2020 target. In addition there are disparities in population subgroups that have not met the HP 2020 target.*
- *Reduce the proportion of adults who engage in no leisure-time physical activity to 32.6%. Kansas 2015: 26.5%. Kansas has met the HP 2020 target, but still approximately 1 in 4*

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Kansas adults did not participate in leisure-time physical activity. In addition there are disparities in population subgroups that have not met the HP 2020 target.

- *Increase the proportion of adults who meet the objectives for aerobic physical activity and for muscle strengthening activity to 20.1%; Kansas 2015: 19.3%. Kansas has not yet met the HP 2020 targets.*

Tobacco

- The percentage of Kansas adults aged 18 years and older who currently smoke cigarettes was significantly **higher** among non-Hispanic African-Americans compared with non-Hispanic whites; and **higher** among Non-Hispanic whites and non-Hispanic African-Americans adults compared with Hispanics (age-adjusted prevalence).
- The percentage of Kansas adults aged 18 years and older who currently use any smokeless tobacco products was significantly **higher** among males compared with females.
- The percentage of Kansas adults 18 years old and older that have ever used or tried e-cigarettes was significantly **higher** among adults with less than college graduation compared with college graduates

Healthy People 2020 Objectives:

- *Reduce cigarette smoking by adults to 12.0%. Kansas 2015: 17.7%. Kansas has not yet met the HP 2020 target.*
- *Reduce use of smokeless tobacco products to 0.3%. Kansas 2015: 5.6%. Kansas has not yet met the HP 2020 target.*

Oral Health

- The percentage of Kansas adults aged 18 years and older with no dental insurance was significantly **higher** among Hispanics compared with non-Hispanic whites (age-adjusted prevalence).

Substance Abuse

- The percentage of Kansas adults aged 18 years and older who were binge drinkers in the past 30 days was significantly **higher** among males compared with females.

Healthy People 2020 Objectives:

- *Reduce the proportion of adults 18 years and older engaging in binge drinking during the past 30 days to 24.4%. Kansas 2015: 15.6%. Kansas has met the HP 2020 target, but still approximately 1 in 6 Kansas adults were binge drinkers. In addition there are disparities in population subgroups that have not met the HP 2020 target.*

Mental Health

- Mental health issues are seen in the Kansas population and its subgroups.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with depression was significantly **higher** among females compared with males.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with depression was significantly **higher** among adults with lower annual household income compared with adults in higher annual household income groups.

Chronic Health Conditions

- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with diabetes was significantly **higher** among adults living with a disability compared with adults living without a disability.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with current asthma was significantly **higher** among females compared with males.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with arthritis was significantly **higher** among adults with lower annual household income compared with adults in higher annual household income groups.
- The percentage of Kansas adults aged 18 years and older that had ever been diagnosed with heart disease was significantly **higher** among adults with lower education compared with adults in higher education groups.
- The percentage of Kansas adults aged 18 years and older that had ever been diagnosed with stroke was significantly **higher** among adults with lower annual household income compared with adults in higher annual household income groups.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with cancer (excluding skin cancer) was significantly **higher** among females compared with males.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with skin cancer was significantly **higher** among non-Hispanics whites compared with Hispanics (age-adjusted prevalence).

Access to Health Care: Health Insurance

Access to health services is one of the leading health indicators of Healthy People 2020. The U.S. Institute of Medicine defined health access as the timely use of personal health services to achieve the best possible health outcomes. Lack of access to health services is a persistent barrier to good health.¹ Adults with no or limited insurance coverage are less likely to get needed medical attention.²

Access to health care among Kansans aged 18 to 64 years:

In 2015, approximately 1 in 6 Kansas adults aged 18 to 64 years lacked health care coverage. The percentage of Kansas adults aged 18 to 64 years with no health care coverage was significantly **higher** among:

- Males compared with females
- Adults aged 25 to 34 years compared with those in older age groups
- Non-Hispanic African-Americans and Hispanics compared with non-Hispanic whites (age-adjusted prevalence)
- Adults in lower education groups compared with adults in higher education groups
- Adults with an annual household income of less than \$25,000 compared with those with an annual household income of \$25,000 or higher

The percentage of Kansas adults with no health care coverage did not differ significantly between adults living with a disability and those living without a disability.

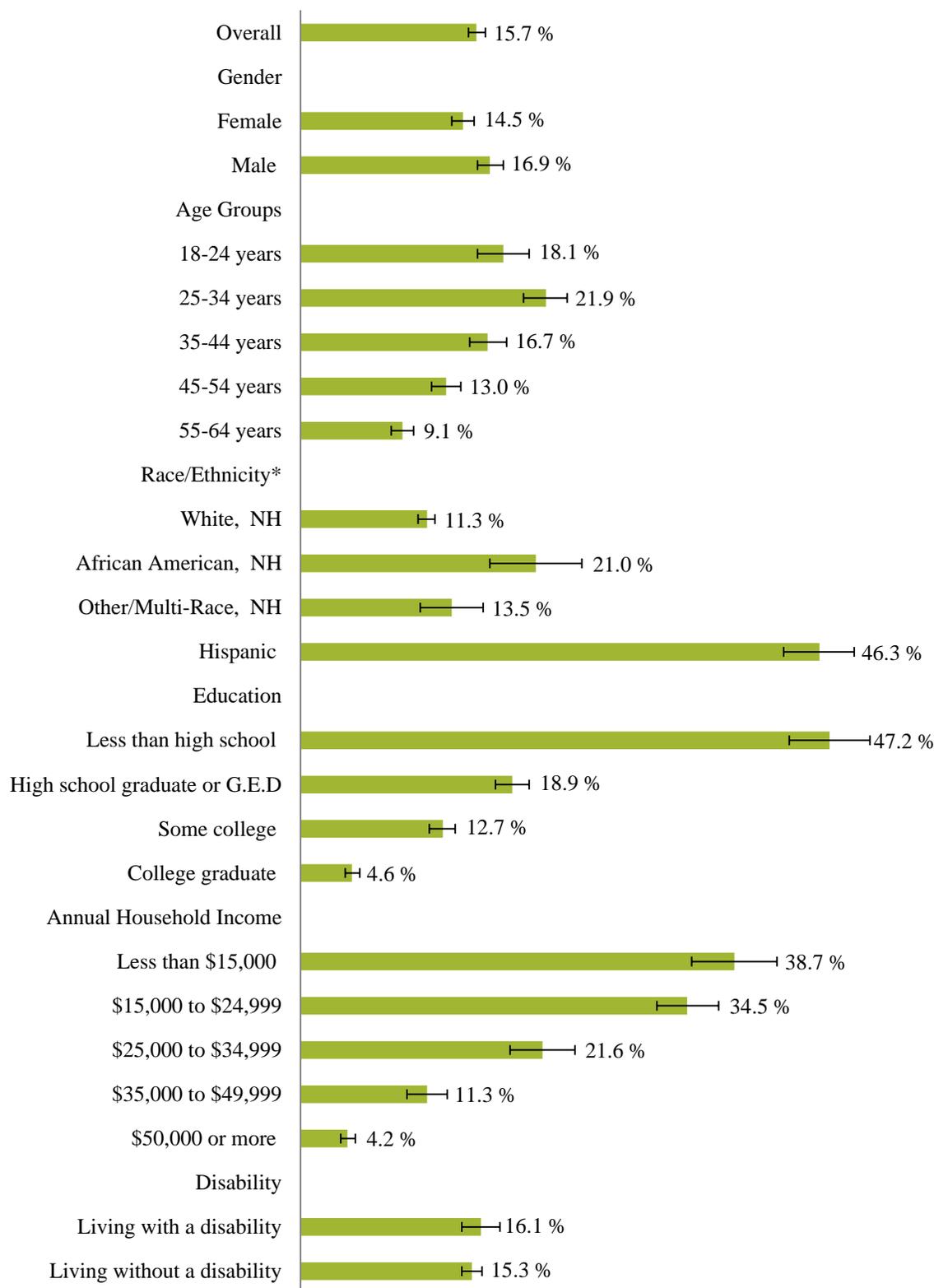
Percentage of Adults Aged 18 to 64 Years Who Lack Health Care Coverage, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	15.7	15.0-16.5
Gender		
Female	14.5	13.5-15.5
Male	16.9	15.8-18.1
Age Groups		
18-24 years	18.1	15.8-20.4
25-34 years	21.9	19.9-23.8
35-44 years	16.7	15.1-18.4
45-54 years	13.0	11.7-14.3
55-64 years	9.1	8.1-10.1
Race/Ethnicity*		
White, NH	11.3	10.5-12.0
African-American, NH	21.0	16.9-25.1
Other/Multi-Race, NH	13.5	10.7-16.3
Hispanic	46.3	43.1-49.4
Education		
Less than high school	47.2	43.6-50.8
High school graduate or G.E.D	18.9	17.4-20.4
Some college	12.7	11.5-13.8
College graduate	4.6	4.0-5.3
Annual Household Income		
Less than \$15,000	38.7	34.9-42.5
\$15,000 to \$24,999	34.5	31.8-37.3
\$25,000 to \$34,999	21.6	18.7-24.5
\$35,000 to \$49,999	11.3	9.5-13.1
\$50,000 or more	4.2	3.6-4.9
Disability		
Living with a disability	16.1	14.4-17.8
Living without a disability	15.3	14.4-16.2

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 to 64 Years Who Lack Health Care Coverage, KS BRFSS 2015



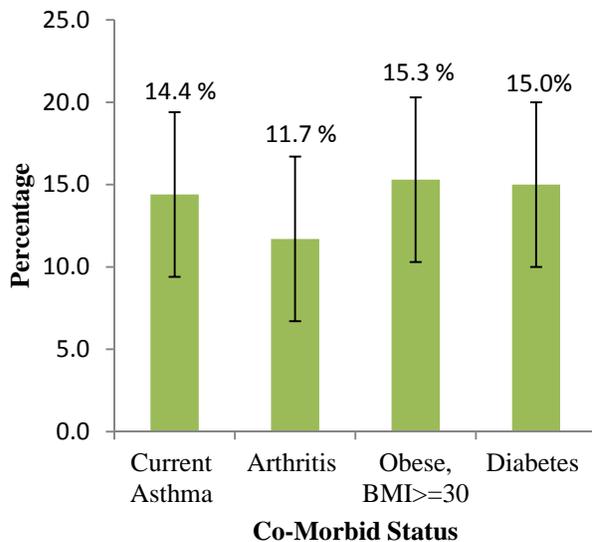
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Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 to 64 Years Who Lack Health Care Coverage by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	14.4	12.0-16.8
No	15.8	15.0-16.6
Arthritis Status		
Yes	11.7	10.3-13.1
No	16.6	15.7-17.5
Weight Category		
Normal or Underweight, BMI<25	15.1	13.6-16.5
Overweight, 25<= BMI<30	14.3	13.0-15.7
Obese, BMI>=30	15.3	14.0-16.6
Diabetes Status		
Yes	15.0	12.5-17.4
No	15.8	15.0-16.6

Percentage of Adults Aged 18 to 64 Years Who Lack Health Care Coverage, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 to 64 years with no health care coverage was significantly **higher** among:

- Adults with no arthritis compared with those with arthritis

The percentage of Kansas adults aged 18 to 64 years with no health care coverage did not differ significantly by current asthma status, diabetes status or weight categories.

SUMMARY

Approximately 16 percent of Kansas adults aged 18 to 64 years lacked health care coverage. In addition, higher percentages of adults who lacked health insurance were seen among: males, younger adults, non-Hispanic African-Americans, Hispanics, adults with lower income and adults with lower education.

The Healthy People 2020 target is for 100 percent of people to have health insurance. Further public health efforts are needed to reach the target in Kansas and to address observed disparities among population subgroups.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Access to health care among Kansans aged 18 years and older:

In 2015, approximately 1 in 8 Kansas adults aged 18 years and older lacked health care coverage. The percentage of Kansas adults aged 18 years and older with no health care coverage was significantly **higher** among:

- Males compared with females
- Adults aged 44 years and younger compared with those in older age groups
- Non-Hispanic African-Americans and Hispanics compared with non-Hispanic whites (age-adjusted prevalence)
- Adults in lower education groups compared with adults in higher education groups
- Adults in lower annual household income groups compared with adults in higher annual household income groups

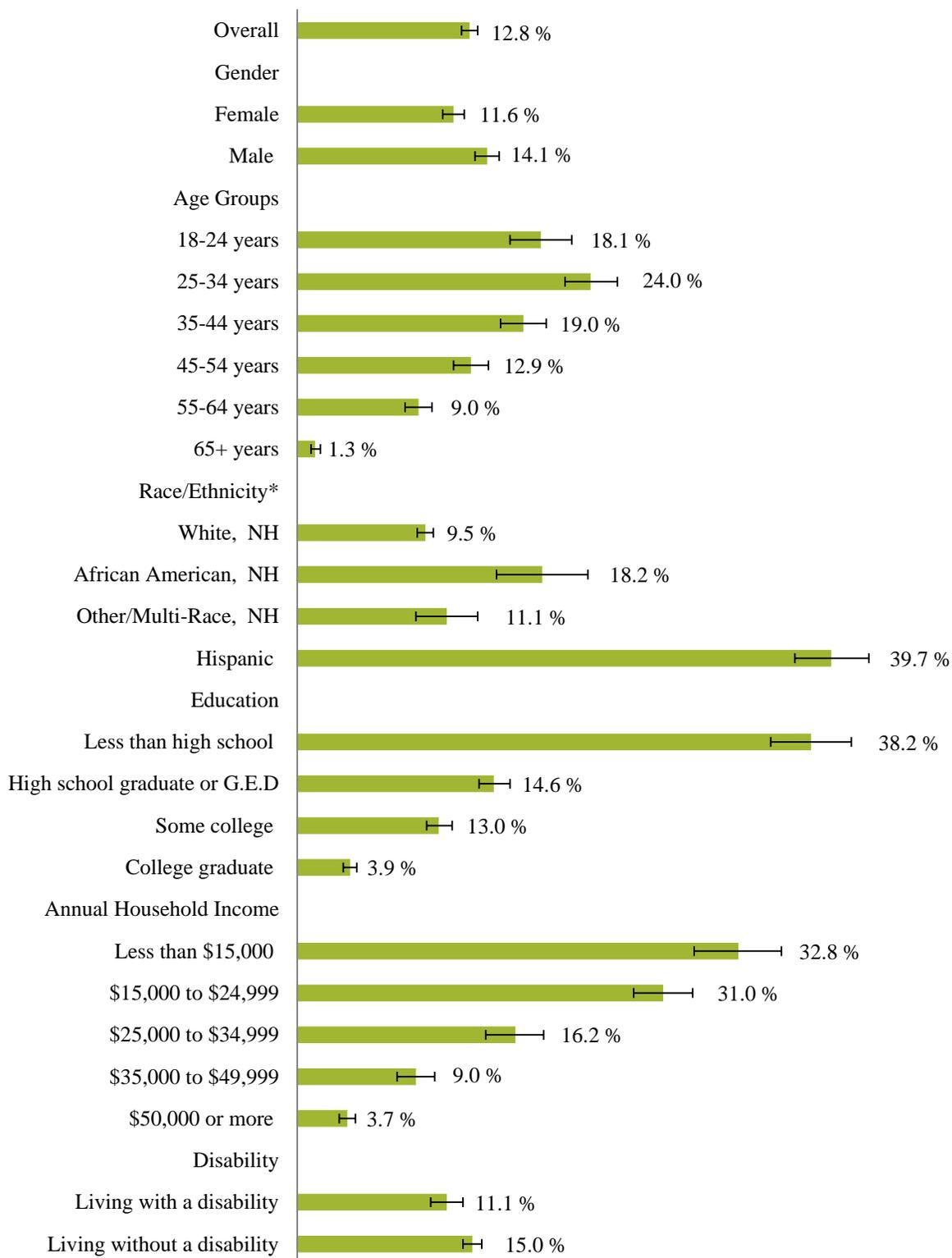
The percentage of Kansas adults with no health care coverage did not differ significantly between adults living with a disability and those living without a disability.

Percentage of Adults Aged 18 Years and Older Who Lack Health Care Coverage, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	12.8	12.2-13.4
Gender		
Female	11.6	10.8-12.4
Male	14.1	13.2-15.0
Age Groups		
18-24 years	18.1	15.8-20.4
25-34 years	21.8	19.9-23.8
35-44 years	16.8	15.1-18.5
45-54 years	12.9	11.6-14.2
55-64 years	9.0	8.0-10.0
65+ years	1.3	1.0-1.7
Race/Ethnicity*		
White, NH	9.5	8.9-10.1
African-American, NH	18.2	14.8-21.6
Other/Multi-Race, NH	11.1	8.8-13.4
Hispanic	39.7	37.0-42.5
Education		
Less than high school	38.2	35.2-41.2
High school graduate or G.E.D	14.6	13.5-15.8
Some college	10.5	9.6-11.5
College graduate	3.9	3.4-4.4
Annual Household Income		
Less than \$15,000	32.8	29.5-36.0
\$15,000 to \$24,999	27.2	25.0-29.4
\$25,000 to \$34,999	16.2	14.0-18.3
\$35,000 to \$49,999	8.8	7.4-10.2
\$50,000 or more	3.7	3.1-4.3
Disability		
Living with a disability	11.1	9.9-12.3
Living without a disability	13.0	12.3-13.7

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Percentage of Adults Aged 18 Years and Older Who Lack Health Care Coverage, KS BRFSS 2015



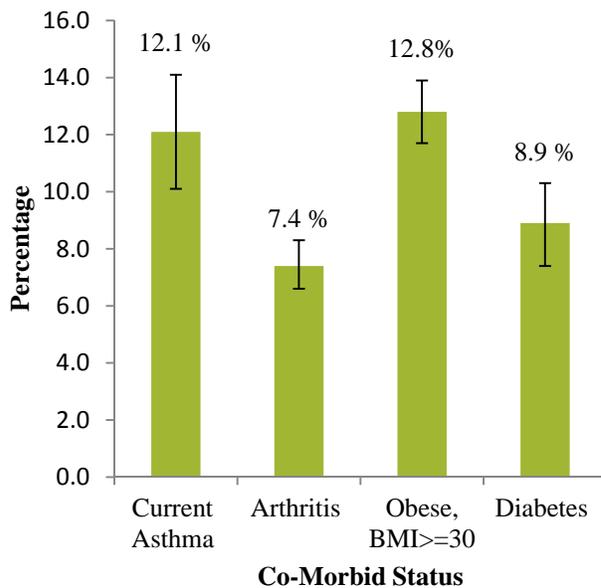
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Lack Health Care Coverage by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	12.1	10.1-14.1
No	12.8	12.2-13.5
Arthritis Status		
Yes	7.4	6.5-8.2
No	14.6	13.8-15.3
Weight Category		
Normal or Underweight, BMI<25	12.2	11.1-13.4
Overweight, 25<=BMI<30	11.2	10.1-12.2
Obese, BMI>=30	12.8	11.7-13.9
Diabetes Status		
Yes	8.9	7.5-10.4
No	13.2	12.6-13.9

Percentage of Adults Aged 18 Years and Older Who Lack Health Care Coverage, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older with no health care coverage was significantly **higher** among:

- Adults with no arthritis compared with those with arthritis
- Adults with no diabetes compared with those with diabetes

The percentage of Kansas adults aged 18 years and older with no health care coverage did not differ significantly by current asthma status or weight category.

SUMMARY

Approximately 13 percent of Kansas adults aged 18 years and older lacked health care coverage. Also, significant disparities were seen among gender, age groups, race/ethnicity groups, education groups and annual household income groups.

The Healthy People 2020 target is for 100 percent of persons to have health insurance. Further public health efforts are needed to reach the target and to address disparities seen in various population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Access to Health Care: No Personal Health Care Provider

Health-related outcomes are shown to be substantially improved when people have access to primary health care and a personal doctor. People who have a personal health care provider also indicate they receive appropriate preventive care, have their problems identified and pay lower costs related to hospitalization due to timely diagnostic tests, fewer prescriptions and fewer emergency room visits.³

No personal doctor among Kansans aged 18 years and older:

In 2015, approximately 1 in 5 Kansas adults aged 18 years and older did not have a personal health care provider. The percentage of Kansas adults with no personal health care provider was significantly **higher** among:

- Males compared with females
- Younger adults compared with adults in older age groups
- Non-Hispanic African-Americans compared with non-Hispanic whites; Hispanics compared with all other race/ethnicity groups (age-adjusted prevalence)
- Adults who had less than high school education compared with those with higher levels of education
- Adults with lower annual household income compared with adults in higher annual household income groups
- Adults living without a disability compared with those living with a disability

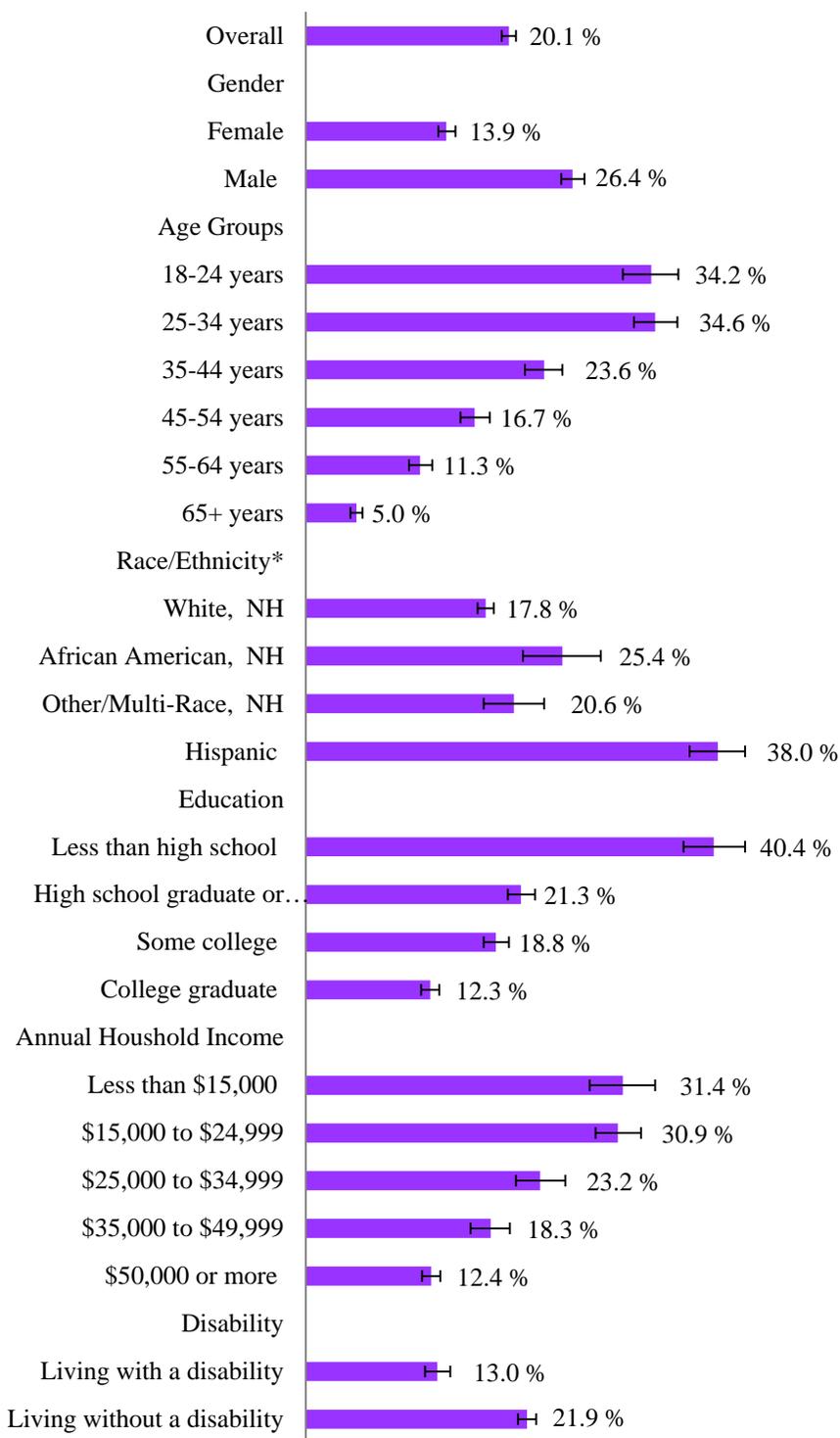
Percentage of Adults Aged 18 Years and Older With No Personal Doctor, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	20.1	19.4-20.8
Gender		
Female	13.9	13.1-14.8
Male	26.4	25.3-27.6
Age Groups		
18-24 years	34.2	31.4-36.9
25-34 years	34.6	32.5-36.8
35-44 years	23.6	21.7-25.4
45-54 years	16.7	15.3-18.2
55-64 years	11.3	10.2-12.5
65+ years	5.0	4.4-5.6
Race/Ethnicity*		
White, NH	17.8	17.0-18.6
African-American, NH	25.4	21.5-29.2
Other/Multi-Race, NH	20.6	17.6-23.6
Hispanic	40.8	38.0-43.5
Education		
Less than high school	40.4	37.4-43.5
High school graduate or GED	21.3	20.0-22.7
Some college	18.8	17.6-20.1
College graduate	12.3	11.4-13.2
Annual Household Income		
Less than \$15,000	31.4	28.1-34.6
\$15,000 to \$24,999	30.9	28.7-33.2
\$25,000 to \$34,999	23.2	20.8-25.7
\$35,000 to \$49,999	18.3	16.3-20.2
\$50,000 or more	12.4	11.5-13.3
Disability		
Living with a disability	13.0	11.8-14.3
Living without a disability	21.9	21.0-22.8

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With No Personal Doctor, KS BRFSS 2015



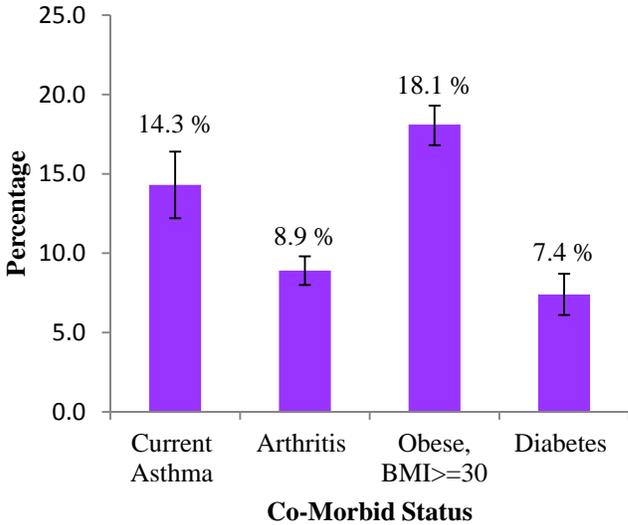
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Percentage of Adults Aged 18 Years and Older With No Personal Doctor by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	14.3	12.2-16.4
No	20.6	19.8-21.3
Arthritis Status		
Yes	8.9	8.0-9.8
No	23.7	22.9-24.6
Weight Category		
Normal or Underweight, BMI<25	21.1	19.7-22.5
Overweight, 25<= BMI<30	19.3	18.1-20.6
Obese, BMI>=30	18.1	16.9-19.4
Diabetes Status		
Yes	7.4	6.1-8.7
No	21.5	20.7-22.3

Percentage of Adults Aged 18 Years and Older With No Personal Doctor by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older with no personal health care provider was significantly **higher** among:

- Adults with no current asthma compared with those with current asthma
- Adults with no arthritis compared with those with arthritis
- Adults who were normal or underweight compared with those who were obese
- Adults with no diabetes compared with those with diabetes

SUMMARY

Approximately 20.1 percent of Kansas adults aged 18 years and older did not have a personal health care provider. In addition, higher percentages of adults who did not have a personal doctor were seen among: males, young adults, African-Americans, Hispanics, adults with lower income and education, and those without chronic diseases or disabilities.

The Healthy People 2020 target is for 96 percent of people to have ongoing primary care. Further public health efforts are needed to reach the target and to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Injury and Violence: Seat Belt Use

Motor vehicle crashes are the leading cause of death for people aged 5 to 34 years. Crashes can lead to premature death, disability, poor mental health, high medical costs and lost productivity.⁴ Seat belts use is the most effective way to reduce injuries and mortality due to motor vehicle crashes.⁵ Increasing use of seat belts is one of the objectives for the prevention of unintentional injury. The Healthy People 2020 goal for injury prevention is to prevent unintentional injuries and reduce their consequences.

In 2015, approximately 1 in 6 Kansas adults aged 18 years and older did not always wear a seat belt when they drove or rode in a car. The percentage of Kansas adults who did not always wear a seat belt when they drove or rode in a car was significantly **higher** among:

- Males compared with females
- Younger adults compared with adults in older age groups
- Non-Hispanic whites compared with all other race/ethnicity groups and Hispanics (age-adjusted prevalence)
- Adults who were not college graduates compared with those who were college graduates
- Adults with annual household income of less than \$50,000 compared with adults whose annual household income was \$50,000 or greater
- Adults who were uninsured compared with adults who were insured

The percentage of Kansas adults who did not always wear a seat belt when they drove or rode in a car did not differ significantly by disability status.

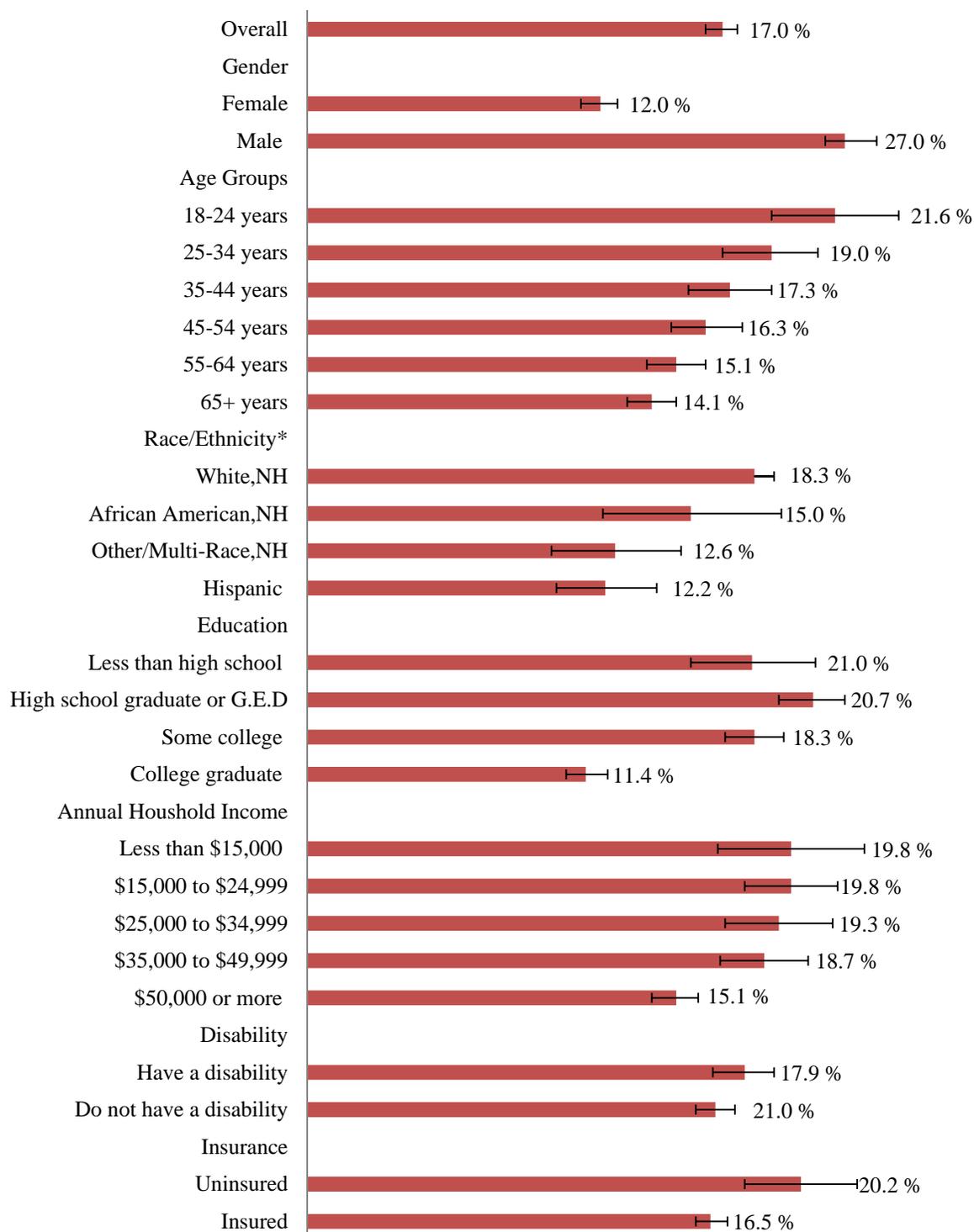
Percentage of Adults Aged 18 Years and Older Who Do Not Always Wear a Seat Belt When They Drive or Ride in a Car, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	17.0	16.3-17.6
Gender		
Female	12.0	11.2-12.7
Male	22.0	21.2-23.3
Age Groups		
18-24 years	21.6	19.0-24.2
25-34 years	19.0	17.0-20.9
35-44 years	17.3	15.6-19.0
45-54 years	16.3	14.9-17.8
55-64 years	15.1	13.9-16.3
65+ years	14.1	13.1-15.1
Race/Ethnicity*		
White, NH	18.3	17.5-19.1
African-American, NH	15.7	12.1-19.4
Other/Multi-Race, NH	12.6	10.0-15.3
Hispanic	12.2	10.2-14.3
Education		
Less than high school	18.2	15.7-20.8
High school graduate or G.E.D	20.7	19.3-22.0
Some college	18.3	17.1-19.5
College graduate	11.4	10.6-12.3
Annual Household Income		
Less than \$15,000	19.8	16.8-22.8
\$15,000 to \$24,999	19.8	17.9-21.7
\$25,000 to \$34,999	19.3	17.1-21.5
\$35,000 to \$49,999	18.7	16.9-20.5
\$50,000 or more	15.1	14.1-16.0
Disability		
Living with a disability	17.9	16.6-19.1
Living without a disability	16.7	15.9-17.5
Insurance		
Uninsured	20.2	17.9-22.5
Insured	16.5	15.9-17.2

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Reported They Do Not Always Wear a Seat Belt When They Drive or Ride in a Car, KS BRFSS 2015



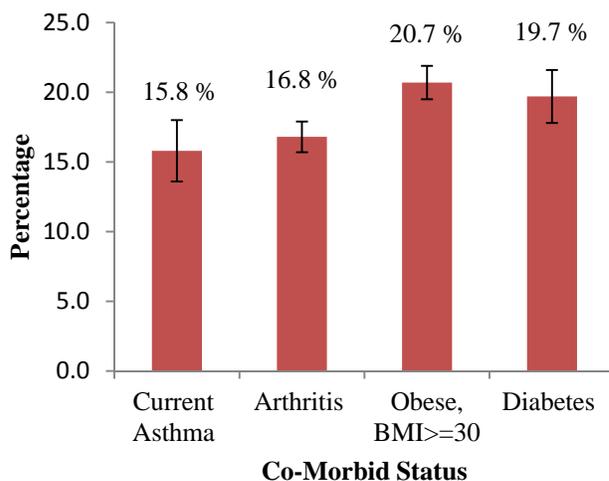
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Do Not Always Wear a Seat Belt When They Drive or Ride in a Car by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	15.8	13.6-18.0
No	17.1	16.4-17.7
Arthritis Status		
Yes	16.8	15.7-18.0
No	17.0	16.2-17.8
Weight Category		
Normal or Underweight, BMI<25	13.4	12.2-14.5
Overweight, 25<=BMI<30	17.3	16.2-18.5
Obese, BMI>=30	20.7	19.5-21.9
Diabetes Status		
Yes	19.7	17.8-21.5
No	16.7	16.0-17.4

Percentage of Adults Who Reported They Do Not Always Wear a Seat Belt When They Drive or Ride in a Car, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults who did not always wear a seat belt when they drove or rode in a car was significantly **higher** among:

- Adults who were obese compared with those who were not obese

The percentage of Kansas adults who did not always wear a seat belt when they drove or rode in a car did not differ significantly by current asthma status, arthritis status or diabetes status.

SUMMARY

Approximately 17 percent of Kansas adults aged 18 years and older did not always wear a seat belt when they drove or rode in a car. In addition, higher percentages of adults who did not always wear a seat belt when they drove or rode in a car were seen among: males, young adults, non-Hispanic whites, adults who were not college graduates, adults with annual household income less than \$50,000, uninsured adults and adults who were obese.

The Healthy People 2020 target is for 92 percent of persons to use a seat belt when they drive or ride in a car. Further public health efforts are needed to reach the target and to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Clinical Preventative Services: Flu Vaccine

Life expectancy has increased since the 20th century largely due to several immunizations. Vaccines are a core component of any preventative service and are a very cost effective preventive service.⁶ Influenza can have a costly impact resulting in doctor visits, hospitalization, loss of productivity and death.⁷ The Healthy People 2020 goal is to increase the percentage of adults who get vaccinated annually against seasonal influenza.

In 2015, approximately 3 in 5 Kansas adults aged 18 years and older did not get immunized against influenza during the past 12 months. The percentage of Kansas adults who did not get immunized against influenza during the past 12 months was significantly **higher** among:

- Males compared with females
- Younger adults compared with adults in older age groups
- Adults who are not college graduates compared with college graduates
- Adults with annual household income of less than \$50,000 compared with adults whose annual household income was \$50,000 or greater
- Adults who do not have a disability compared with adults with a disability
- Adults with no insurance compared with adults with insurance

The percentage of Kansas adults aged 18 years and older who did not get immunized against influenza during the past 12 months did not differ significantly by race/ethnicity groups (age-adjusted prevalence).

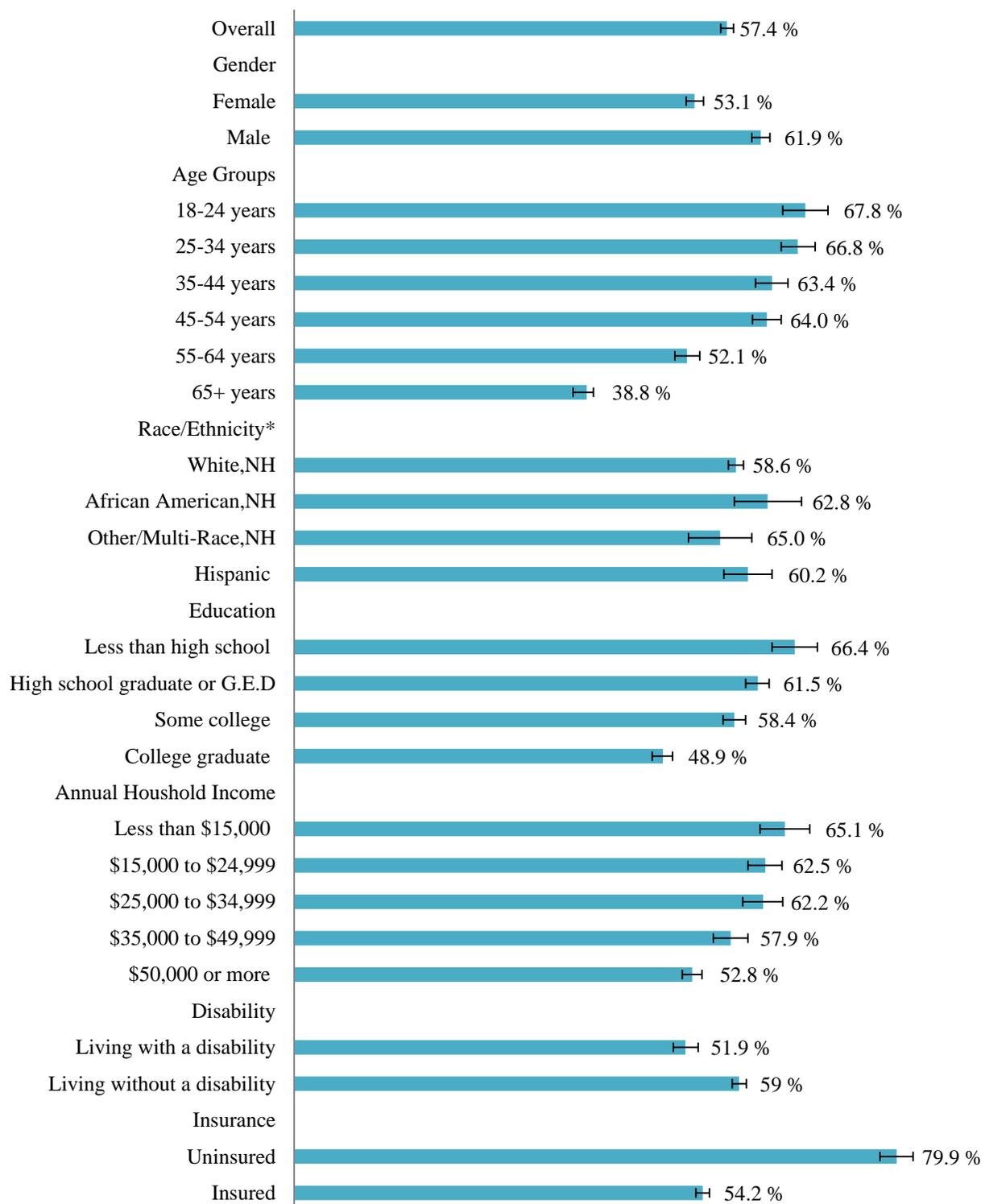
Percentage of Adults Aged 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	57.4	56.6-58.3
Gender		
Female	53.1	52.0-54.3
Male	61.9	60.7-63.1
Age Groups		
18-24 years	67.8	64.8-70.8
25-34 years	66.8	64.6-69.1
35-44 years	63.4	61.2-65.5
45-54 years	62.7	60.8-64.6
55-64 years	52.1	50.5-53.8
65+ years	38.8	37.0-39.7
Race/Ethnicity*		
White, NH	58.6	57.6-59.6
African-American, NH	62.8	58.4-67.3
Other/Multi-Race, NH	56.5	52.3-60.7
Hispanic	60.2	57.0-63.4
Education		
Less than high school	66.4	63.4-69.4
High school graduate or G.E.D	61.5	59.9-63.0
Some college	58.4	56.9-59.9
College graduate	48.9	47.5-50.2
Annual Household Income		
Less than \$15,000	65.1	61.8-68.4
\$15,000 to \$24,999	62.5	60.2-64.7
\$25,000 to \$34,999	62.2	59.5-64.8
\$35,000 to \$49,999	57.9	55.6-60.2
\$50,000 or more	52.8	51.5-54.1
Disability		
Living with a disability	51.9	50.3-53.6
Living without a disability	59.0	58.1-60.0
Insurance		
Uninsured	79.9	77.7-82.1
Insured	54.2	53.3-55.1

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months, KS BRFSS 2015



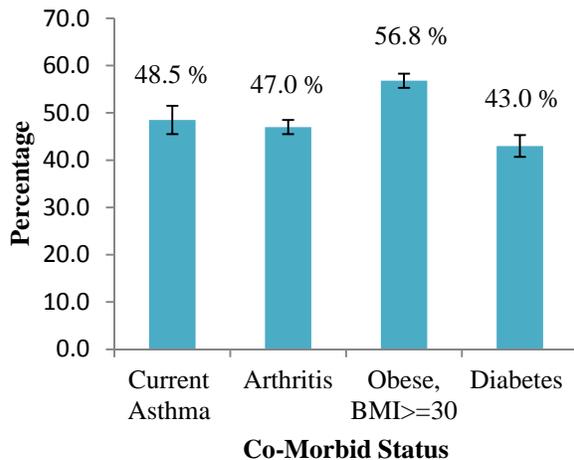
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	48.5	45.5-51.4
No	58.3	57.4-59.1
Arthritis Status		
Yes	47.0	45.5-48.5
No	60.9	59.9-61.9
Weight Category		
Normal or Underweight, BMI<25	57.6	56.0-59.2
Overweight, 25<=BMI<30	57.4	55.9-58.8
Obese, BMI>=30	56.8	55.3-58.3
Diabetes Status		
Yes	43.0	40.7-45.3
No	59.0	58.1-59.9

Percentage of Adults Aged 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who did not get immunized against influenza during the past 12 months was significantly **higher** among:

- Adults without current asthma compared with those with current asthma
- Adults without arthritis compared with those with arthritis
- Adults without diabetes compared with those with diabetes

The percentage of Kansas adults aged 18 years and older who did not get immunized against influenza during the past 12 months did not differ significantly by weight category.

Per guidelines people at risk of developing flu-related complications include those with asthma and adults aged 65 years and older.⁹ Approximately 48.5 percent of Kansas adults with current asthma and 38.3 percent of adults aged 65 years and older did not get immunized against influenza during the past 12 months.

SUMMARY

Approximately 57.4 percent of Kansas adults aged 18 years and older did not get immunized against influenza during the past 12 months. In addition, higher percentages of adults who did not get immunized against influenza during the past 12 months were seen among: males, young adults, adults with no insurance, adults with lower income and education, and those without chronic diseases (diabetes, arthritis or current asthma) or disabilities. In addition, prevalence of people who are at risk of developing flu-related complications that did not get immunized against influenza during the past 12 months was as high as more than half of Kansas adults with current asthma and 1 in 3 adults aged 65 years and older.

The Healthy People 2020 goal is to increase the percentage of adults who get vaccinated annually against seasonal influenza. To increase the percentage and to address associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Clinical Preventative Services: Pneumonia Vaccine

In the U.S., about 1 million adults get pneumococcal pneumonia and 5 to 7 percent will die from it every year.⁸ The best way to protect adults from pneumonia is to get vaccinated. Vaccines are a core component of any preventative service and are a very cost effective preventive service.⁶ The Healthy People 2020 goal is to increase the percentage of adults aged 65 years and older who are vaccinated against the pneumococcal disease to 90 percent.

In 2015, approximately 1 in 4 Kansas adults aged 65 years and older have never received a pneumonia vaccination. The percentage of Kansas adults aged 65 years and older who never received a pneumonia vaccination was significantly **higher** among:

- Males compared with females
- Hispanics as compared with non-Hispanic whites
- Adults living without a disability compared with those living with a disability

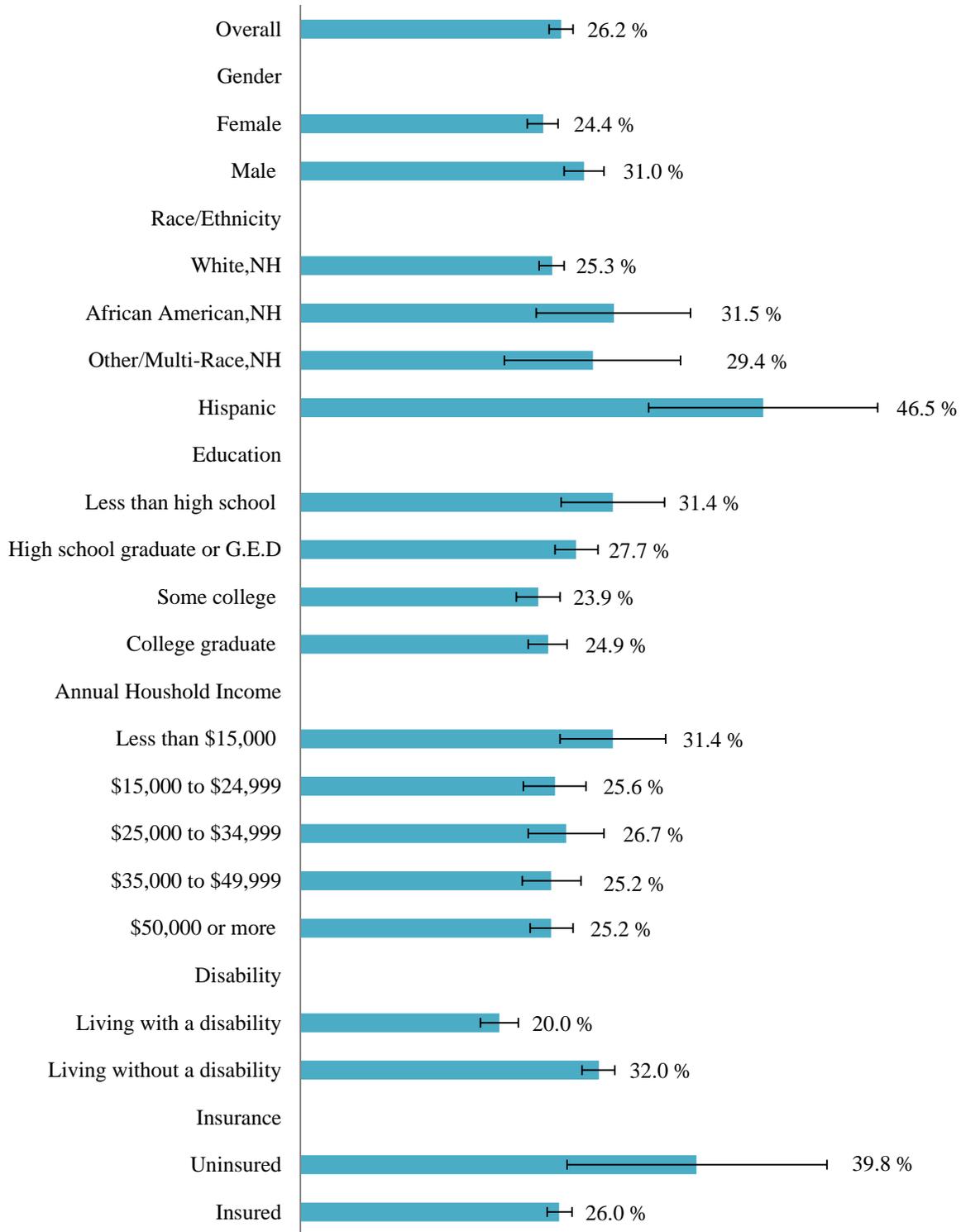
The percentage of Kansas adults aged 65 years and older who never received a pneumonia vaccination did not differ significantly by education status, annual household income or insurance status.

Percentage of Adults Aged 65 Years and Older Who Have Never Had Pneumonia Vaccination, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	26.2	25.0-27.4
Gender		
Female	24.4	22.8-25.9
Male	28.5	26.5-30.5
Race/Ethnicity		
White, NH	25.3	24.0-26.5
African-American, NH	31.5	23.7-39.2
Other/Multi-Race, NH	29.4	20.5-38.2
Hispanic	46.5	35.0-58.0
Education		
Less than high school	31.4	26.2-36.6
High school graduate or G.E.D	27.7	25.6-29.9
Some college	23.9	21.7-26.1
College graduate	24.9	22.9-26.8
Annual Household Income		
Less than \$15,000	31.4	26.1-36.7
\$15,000 to \$24,999	25.6	22.4-28.7
\$25,000 to \$34,999	26.7	22.9-30.5
\$35,000 to \$49,999	25.2	22.3-28.2
\$50,000 or more	25.2	23.1-27.4
Disability		
Living with a disability	20.0	18.1-21.9
Living without a disability	30.0	28.3-31.6
Insurance		
Uninsured	39.8	26.8-52.9
Insured	26.0	24.8-27.3

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 65 Years and Older Who Have Never Had Pneumonia Vaccination, KS BRFSS 2015

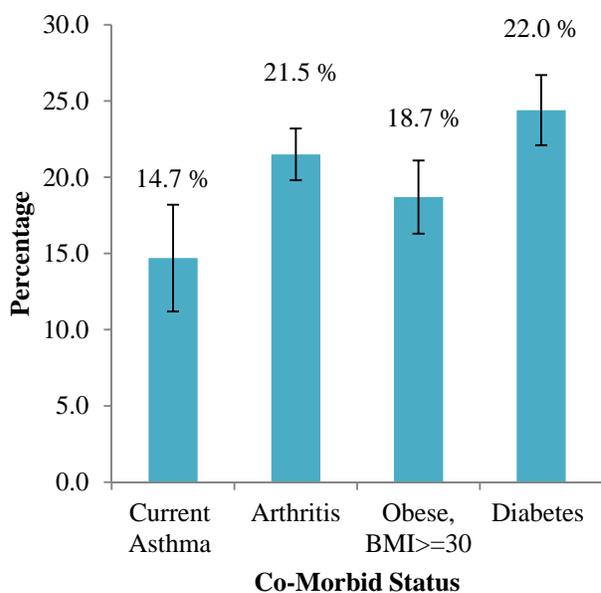


Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 65 Years and Older Who Have Never Had Pneumonia Vaccination by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	14.7	11.2-18.3
No	27.3	26.0-28.6
Arthritis Status		
Yes	21.5	19.8-23.2
No	30.8	29.0-32.6
Diabetes Status		
Yes	18.7	16.3-21.2
No	28.2	26.8-29.6
Weight Category		
Normal or Underweight, BMI<25	25.7	23.5-27.9
Overweight, 25<=BMI<30	27.1	25.0-29.2
Obese, BMI>=30	24.4	22.1-26.7

Percentage of Adults Aged 65 Years and Older Who Have Never Had Pneumonia Vaccination, by Co-Morbid Condition, KS BRFSS 2015



The percentage of Kansas adults aged 65 years and older who never received a pneumonia vaccination was significantly **higher** among:

- Adults without current asthma compared with those with current asthma
- Adults without arthritis compared with those with arthritis
- Adults without diabetes compare to those with diabetes

The percentage of Kansas adults aged 65 years and older who never received a pneumonia vaccination did not differ significantly by weight category.

SUMMARY

Approximately 26 percent of Kansas adults aged 65 years and older have never received a pneumonia vaccination. In addition, higher percentages of adults who have never received a pneumonia vaccination were seen among: males, Hispanics, those living without disabilities and those without chronic health conditions (current asthma, arthritis or diabetes).

The Healthy People 2020 goal is to increase the percentage of adults aged 65 years and older who are vaccinated against the pneumococcal disease to 90 percent. To meet the goal for Kansas, the percentage of adults who get immunized against pneumococcal needs to increase; further public health efforts are needed.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity & Obesity:

Obesity

Obesity is a complex health issue that can have a wide range of negative health outcomes associated with it, including but not limited to coronary heart disease, cancers, hypertension and sleep apnea.⁹ The wide range of health consequences demonstrates the need to reach the Healthy People 2020 goal to reduce the proportion of adults who are obese.

In 2015, approximately 1 in 3 Kansas adults aged 18 years and older were obese. The percentage of Kansas adults who were obese was significantly **higher** among:

- Adults aged 25 years and older compared with adults aged 18 to 24 years; and adults aged 25 to 64 years compared with adults aged 65 years and older
- Non-Hispanic African-Americans compared with non-Hispanic whites and other/multi-race (age-adjusted prevalence)
- Adults with a less than college graduation compared with college graduates
- Adults with annual household income less than \$50,000 compared with adults with an annual household income greater than \$50,000
- Adults living with a disability compared with adults living without a disability

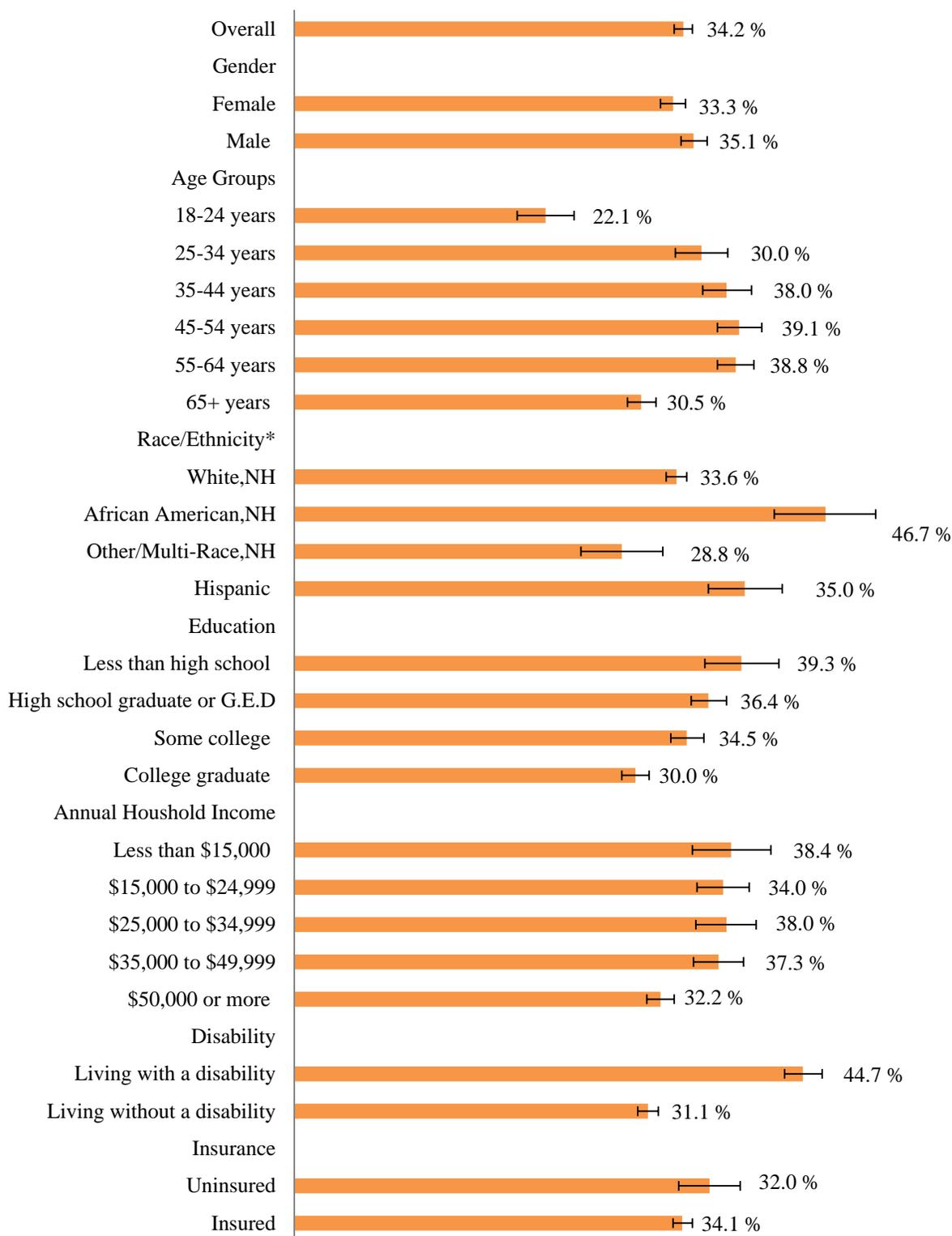
The percentage Kansas adults aged 18 years and older who were obese did not differ significantly by gender groups or insurance status.

Percentage of Adults Aged 18 Years and Older Who Were Obese, KS BRFSS 2015		
Demographic Characteristics	Weighted Percentage	95% CI
Overall	34.2	33.4-35.0
Gender		
Female	33.3	32.2-34.4
Male	35.1	33.9-36.2
Age Groups		
18-24 years	22.1	19.6-24.6
25-34 years	35.8	33.5-38.1
35-44 years	38.0	35.8-40.1
45-54 years	39.1	37.1-41.0
55-64 years	38.8	37.2-40.4
65+ years	30.5	29.2-31.7
Race/Ethnicity*		
White, NH	33.6	32.7-34.5
African-American, NH	46.7	42.3-51.2
Other/Multi-Race, NH	28.8	25.2-32.4
Hispanic	39.6	36.3-42.8
Education		
Less than high school	39.3	36.0-42.5
High school graduate or G.E.D	36.4	34.8-37.9
Some college	34.5	33.0-35.9
College graduate	30.0	28.8-31.2
Annual Household Income		
Less than \$15,000	38.4	34.9-41.8
\$15,000 to \$24,999	37.7	35.4-40.0
\$25,000 to \$34,999	38.0	35.4-40.7
\$35,000 to \$49,999	37.3	35.1-39.5
\$50,000 or more	32.2	31.0-33.4
Disability		
Living with a disability	44.7	43.0-46.3
Living without a disability	31.1	30.2-32.0
Insurance		
Uninsured	36.5	33.8-39.2
Insured	34.1	33.2-34.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Obese, KS BRFSS 2015



*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Obese by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	45.0	42.1-47.9
No	33.1	32.3-33.9
Arthritis Status		
Yes	43.8	42.3-45.2
No	31.0	30.0-31.9
Diabetes Status		
Yes	58.0	55.7-60.2
No	31.6	30.8-32.5

The percentage of Kansas adults aged 18 years and older who were obese was significantly **higher** among:

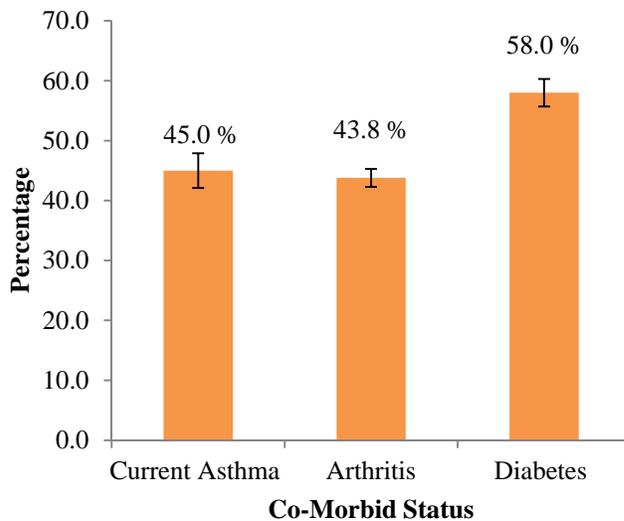
- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes

SUMMARY

Approximately 34.2 percent of Kansas adults aged 18 years and older were obese. In addition, higher percentages of adults who were obese were seen among: older adults, non-Hispanic African-Americans, uninsured adults, adults with lower income and education, adults with co-morbid conditions (current asthma, diabetes or arthritis) and adults living with a disability.

The Healthy People 2020 goal is to reduce the proportion of adults who are obese to 30.5 percent. The goal for the overall population is met in Kansas, however, overall prevalence is still high and there are disparities in population subgroups that have not met the HP 2020 target. Therefore further public health efforts are needed to address overall prevalence and disparities in population subgroups in Kansas.

Percentage of Adults Aged 18 Years and Older Who Were Obese by Co-Morbid Conditions, KS BRFSS 2015



Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity and Obesity:

Leisure-Time Physical Activity

Physical activity can help to improve health outcomes. People who are physically active can live longer and have a lower risk of chronic health conditions including but not limited to heart disease, depression and some cancers.¹⁰ Thus inactive adults have a higher risk of living unhealthy lives. The Healthy People 2020 goal is to reduce the proportion of adults who engage in no leisure-time physical activity.

In 2015, approximately 1 in 4 Kansas adults aged 18 years and older did not participate in leisure-time physical activity in the past 30 days. The percentage of Kansas adults aged 18 years and older who did not participate in leisure-time physical activity in the past 30 days was significantly **higher** among:

- Older adults compared with adults in younger age groups
- Hispanics and non-Hispanic African-Americans compared with non-Hispanic whites and (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with annual household income of lower than \$50,000 compared with adults with annual household income of \$50,000 or greater
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

The percentage of Kansas adults aged 18 years and older who did not participate in leisure-time physical activity in the past 30 days was not significantly different by gender groups.

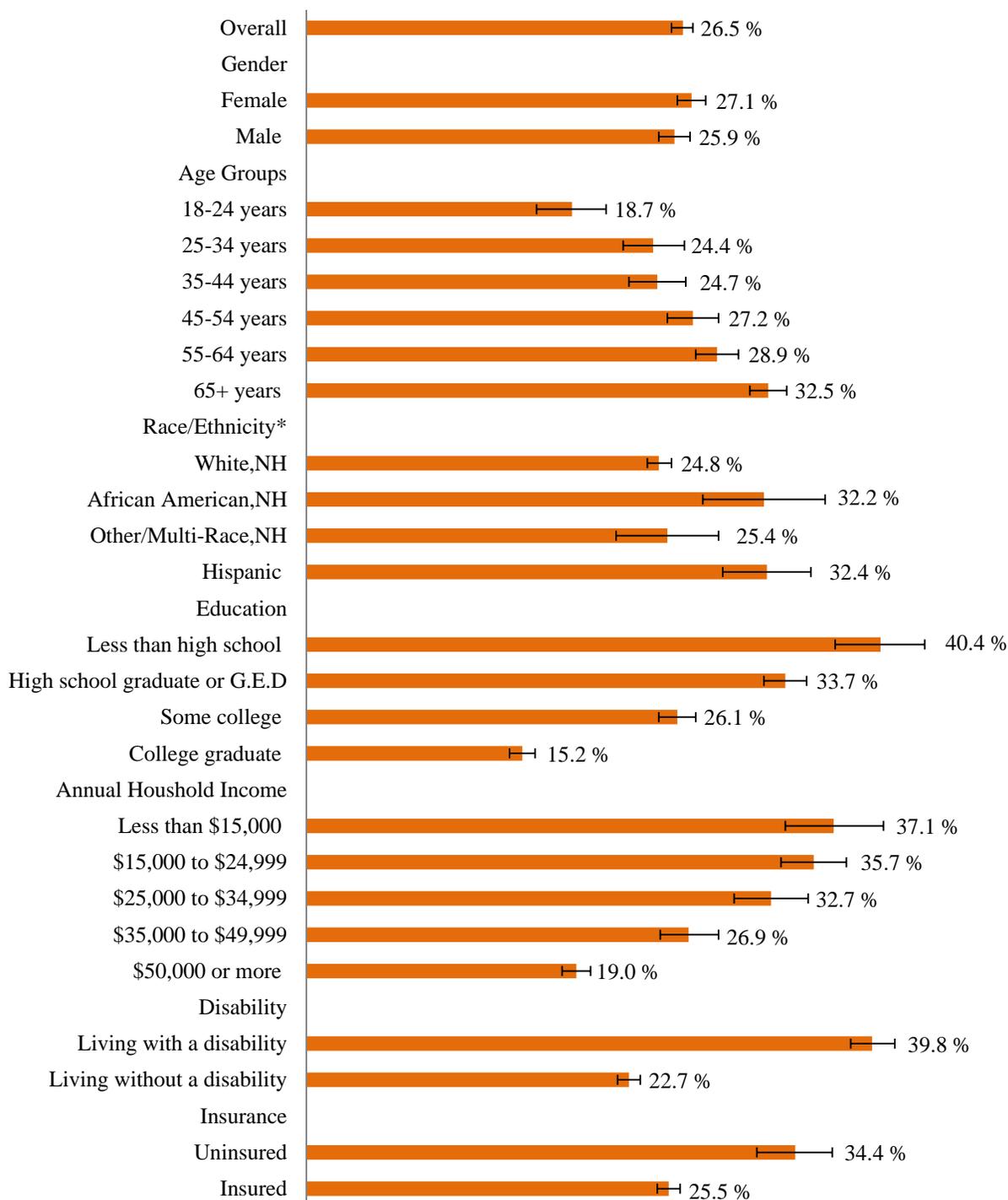
Percentage of Adults Aged 18 Years and Older Not Participating in Leisure-Time Physical Activity in the Past 30 Days, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	26.5	25.8-27.3
Gender		
Female	27.1	26.1-28.1
Male	25.9	24.8-27.0
Age Groups		
18-24 years	18.7	16.3-21.2
25-34 years	24.4	22.2-26.5
35-44 years	24.7	22.7-26.7
45-54 years	27.2	25.4-29.0
55-64 years	28.9	27.4-30.4
65+ years	32.5	31.2-33.8
Race/Ethnicity*		
White, NH	24.8	23.9-25.6
African-American, NH	32.2	27.9-36.5
Other/Multi-Race, NH	25.4	21.8-29.0
Hispanic	32.4	29.3-35.5
Education		
Less than high school	40.4	37.3-43.6
High school graduate or GED	33.7	32.2-35.2
Some college	26.1	24.8-27.4
College graduate	15.2	14.3-16.1
Annual Household Income		
Less than \$15,000	37.1	33.6-40.5
\$15,000 to \$24,999	35.7	33.4-38.0
\$25,000 to \$34,999	32.7	30.1-35.3
\$35,000 to \$49,999	26.9	24.8-28.9
\$50,000 or more	19.0	18.0-20.0
Disability		
Living with a disability	39.8	38.2-41.3
Living without a disability	22.7	21.9-23.5
Insurance		
Uninsured	34.4	31.8-37.1
Insured	25.5	24.7-26.3

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Not Participating in Any Physical Activity Other Than Their Regular Job in the Past 30 Days, KS BRFSS 2015



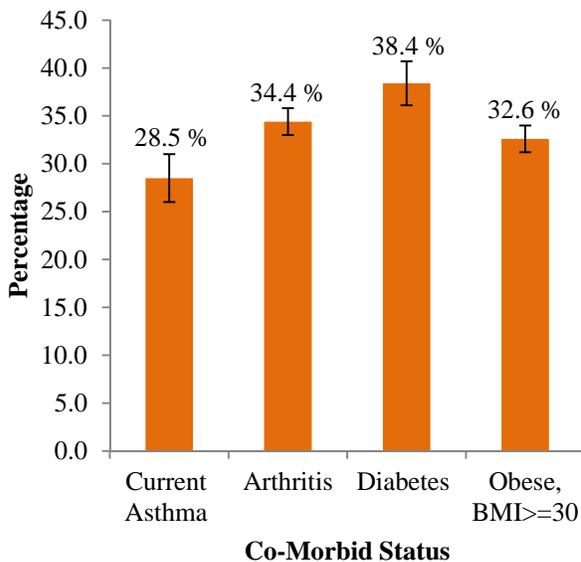
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Not Participating In Leisure-Time Physical Activity in the Past 30 Days by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	28.5	26.0-31.0
No	26.3	25.5-27.0
Arthritis Status		
Yes	34.4	33.0-35.8
No	23.8	22.9-24.7
Diabetes Status		
Yes	38.4	36.1-40.6
No	25.2	24.4-26.0
Weight Category		
Normal or Underweight, BMI<25	20.5	19.2-21.8
Overweight, 25<= BMI<30	23.9	22.6-25.2
Obese, BMI>=30	32.6	31.2-34.0

Percentage of Adults Aged 18 Years and Older Not Participating in Any Physical Activity Other Than Their Regular Job in the Past 30 Days by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who did not participate in leisure-time physical activity in the past 30 days was significantly **higher** among:

- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were overweight, normal weight or underweight

The percentage of Kansas adults aged 18 years and older who did not participate in leisure-time physical activity in the past 30 days did not differ significantly by current asthma status.

SUMMARY

Approximately 26.5 percent of Kansas adults aged 18 years and older did not participate in leisure-time physical activity in the past 30 days. In addition, higher percentages of adults who did not participate in leisure-time physical activity in the past 30 days were seen among: younger adults, Hispanics, non-Hispanic African-Americans, uninsured adults, adults with annual household income of less than \$50,000, adults with lower education, adults with co-morbid conditions (diabetes, arthritis or obesity), adults with no health insurance and adults living with disabilities.

The Healthy People 2020 goal is to reduce the proportion of adults who do not participate in leisure-time physical activity to 32.6 percent. While the Healthy People 2020 objective is being met, the overall prevalence is still high and there are disparities in population subgroups that have not met the HP 2020 target. Therefore further public health efforts are needed to address overall prevalence and disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity and Obesity: Physical Activity (Aerobic & Strengthening)

Aerobic and strength training are both important components of physical activity. People who are physically active can live longer and have a lower risk of chronic health conditions including but not limited to heart disease, depression and some cancers.¹⁰ Thus inactive adults have a higher risk of living unhealthy lives. The Healthy People 2020 goal is to increase the proportion of adults who meet federal physical activity guidelines of 150 minutes of moderate-intensity aerobic activity and 2 or more days of muscle-strengthening activities every week, 75 minutes of vigorous-intensity aerobic activity and 2 or more days of muscle-strengthening activities every week, or equivalent mix of moderate- and vigorous-intensity activities and 2 or more days of muscle-strengthening activities every week.¹¹

In 2015, approximately 2 in 5 Kansas adults aged 18 years and older did not participate in any recommended physical activity (aerobic and strengthening). The percentage of Kansas adults aged 18 years and older that did not participate in any recommended physical activity (aerobic and strengthening) was significantly **higher** among:

- Females compared with males
- Adults aged 25 years and older compared with adults age 18 to 24 years
- Hispanics and non-Hispanic African-Americans compared with non-Hispanic whites (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with lower annual household income compared with adults with higher annual household income
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

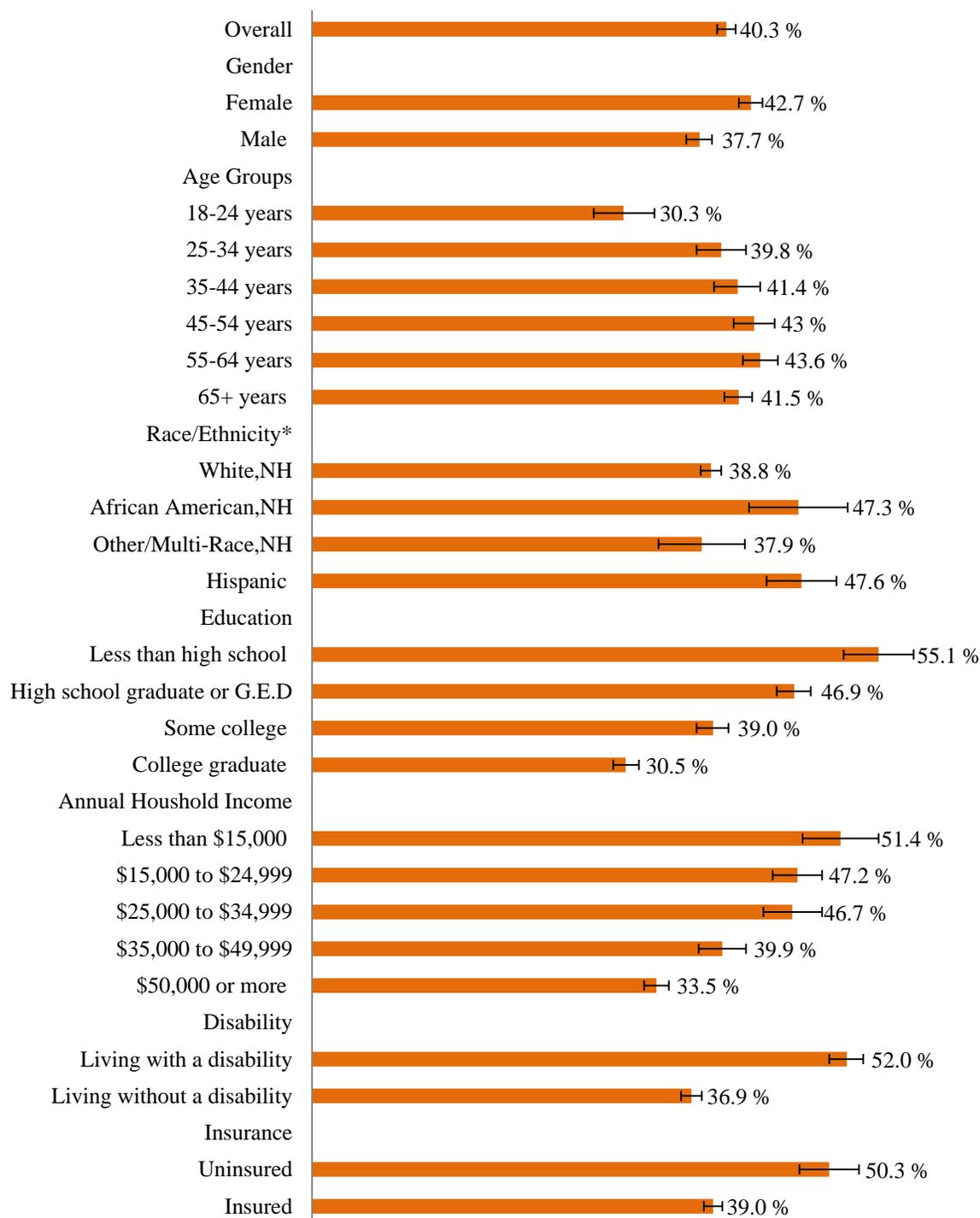
Percentage of Adults Not Participating in Any Recommended Physical Activity (Aerobic and Strengthening), KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	40.3	39.4-41.2
Gender		
Female	42.7	41.6-43.9
Male	37.7	36.5-39.0
Age Groups		
18-24 years	30.3	27.3-33.2
25-34 years	39.8	37.4-42.2
35-44 years	41.4	39.2-43.7
45-54 years	43.0	41.0-45.0
55-64 years	43.6	41.9-45.3
65+ years	41.5	40.2-42.9
Race/Ethnicity*		
White,NH	38.8	37.8-39.8
African-American,NH	47.3	42.5-52.1
Other/Multi-Race,NH	37.9	33.7-42.1
Hispanic	47.6	44.2-51.0
Education		
Less than high school	55.1	51.7-58.5
High school graduate or G.E.D	46.9	45.3-48.6
Some college	39.0	37.5-40.6
College graduate	30.5	29.2-31.7
Annual Household Income		
Less than \$15,000	51.4	47.7-55.1
\$15,000 to \$24,999	47.2	44.8-49.6
\$25,000 to \$34,999	46.7	43.8-49.5
\$35,000 to \$49,999	39.9	37.6-42.2
\$50,000 or more	33.5	32.3-34.7
Disability		
Living with a disability	52.0	50.4-53.7
Living without a disability	36.9	35.9-37.9
Insurance		
Uninsured	50.3	47.4-53.2
Insured	39.0	38.1-39.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Not Participating in Any Recommended Physical Activity (Aerobic and Strengthening), KS BRFSS 2015



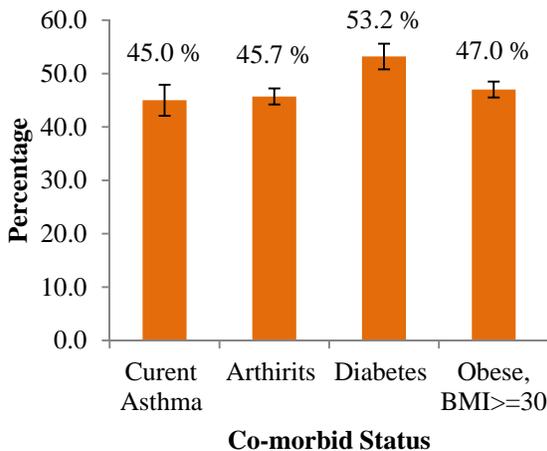
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Not Participating in Any Physical Activity (Aerobic and Strengthening) by Co-morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	45.0	42.1-48.0
No	39.8	28.9-40.7
Arthritis Status		
Yes	45.7	44.2-47.1
No	38.4	37.4-39.4
Diabetes Status		
Yes	53.2	50.8-55.5
No	38.8	37.9-39.8
Weight Category		
Normal or Underweight, BMI<25	32.9	31.3-34.5
Overweight, 25<= BMI<30	37.3	35.9-38.8
Obese, BMI>=30	47.0	45.5-48.5

Percentage of Adults Not Participating in Any Physical Activity (Aerobic and Strengthening), by Co-morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older that did not participate in any recommended physical activity (aerobic and strengthening) was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were overweight, normal weight or underweight

SUMMARY

Approximately 40.3 percent of Kansas adults aged 18 years and older did not participate in any recommended physical activity (aerobic and strengthening). In addition, higher percentages of adults who did not participate in any recommended physical activity (aerobic and strengthening) were seen among: females, adults ages 25 years and older, Hispanics, non-Hispanic African-Americans, adults with lower income and education, uninsured adults, and those with co-morbid conditions (current asthma, diabetes, arthritis or obesity) or those living with disabilities.

The Healthy People 2020 goal is to increase the proportion of adults who meet federal physical activity guidelines for aerobic and muscle-strengthening activities. Therefore further public health efforts are needed to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity and Obesity: Physical Activity (Aerobic &/or Strengthening)

Aerobic and strength training are both important components of physical activity. People who are physically active can live longer and have a lower risk of chronic health conditions.¹⁰ The Healthy People 2020 goal is to increase the proportion of adults who meet federal physical activity guidelines of 150 minutes of moderate-intensity aerobic activity and 2 or more days of muscle-strengthening activities every week, 75 minutes of vigorous-intensity aerobic activity and 2 or more days of muscle-strengthening activities every week, or equivalent mix of moderate- and vigorous-intensity activities and 2 or more days of muscle-strengthening activities every week.¹¹ Adults in this analysis did not meet these guidelines.

In 2015, approximately 4 in 5 Kansas adults aged 18 years and older did not participate in recommended physical activity (aerobic and/or strengthening). The percentage of Kansas adults that did not participate in recommended physical activity (aerobic and/or strengthening) was significantly **higher** among:

- Females compared with males
- Older adults compared with adults in younger age groups
- Adults with lower education compared with adults in higher education groups
- Adults with annual household income of less than \$35,000 compared with adults with an annual household income of \$50,000 or higher
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

The percentage of Kansas adults that did not participate in recommended physical activity (aerobic and/or strengthening) did not differ significantly by race/ethnicity.

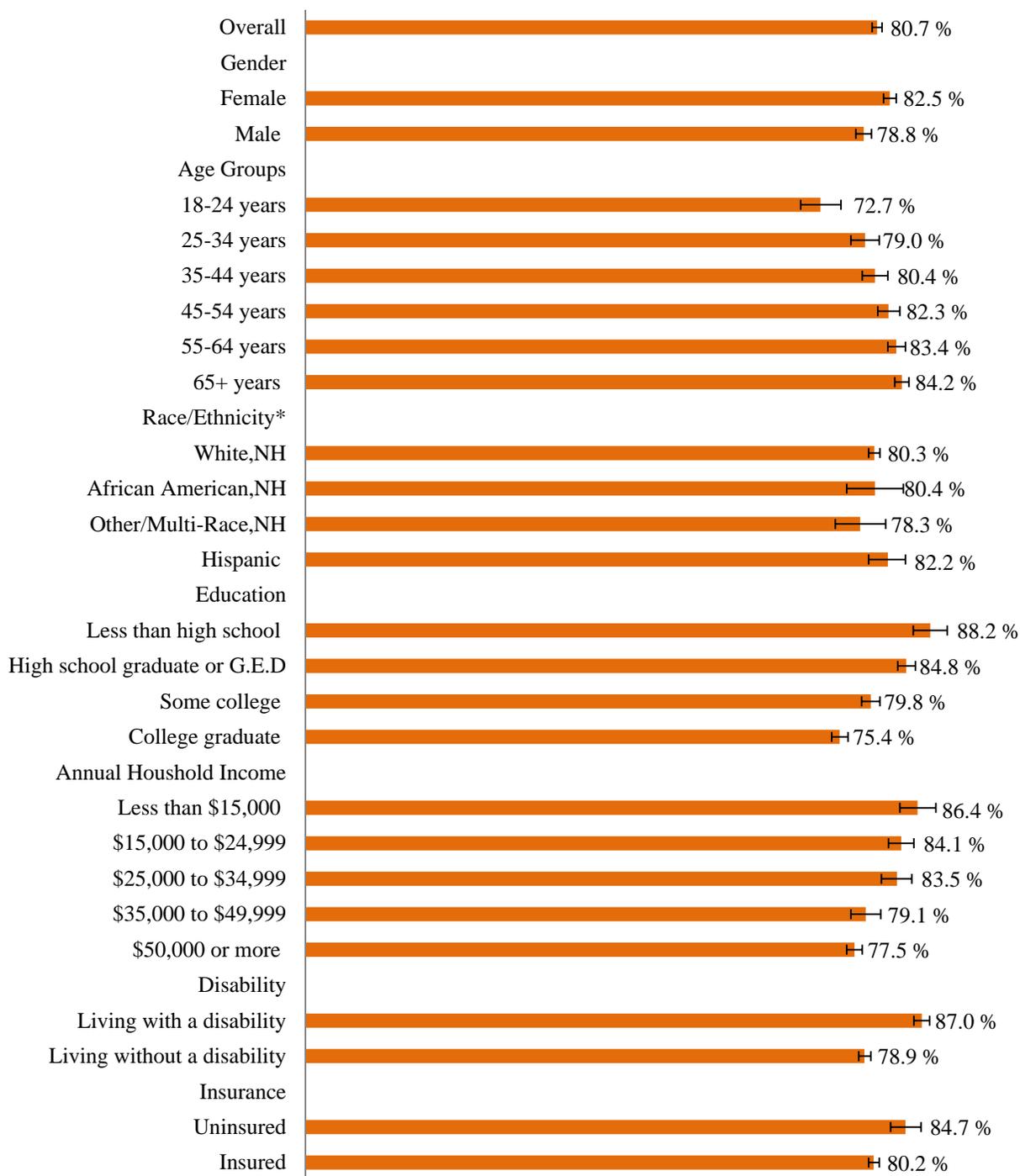
Percentage of Adults Not Participating in the Recommended Physical Activity (Aerobic and/or Strengthening), KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	80.7	80.0-81.4
Gender		
Female	82.5	81.6-83.4
Male	78.8	77.7-79.9
Age Groups		
18-24 years	72.7	69.8-75.5
25-34 years	79.0	77.0-81.0
35-44 years	80.4	78.6-82.2
45-54 years	82.3	80.7-83.8
55-64 years	83.4	82.1-84.6
65+ years	84.2	83.2-85.2
Race/Ethnicity*		
White, NH	80.3	79.5-81.1
African-American, NH	80.4	76.4-84.4
Other/Multi-Race, NH	78.3	74.7-81.8
Hispanic	82.2	79.7-84.9
Education		
Less than high school	88.2	85.8-90.6
High school graduate or G.E.D	84.8	83.5-86.0
Some college	79.8	78.5-81.1
College graduate	75.4	74.2-76.5
Annual Household Income		
Less than \$15,000	86.4	83.8-88.9
\$15,000 to \$24,999	84.1	82.3-85.9
\$25,000 to \$34,999	83.5	81.4-85.7
\$35,000 to \$49,999	79.1	77.0-81.2
\$50,000 or more	77.5	76.4-78.6
Disability		
Living with a disability	87.0	85.9-88.1
Living without a disability	78.9	78.0-79.7
Insurance		
Uninsured	84.7	82.5-86.8
Insured	80.2	79.4-80.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Not Participating in the Recommended Level of Physical Activity (Aerobic and/or Strengthening), KS BRFSS 2015



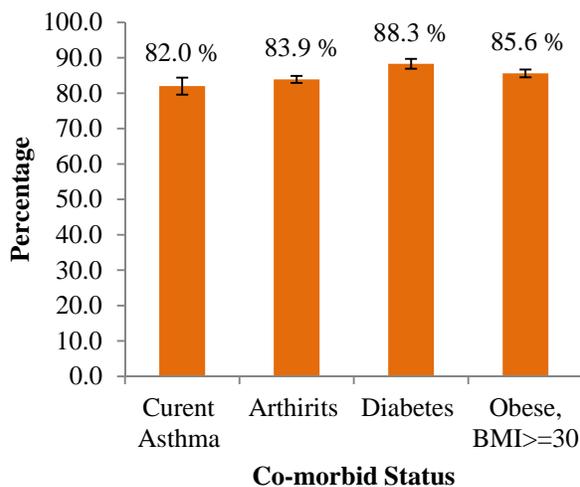
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Not Participating in the Recommended Level of Physical Activity (Aerobic and/or Strengthening), KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	82.0	79.7-84.4
No	80.5	79.7-81.2
Arthritis Status		
Yes	83.9	82.8-85.1
No	79.6	78.7-80.4
Diabetes Status		
Yes	88.3	86.8-89.9
No	79.8	79.1-80.6
Weight Category		
Normal or Underweight, BMI<25	75.5	74.0-77.0
Overweight, 25<= BMI<30	78.8	77.6-80.1
Obese, BMI>=30	85.6	84.5-86.7

Percentage of Adults Not Participating in the Recommended Level of Physical Activity (Aerobic and/or Strengthening), by Co-morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older that did not participate in recommended physical activity (aerobic and/or strengthening) was significantly **higher** among:

- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were overweight or obese compared with those who were normal weight or underweight
- Adults who were obese compared with those who were overweight

The percentage of Kansas adults aged 18 years and older that did not participate in recommended physical activity (aerobic and/or strengthening) did not differ significantly by current asthma status.

SUMMARY

Approximately 80.7 percent Kansas adults aged 18 years and older did not participate in recommended physical activity (aerobic and/or strengthening). In addition, higher percentages of adults who did not participate in recommended physical activity (aerobic and/or strengthening) were seen among: females, older adults, uninsured adults, adults with lower income and education, and those with co-morbid conditions (arthritis; diabetes overweight or obesity) or those living with disabilities.

The Healthy People 2020 goal is to increase the proportion of adults who meet federal physical activity guidelines for aerobic and muscle-strengthening activities. Therefore further public health efforts are needed to reduce prevalence of not participating in recommended physical activity and to address associated disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity and Obesity: Fruit Consumption

Fruit provides important vitamins, minerals and fiber that are good for the human body.¹² Eating fruits can help to lower the risk for chronic diseases and ease weight management,¹² leading to a healthier lifestyle and greater quality of life. The Healthy People 2020 goal is to increase the consumption of fruits in the diet.

In 2015, approximately 2 in 5 Kansas adults aged 18 years and older did not consume fruit at least once per day. The percentage of Kansas adults aged 18 years and older who did not consume fruit at least once per day was significantly **higher** among:

- Males compared with females
- Younger adults compared with adults in older age adults
- Non-Hispanic African-Americans compared with Hispanics (age-adjusted prevalence)
- Adults with a less than college graduation compared with college graduates
- Adults with annual household income less than \$50,000 compared with adults with an annual household income greater than \$50,000
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

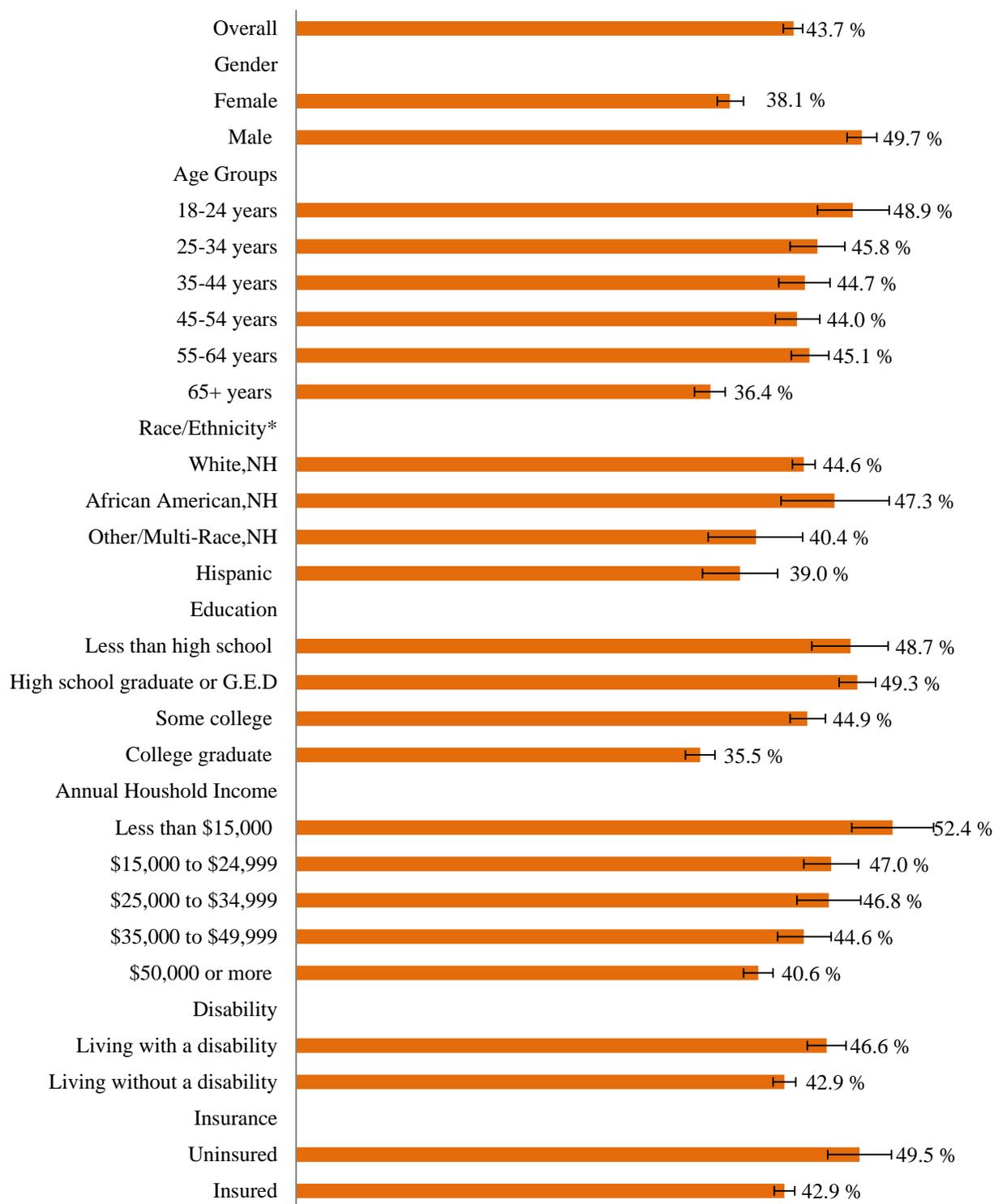
Percentage of Adults Who Did Not Consume Fruit at Least Once Per Day, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	43.7	42.9-44.6
Gender		
Female	38.1	36.9-39.2
Male	49.7	48.4-51.0
Age Groups		
18-24 years	48.9	45.7-52.0
25-34 years	45.8	43.4-48.2
35-44 years	44.7	42.5-47.0
45-54 years	44.0	42.0-45.9
55-64 years	45.1	43.4-46.7
65+ years	36.4	35.1-37.8
Race/Ethnicity*		
White, NH	44.6	43.6-45.6
African-American, NH	47.3	42.5-52.0
Other/Multi-Race, NH	40.4	36.3-44.6
Hispanic	39.0	35.7-42.3
Education		
Less than high school	48.7	45.4-52.1
High school graduate or G.E.D	49.3	47.7-50.9
Some college	44.9	43.3-46.4
College graduate	35.5	34.2-36.8
Annual Household Income		
Less than \$15,000	52.4	48.8-56.0
\$15,000 to \$24,999	47.0	44.6-49.4
\$25,000 to \$34,999	46.8	44.0-49.6
\$35,000 to \$49,999	44.6	42.2-46.9
\$50,000 or more	40.6	39.3-41.9
Disability		
Living with a disability	46.6	44.9-48.3
Living without a disability	42.9	41.9-43.9
Insurance		
Uninsured	49.5	46.7-52.3
Insured	42.9	42.0-43.8

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Did Not Consume Fruit at Least Once Per Day, KS BRFSS 2015

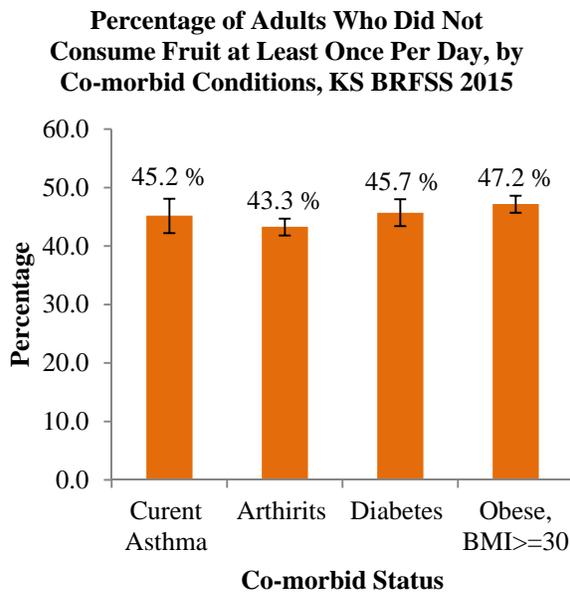


*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Did Not Consume Fruit at Least Once Per Day, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	45.2	42.3-48.2
No	43.5	42.6-44.4
Arthritis Status		
Yes	43.3	41.9-44.8
No	43.9	42.8-44.9
Diabetes Status		
Yes	45.7	43.4-48.0
No	43.6	42.6-44.5
Weight Category		
Normal or Underweight, BMI<25	39.9	38.3-41.6
Overweight, 25<= BMI<30	44.3	42.8-45.8
Obese, BMI>=30	47.2	45.8-48.7



The percentage of Kansas adults aged 18 years and older who did not consume fruit at least once per day was significantly **higher** among:

- Adults who were obese compared with those who were normal weight or underweight

The percentage of Kansas adults aged 18 years and older who did not consume fruit at least once per day did not differ significantly by current asthma, arthritis or diabetes status.

SUMMARY

Approximately 43.7 percent of Kansas adults aged 18 years and older did not consume fruit at least once per day. In addition, higher percentages of adults who did not consume fruit at least once per day were seen among: males, younger adults, adults with less than a college degree, adults with an annual household income of less than \$50,000, uninsured adults, obese adults and adults living with a disability.

Healthy People 2020 goal is to increase the contribution of fruits to the diet. Therefore further public health efforts are needed to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity and Obesity: Vegetable Consumption

Vegetables provide important vitamins, minerals, and fiber that are good for the human body.¹² Eating vegetables can help to lower the risk for chronic diseases and ease weight management,¹² leading to a healthier lifestyle and greater quality of life. The Healthy People 2020 goal is to increase the variety and contribution of vegetables to the diet.

In 2015, approximately 1 in 5 Kansas adults aged 18 years and older did not consume vegetables at least once per day. The percentage of Kansas adults aged 18 years and older who did not consume vegetables at least once per day was significantly **higher** among:

- Males compared with females
- Adults 18 to 24 years old compared with adults in older age groups
- Non-Hispanic African-Americans compared with all other race/ethnicity groups (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with lower annual household income compared with adults in higher annual household income groups
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

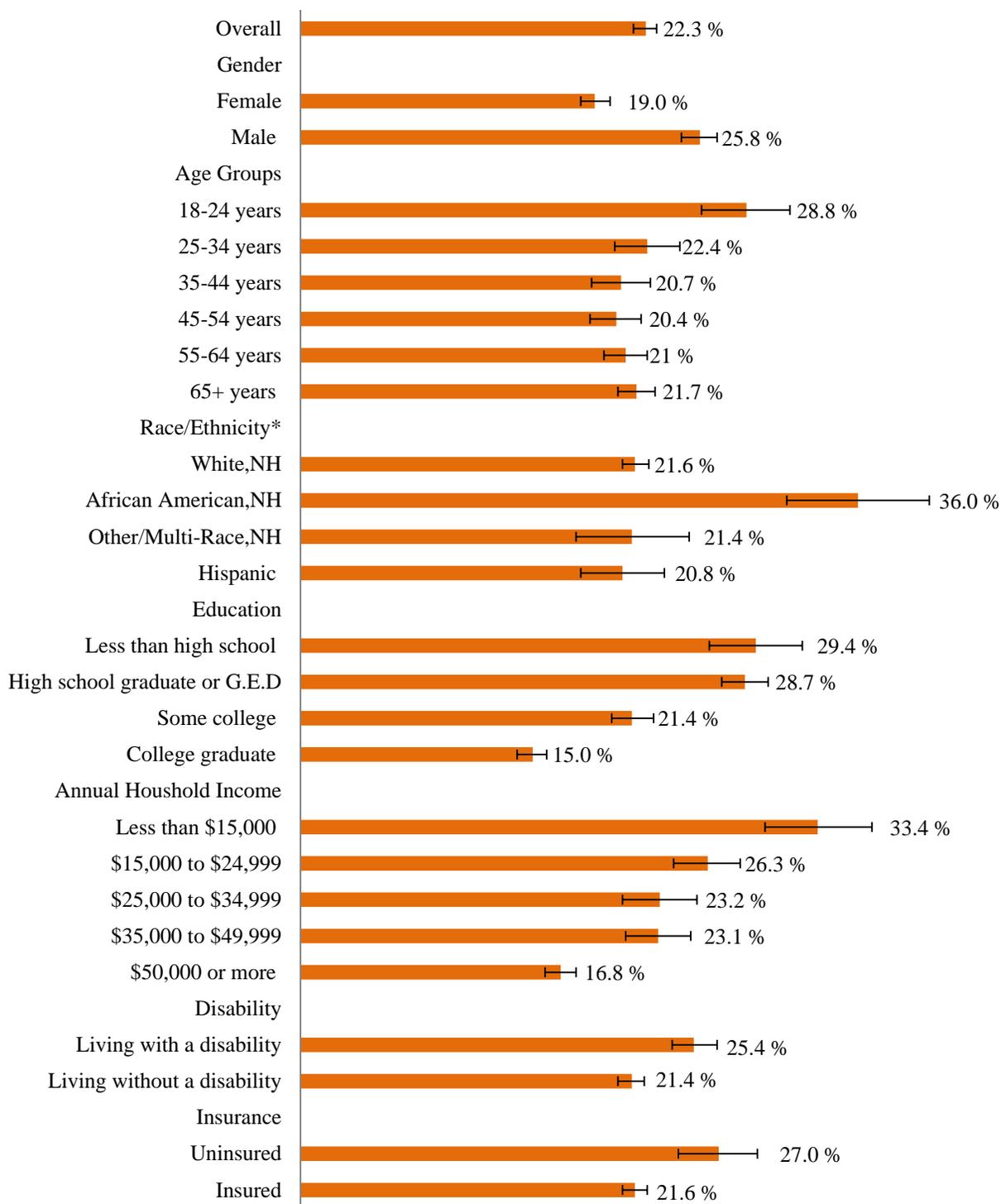
Percentage of Adults Who Did Not Consume Vegetables at Least Once Per Day, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	22.3	21.6-23.1
Gender		
Female	19.0	18.0-19.9
Male	25.8	24.7-27.0
Age Groups		
18-24 years	28.8	26.0-31.7
25-34 years	22.4	20.3-24.5
35-44 years	20.7	18.8-22.6
45-54 years	20.4	18.8-22.1
55-64 years	21.0	19.6-22.4
65+ years	21.7	20.5-22.9
Race/Ethnicity*		
White, NH	21.6	20.7-22.4
African-American, NH	36.0	31.4-40.6
Other/Multi-Race, NH	21.4	17.7-25.0
Hispanic	20.8	18.1-23.5
Education		
Less than high school	29.4	26.4-32.4
High school graduate or G.E.D	28.7	27.2-30.2
Some college	21.4	20.0-22.7
College graduate	15.0	14.1-16.0
Annual Household Income		
Less than \$15,000	33.4	29.9-36.8
\$15,000 to \$24,999	26.3	24.2-28.5
\$25,000 to \$34,999	23.2	20.8-25.6
\$35,000 to \$49,999	23.1	21.0-25.2
\$50,000 or more	16.8	15.8-17.8
Disability		
Living with a disability	25.4	23.9-26.8
Living without a disability	21.4	20.6-22.3
Insurance		
Uninsured	27.0	24.5-29.6
Insured	21.6	20.8-22.4

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Did Not Consume Vegetables at Least Once Per Day, KS BRFSS 2015



*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Did Not Consume Vegetables at Least Once Per Day, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	24.8	22.2-27.4
No	22.1	21.4-22.9
Arthritis Status		
Yes	23.0	21.7-24.2
No	22.0	21.1-22.9
Diabetes Status		
Yes	24.1	22.1-26.1
No	22.1	21.4-22.9
Weight Category		
Normal or Underweight, BMI<25	21.2	19.8-22.6
Overweight, 25<= BMI<30	21.8	20.5-23.1
Obese, BMI>=30	23.5	22.3-24.8

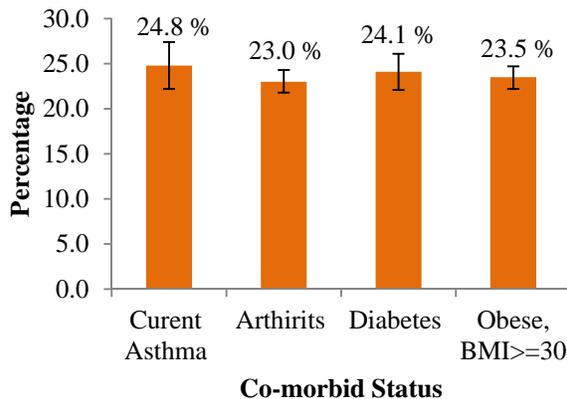
The percentage of Kansas adults aged 18 years and older who did not consume vegetables at least once per day did not differ significantly by current asthma, arthritis, diabetes or weight category status.

SUMMARY

Approximately 22.3 percent of Kansas adults aged 18 years and older did not consume vegetables at least once per day. In addition, higher percentages of adults who did not consume vegetables at least once per day were seen among: females, adults 18 to 24 years old, non-Hispanic African-Americans, uninsured adults, adults with lower income and education and adults with co-morbid conditions (diabetes or obesity).

The Healthy People 2020 goal is to increase the variety and contribution of vegetables to the diet. Therefore further public health efforts are needed to address disparities in population subgroups in Kansas.

Percentage of Adults Who Did Not Consume Vegetables at Least Once Per Day, by Co-morbid Conditions, KS BRFSS 2015



Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Tobacco Use: Current Cigarette Smoking

Tobacco use is one of the most preventable causes of morbidity and mortality.¹³ More deaths are caused each year by tobacco use than by all deaths from human immunodeficiency virus (HIV), illegal drug use, alcohol use, motor vehicle injuries, suicides and homicides combined.^{14,15} The Healthy People 2020 goal is to reduce smoking among adults.

Current smoking is defined as adults who have smoked 100 cigarettes in their entire life and smoke now, either every day or some days. In 2015, approximately 1 in 6 Kansas adults aged 18 years and older currently smoke cigarettes. The percentage of Kansas adults aged 18 years and older who currently smoke cigarettes was significantly **higher** among:

- Males compared with females.
- Adults aged 64 years and younger compared with adults aged 65 years and older
- Non-Hispanic African-Americans compared with non-Hispanic whites and Hispanics (age-adjusted prevalence)
- Non-Hispanic whites and non-Hispanic African-Americans adults compared with Hispanics (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with lower annual household income compared with adults in higher annual household income groups
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

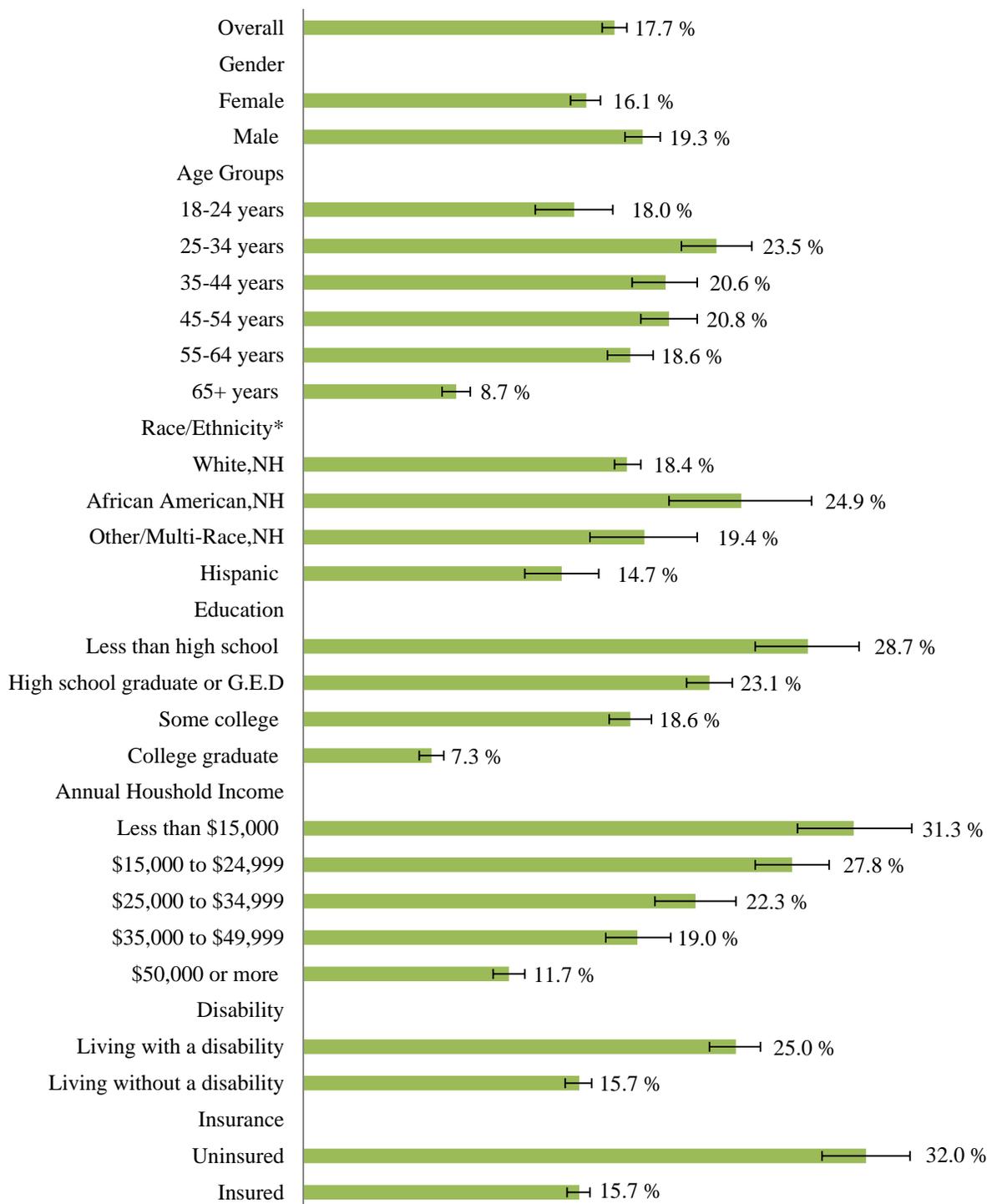
Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	17.7	17.0-18.4
Gender		
Female	16.1	15.3-17.0
Male	19.3	18.3-20.3
Age Groups		
18-24 years	15.4	13.2-17.6
25-34 years	23.5	21.5-25.5
35-44 years	20.6	18.8-22.5
45-54 years	20.8	19.2-22.4
55-64 years	18.6	17.3-19.9
65+ years	8.7	7.9-9.5
Race/Ethnicity*		
White, NH	18.4	17.6-19.1
African-American, NH	24.9	20.9-29.0
Other/Multi-Race, NH	19.4	16.4-22.5
Hispanic	14.7	12.6-16.8
Education		
Less than high school	28.7	25.8-31.7
High school graduate or GED	23.1	21.8-24.4
Some college	18.6	17.4-19.8
College graduate	7.3	6.6-8.0
Annual Household Income		
Less than \$15,000	31.3	28.0-34.5
\$15,000 to \$24,999	27.8	25.7-29.9
\$25,000 to \$34,999	22.3	20.0-24.6
\$35,000 to \$49,999	19.0	17.1-20.8
\$50,000 or more	11.7	10.8-12.6
Disability		
Living with a disability	24.6	23.2-26.1
Living without a disability	15.7	15.0-16.5
Insurance		
Uninsured	32.0	29.5-34.5
Insured	15.7	15.1-16.4

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes, KS BRFSS 2015

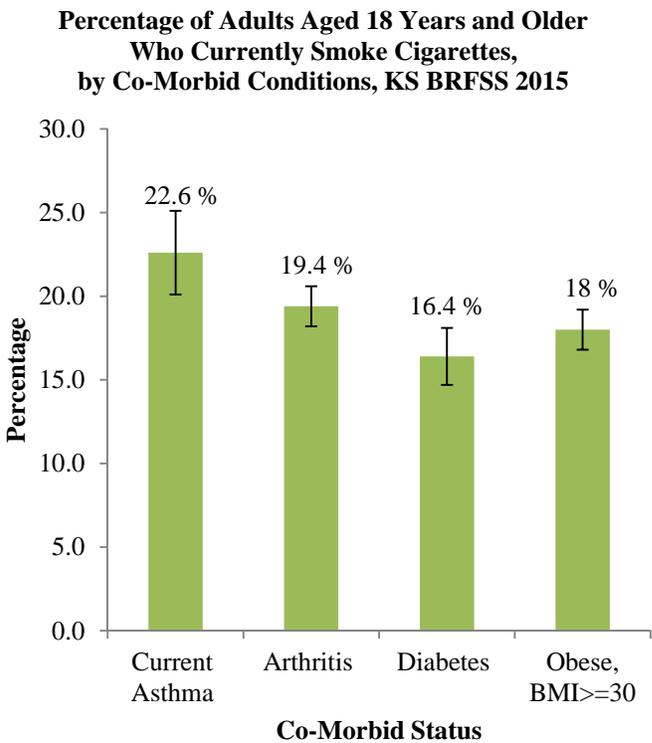


*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	22.6	20.1-25.0
No	17.2	16.6-17.9
Arthritis Status		
Yes	19.4	18.2-20.7
No	17.1	16.3-17.9
Diabetes Status		
Yes	16.4	14.7-18.2
No	17.9	17.1-18.6
Weight Category		
Normal or Underweight, BMI<25	19.5	18.3-20.8
Overweight, 25<= BMI<30	17.4	16.2-18.6
Obese, BMI>=30	18.0	16.8-19.2



The percentage of Kansas adults aged 18 years and older who currently smoke cigarettes was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis

The percentage of Kansas adults who currently smoke cigarettes did not differ significantly by diabetes and weight category.

SUMMARY

About 17.7 percent of Kansas adults aged 18 years and older currently smoke cigarettes. In addition, higher percentages of adults who currently smoke cigarettes were seen among: males, adults aged 64 years and younger, non-Hispanic African-Americans, non-Hispanic whites, uninsured adults, adults with lower income and education, adults with co-morbid conditions (current asthma or arthritis) and those living with a disability.

The Healthy People 2020 goal is to reduce smoking by adults to 12 percent. Therefore further public health efforts are needed to reach the objective and to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Tobacco Use: Smokeless Tobacco

Smokeless tobacco causes a number of serious oral health problems, including cancer of the mouth and gums, periodontal disease and tooth loss.¹⁶ The Healthy People 2020 goal is to reduce the use of smokeless tobacco products by adults.

A smokeless tobacco user is defined as an adult who currently uses chewing tobacco, snuff or snus (Swedish for snuff) some days or every day. In 2015, approximately 1 in 20 Kansas adults aged 18 years and older were currently using any smokeless tobacco product. The percentage of Kansas adults aged 18 years and older who currently use any smokeless tobacco products was significantly **higher** among:

- Males compared with females
- Adults aged 54 years and younger compared with adults aged 55 years and older
- Non-Hispanic whites compared with Hispanics, non-Hispanic African – Americans and other/multi-race (age-adjusted prevalence)
- Adults with a high school diploma or GED compared with college graduates

The percentage of Kansas adults aged 18 years and older who currently use any smokeless tobacco products did not differ significantly by annual household income groups, disability or insurance status.

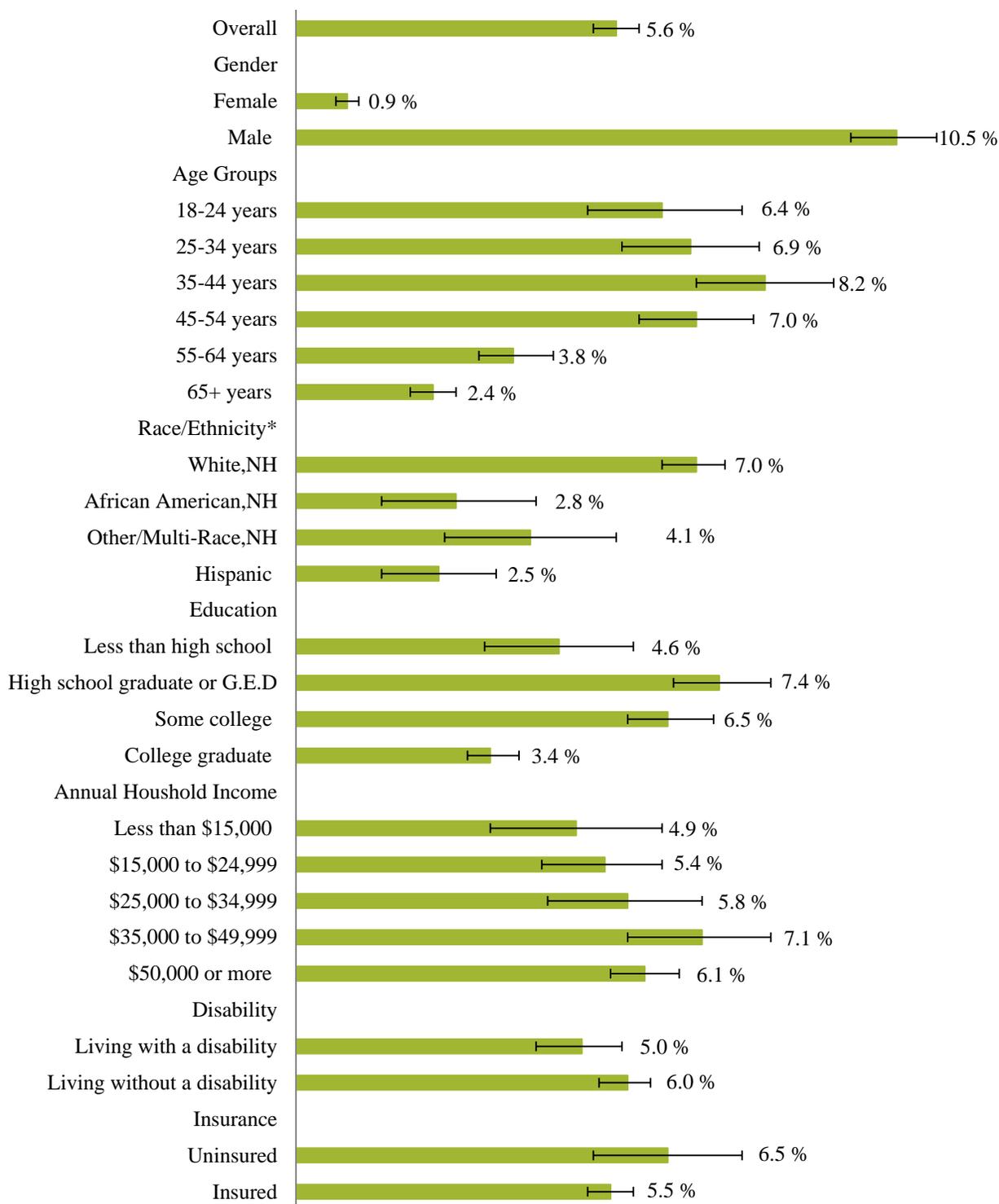
Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	5.6	5.2-6.0
Gender		
Female	0.9	0.7-1.1
Male	10.5	9.8-11.3
Age Groups		
18-24 years	6.4	5.0-7.7
25-34 years	6.9	5.7-8.1
35-44 years	8.2	7.0-9.4
45-54 years	7.0	6.0-8.0
55-64 years	3.8	3.1-4.4
65+ years	2.4	2.0-2.8
Race/Ethnicity*		
White, NH	7.0	6.5-7.6
African-American, NH	2.8	1.4-4.1
Other/Multi-Race, NH	4.1	2.6-5.6
Hispanic	2.5	1.5-3.5
Education		
Less than high school	4.6	3.3-5.9
High school graduate or G.E.D	7.4	6.5-8.2
Some college	6.5	5.7-7.2
College graduate	3.4	2.9-3.8
Annual Household Income		
Less than \$15,000	4.9	3.4-6.4
\$15,000 to \$24,999	5.4	4.4-6.5
\$25,000 to \$34,999	5.8	4.5-7.2
\$35,000 to \$49,999	7.1	5.9-8.4
\$50,000 or more	6.1	5.5-6.7
Disability		
Living with a disability	5.0	4.3-5.8
Living without a disability	5.8	5.4-6.3
Insurance		
Uninsured	6.5	5.2-7.8
Insured	5.5	5.1-5.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products, KS BRFSS 2015



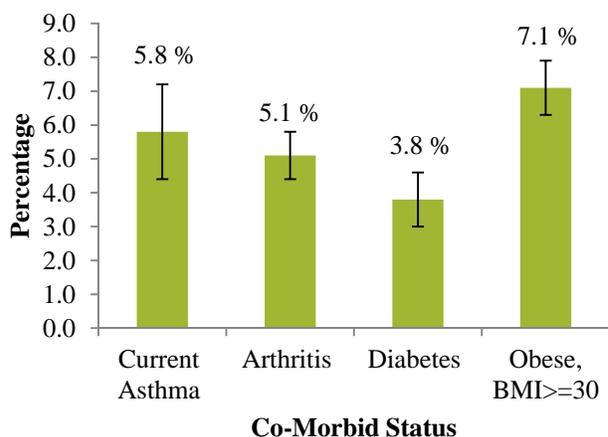
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	5.8	4.4-7.1
No	5.6	5.2-6.1
Arthritis Status		
Yes	5.1	4.4-5.8
No	5.8	5.3-6.3
Diabetes Status		
Yes	3.8	3.0-4.7
No	5.8	5.4-6.3
Weight Category		
Normal or Underweight, BMI<25	4.1	3.5-4.7
Overweight, 25<= BMI<30	6.6	5.8-7.3
Obese, BMI>=30	7.1	6.3-7.8

Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who currently use any smokeless tobacco products was significantly **higher** among:

- Adults without diabetes compared with adults with diabetes
- Adults who were overweight or obese compared with adults who were normal or underweight

The percentage of Kansas adults who currently use any smokeless tobacco products did not differ significantly by current asthma or arthritis.

SUMMARY

Approximately 6 percent of Kansas adults aged 18 years and older were current smokeless tobacco product users. In addition, higher percentages of adults who were currently using any smokeless tobacco products were seen among: males, adults aged 54 years and younger, non-Hispanic whites, high school graduates and adults who are overweight or obese.

The Healthy People 2020 goal is to reduce the use of smokeless tobacco products by adults to 0.3 percent. Therefore further public health efforts are needed to reach the objective and to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Tobacco Use: Electronic Cigarettes

Electronic cigarettes or e-cigarettes are battery-powered devices that provide doses of nicotine and other additives to the user in an aerosol. E-cigarettes have not been fully studied so it is difficult to determine the potential risk.¹⁷ But e-cigarettes release nicotine when inhaled and nicotine has been linked to adverse effects on adolescent brain develop that may result in lasting deficits in cognitive function.¹⁸

In 2015, approximately 1 in 6 Kansas adults aged 18 years and older have ever used or tried e-cigarettes. The percentage of Kansas adults aged 18 years and older that have ever used or tried e-cigarettes was significantly **higher** among:

- Males compared with females.
- Younger adults compared with adults in older age groups
- Non-Hispanic whites, non-Hispanic African-Americans and non-Hispanic other/multi-race adults compared with Hispanics (age-adjusted prevalence).
- Adults with a less than college graduation compared with college graduates
- Adults with an annual household income of less than \$25,000 compared with adults with an annual household income of \$35,000 or more
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

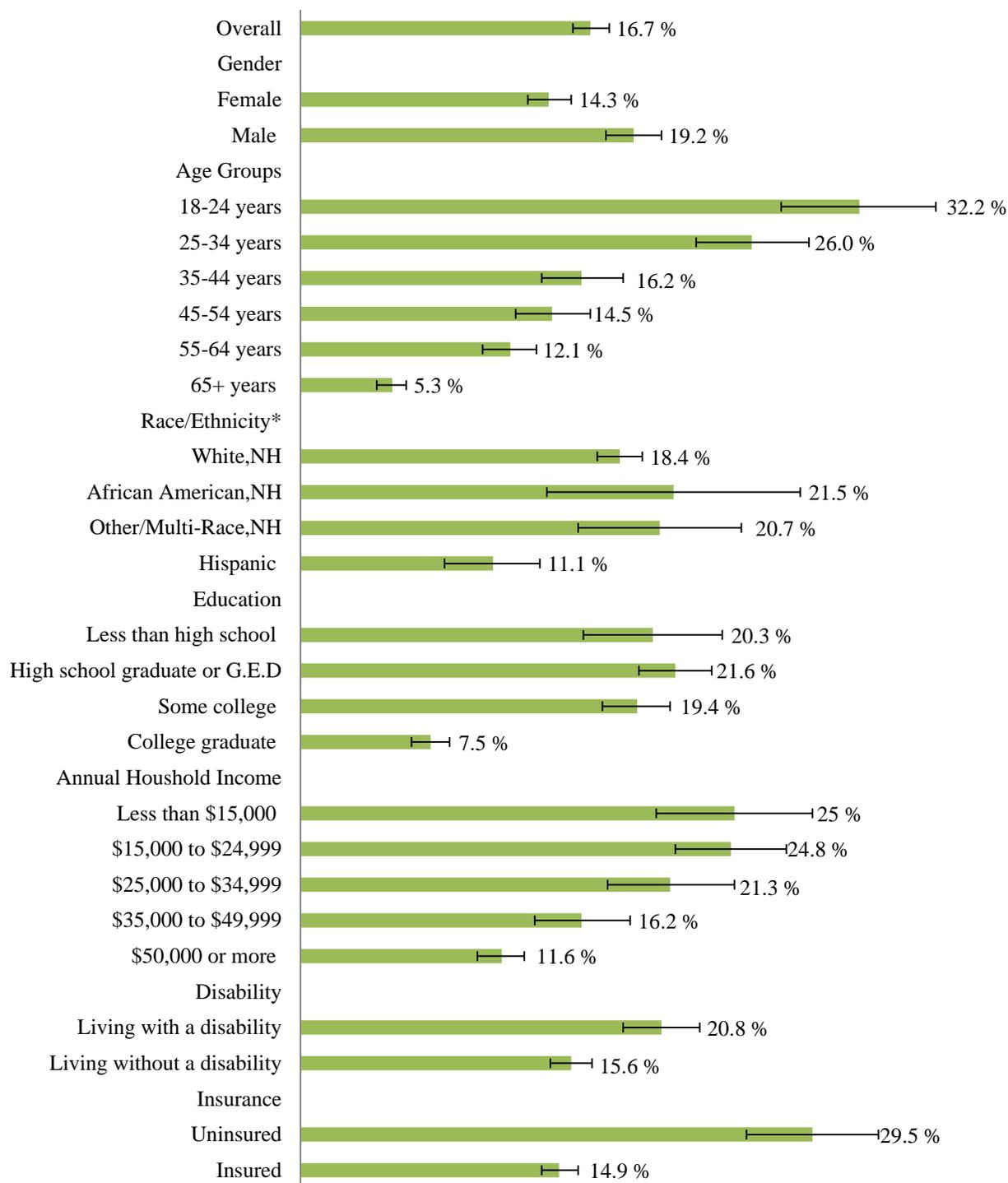
Percentage of Adults Who Have Ever Used or Tried Electronic Cigarettes or E-Cigarettes, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	16.7	15.6-17.7
Gender		
Female	14.3	13.0-15.5
Male	19.2	17.6-20.8
Age Groups		
18-24 years	32.2	27.8-36.7
25-34 years	26.0	22.7-29.2
35-44 years	16.2	13.8-18.5
45-54 years	14.5	12.3-16.6
55-64 years	12.1	10.6-13.7
65+ years	5.3	4.5-6.2
Race/Ethnicity*		
White, NH	18.4	17.1-19.7
African-American, NH	21.5	14.2-28.8
Other/Multi-Race, NH	20.7	16.0-25.4
Hispanic	11.1	8.4-13.9
Education		
Less than high school	20.3	16.3-24.3
High school graduate or G.E.D	21.6	19.5-23.7
Some college	19.4	17.5-21.4
College graduate	7.5	6.4-8.6
Annual Household Income		
Less than \$15,000	25.0	20.5-29.5
\$15,000 to \$24,999	24.8	21.6-28.0
\$25,000 to \$34,999	21.3	17.6-24.9
\$35,000 to \$49,999	16.2	13.4-18.9
\$50,000 or more	11.6	10.3-13.0
Disability		
Living with a disability	20.8	18.6-23.0
Living without a disability	15.6	14.4-16.8
Insurance		
Uninsured	29.5	25.7-33.3
Insured	14.9	13.8-15.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Have Ever Used or Tried Electronic Cigarettes or E-Cigarettes, KS BRFSS 2015



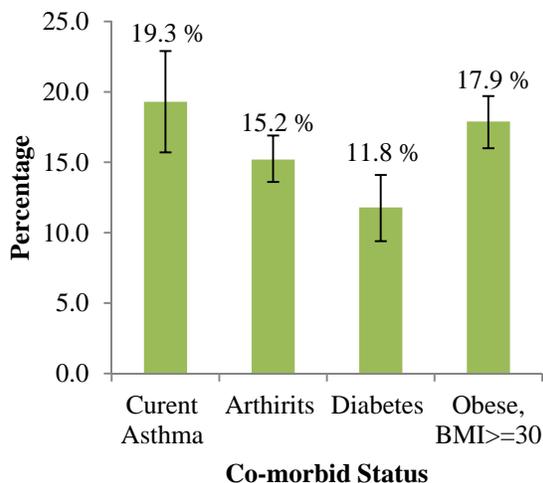
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Have Ever Used or Tried Electronic Cigarettes or E-Cigarettes, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	19.3	15.7-22.9
No	16.5	15.4-17.5
Arthritis Status		
Yes	15.2	13.5-16.8
No	17.2	15.9-18.4
Diabetes Status		
Yes	11.8	9.5-14.2
No	17.2	16.1-18.3
Weight Category		
Normal or Underweight, BMI<25	19.1	17.0-21.2
Overweight, 25<= BMI<30	14.2	12.6-15.8
Obese, BMI>=30	17.9	16.1-19.8

Percentage of Adults Who Have Ever Used or Tried Electronic Cigarettes or E-Cigarettes, by Co-morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who have ever used or tried e-cigarettes was significantly **higher** among:

- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were overweight

The percentage of Kansas adults aged 18 years and older who have ever used or tried e-cigarettes did not differ significantly by current asthma or arthritis.

SUMMARY

Approximately 16.7 percent of Kansas adults aged 18 years and older have ever used or tried e-cigarettes. In addition, higher percentages of adults who have ever used or tried e-cigarettes were seen among: males, younger adults, non-Hispanic African-Americans, non-Hispanic other/multi-race adults, non-Hispanic whites, adults with less than college graduation, adults with an annual household income of less than \$25,000, uninsured adults, adults with diabetes or obesity and those living with a disability.

Therefore further public health efforts are needed to reduce e-cigarette use and to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Oral Health: Dental Insurance

Lack of access to health services is a persistent barrier to good health.^{1,19} This is inclusive of oral health services especially since oral health and general health status are interrelated. A developmental Healthy People 2020 goal is to increase the proportion of people with dental insurance.

In 2015, more than 1 in 3 Kansas adults aged 18 years and older did not have dental insurance. The percentage of Kansas adults aged 18 years and older with no dental insurance was significantly **higher** among:

- Adults aged 65 years and older compared with adults in all other age groups
- Hispanics compared with non-Hispanic whites (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with lower annual household income compared with adults in higher annual household income groups
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

The percentage of Kansas adults aged 18 years and older with no dental insurance did not differ significantly by gender groups.

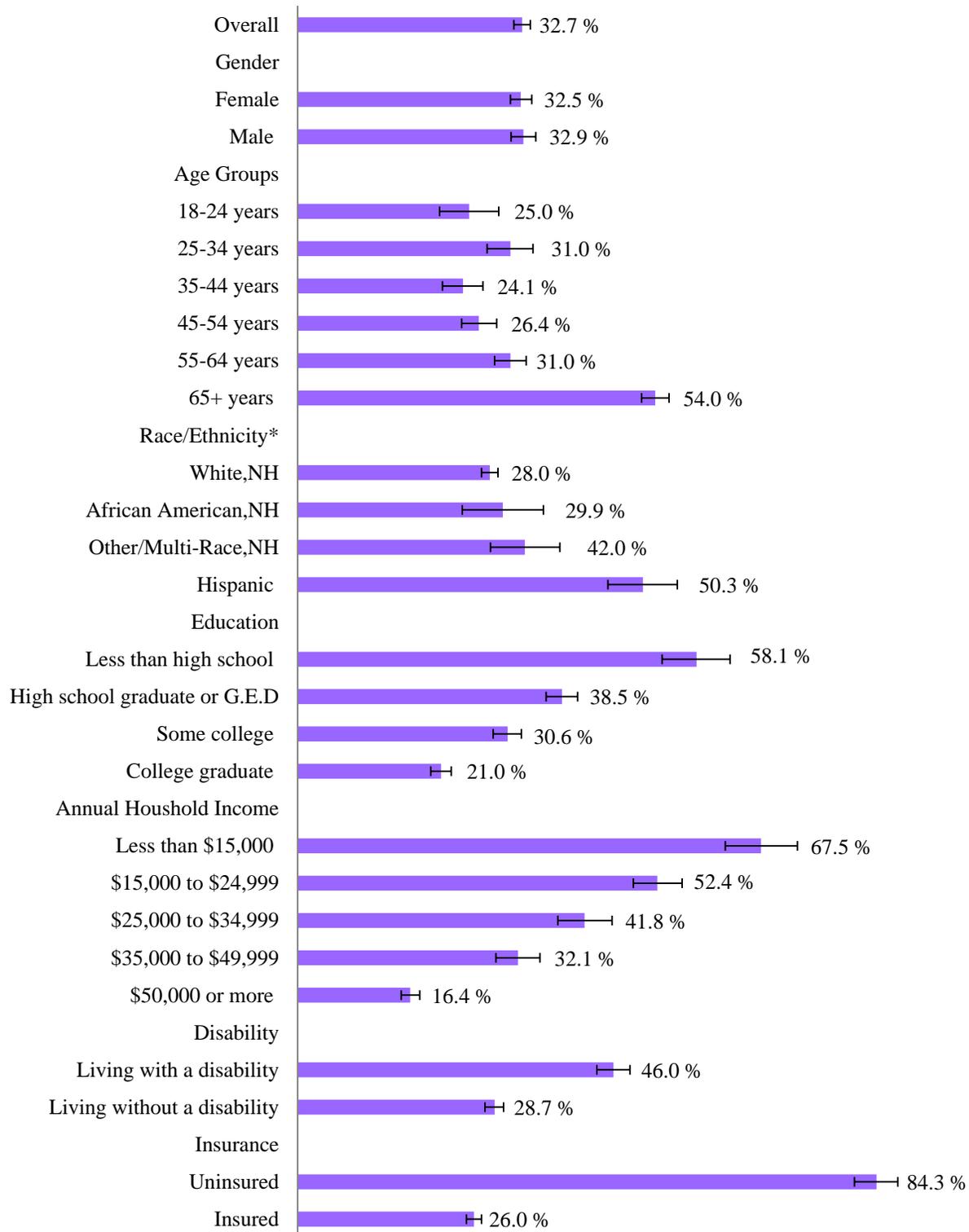
Percentage of Adults Aged 18 Years and Older With No Dental Insurance, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	32.7	31.5-33.9
Gender		
Female	32.5	30.9-34.0
Male	32.9	31.1-34.7
Age Groups		
18-24 years	25.0	20.7-29.3
25-34 years	31.0	27.7-34.4
35-44 years	24.1	21.2-27.1
45-54 years	26.4	23.8-28.9
55-64 years	31.0	28.7-33.3
65+ years	52.1	50.1-54.1
Race/Ethnicity*		
White, NH	28.0	26.8-29.2
African-American, NH	29.9	24.0-35.8
Other/Multi-Race, NH	33.1	28.0-38.1
Hispanic	50.3	45.3-55.4
Education		
Less than high school	58.1	53.2-63.1
High school graduate or G.E.D	38.5	36.2-40.8
Some college	30.6	28.6-32.7
College graduate	20.9	19.4-22.4
Annual Household Income		
Less than \$15,000	67.5	62.2-72.7
\$15,000 to \$24,999	52.4	48.8-55.9
\$25,000 to \$34,999	41.8	37.8-45.7
\$35,000 to \$49,999	32.1	28.9-35.3
\$50,000 or more	16.4	15.0-17.7
Disability		
Living with a disability	46.0	43.6-48.4
Living without a disability	28.7	27.4-30.1
Insurance		
Uninsured	84.3	81.2-87.5
Insured	25.7	24.6-26.8

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With No Dental Insurance, KS BRFSS 2015



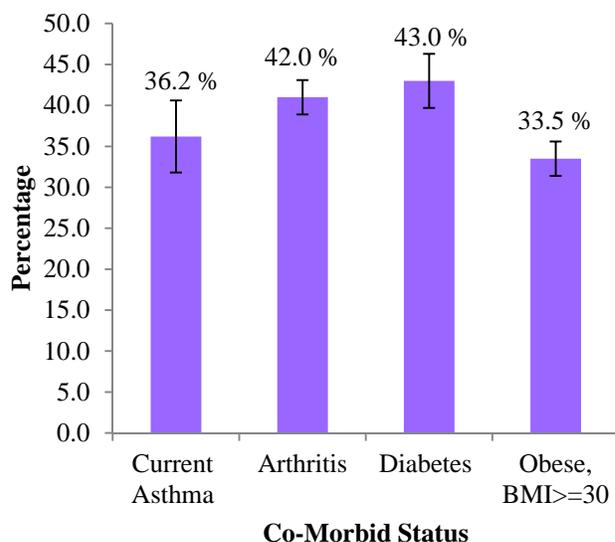
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With No Dental Insurance by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	36.2	31.8-40.6
No	32.3	31.1-33.6
Arthritis Status		
Yes	41.0	38.9-43.1
No	29.8	28.4-31.2
Diabetes Status		
Yes	43.0	39.7-46.4
No	31.5	30.2-32.7
Weight Category		
Normal or Underweight, BMI<25	31.0	28.7-33.2
Overweight, 25<= BMI<30	32.7	30.6-34.7
Obese, BMI>=30	33.5	31.4-35.5

Percentage of Adults Aged 18 Years and Older With No Dental Insurance, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older without dental insurance was significantly **higher** among:

- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes

The percentage of Kansas adults aged 18 years and older with no dental insurance did not differ significantly by current asthma or weight category.

SUMMARY

Approximately 33 percent of Kansas adults aged 18 years and older did not have dental insurance. In addition, higher percentages of adults who did not have dental insurance were seen among: older adults, Hispanics, uninsured adults, adults with lower annual income and education, adults with co-morbid conditions (diabetes or arthritis), and those living with a disability.

A developmental Healthy People 2020 goal is to increase the proportion of people with dental insurance. More than one-third of Kansans aged 18 years and older did not have dental insurance and lower insurance rates exist in certain population subgroups. Further public health efforts are needed to address this issue.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Substance Abuse: Binge Drinking

Alcohol consumption is the third leading preventable cause of death in the U.S.²⁰ Binge drinking is defined as adult males having five or more drinks on one occasion and adult females having four or more drinks on one occasion in the past 30 days. Binge drinking is associated with alcohol poisoning, unintentional injuries, suicide and hypertension, among other health outcomes.²¹ The Healthy People 2020 goal is to reduce the proportion of adults engaging in binge drinking during the past 30 days.

In 2015, approximately 1 in 6 Kansas adults aged 18 years and older were binge drinkers. The percentage of Kansas adults aged 18 years and older who were binge drinkers was significantly **higher** among:

- Males compared with females
- Younger adults compared with older adults
- Non-Hispanic whites compared with non-Hispanic African-Americans and other/multi race adults (age-adjusted prevalence)
- Adults with an annual household income of \$50,000 and higher compared with adults with annual household income of less than \$50,000
- Adults living without a disability compared with adults living with a disability
- Adults with no insurance compared with adults with insurance

The percentage of Kansas adults aged 18 years and older who were binge drinkers did not differ significantly by education groups.

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers,** KS BRFSS 2015

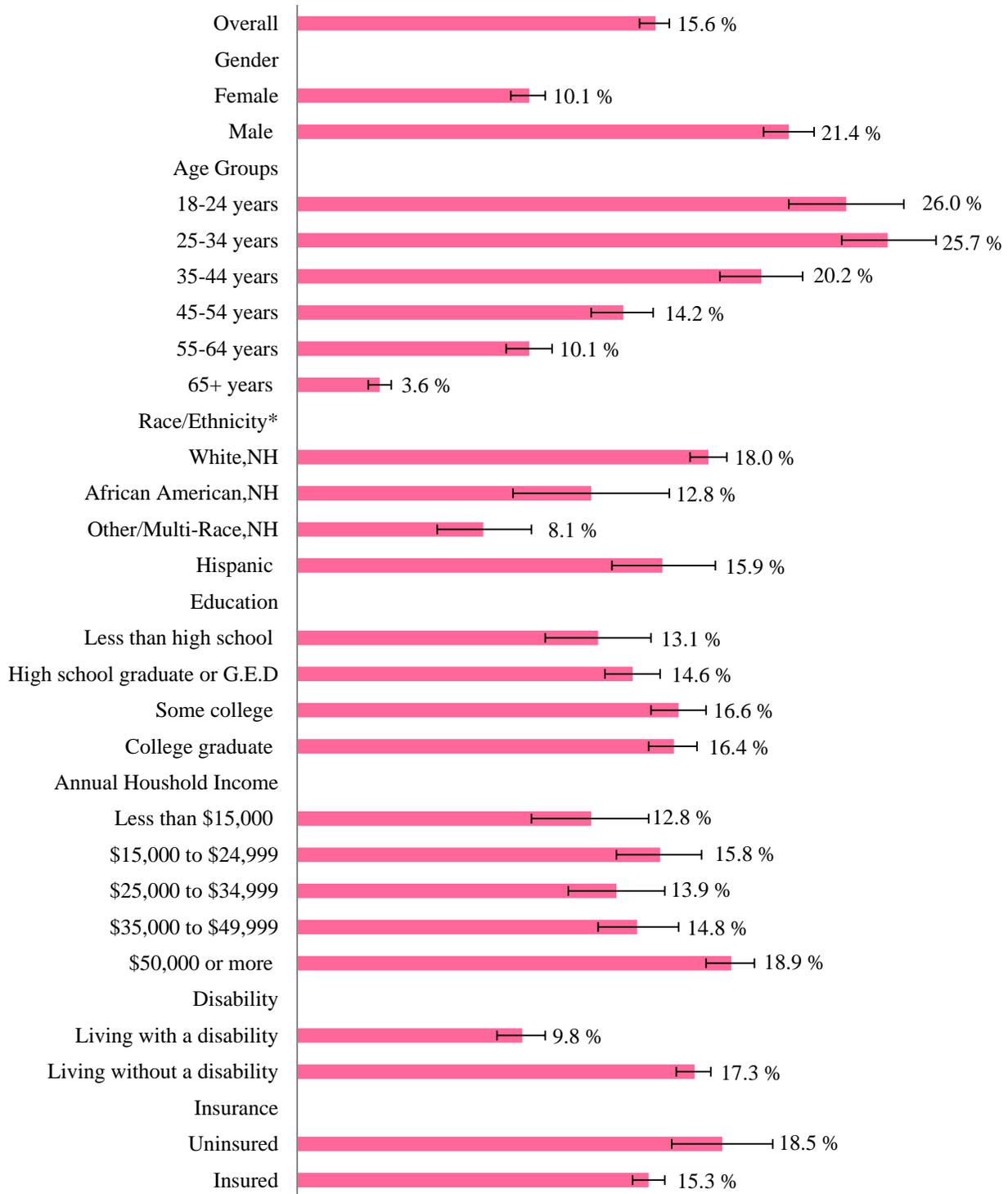
Demographic Characteristics	Weighted Percentage	95% CI
Overall	15.6	15.0-16.3
Gender		
Female	10.1	9.4-10.9
Male	21.4	20.3-22.5
Age Groups		
18-24 years	23.9	21.4-26.4
25-34 years	25.7	23.6-27.7
35-44 years	20.2	18.4-22.0
45-54 years	14.2	12.9-15.6
55-64 years	10.1	9.1-11.1
65+ years	3.6	3.1-4.1
Race/Ethnicity*		
White, NH	17.9	17.1-18.7
African-American, NH	12.8	9.4-16.2
Other/Multi-Race, NH	8.1	6.0-10.1
Hispanic	15.9	13.6-18.1
Education		
Less than high school	13.1	10.8-15.4
High school graduate or G.E.D	14.6	13.4-15.8
Some college	16.6	15.4-17.8
College graduate	16.4	15.4-17.5
Annual Household Income		
Less than \$15,000	12.8	10.3-15.4
\$15,000 to \$24,999	15.8	14.0-17.7
\$25,000 to \$34,999	13.9	11.8-16.0
\$35,000 to \$49,999	14.8	13.0-16.5
\$50,000 or more	18.9	17.9-20.0
Disability		
Living with a disability	9.8	8.8-10.9
Living without a disability	17.3	16.6-18.1
Insurance		
Uninsured	18.5	16.3-20.7
Insured	15.3	14.6-16.0

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

2, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from about BRFSS survey methodology.

** Males having five or more drinks or females having four or more drinks on one occasion in the past 30 days

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers, KS BRFSS 2015



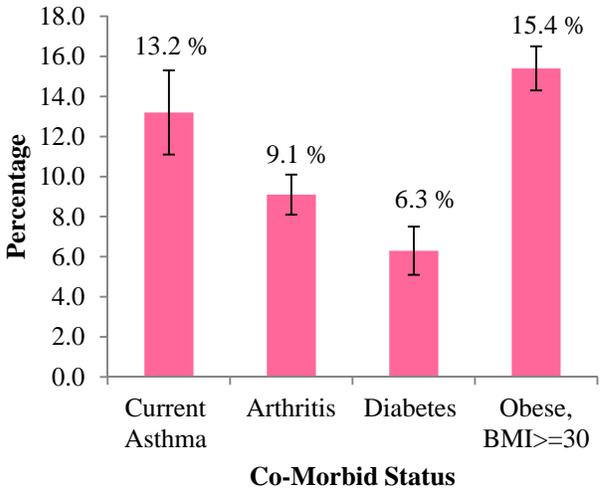
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	13.2	11.1-15.4
No	15.9	15.2-16.6
Arthritis Status		
Yes	9.1	8.1-10.0
No	17.9	17.1-18.7
Diabetes Status		
Yes	6.3	5.1-7.6
No	16.7	16.0-17.4
Weight Category		
Normal or Underweight, BMI<25	16.8	15.6-18.1
Overweight, 25<=BMI<30	17.1	15.9-18.3
Obese, BMI>=30	15.4	14.3-16.6

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were binge drinkers was significantly **higher** among:

- Adults without arthritis compared with those with arthritis
- Adults without diabetes compared with those with diabetes

The percentage of Kansas adults aged 18 years and older who were binge drinkers did not differ significantly by current asthma or weight category.

SUMMARY

Approximately 16 percent of Kansas adults aged 18 years and older were binge drinkers. In addition, higher prevalence of binge drinking was seen among: males, younger adults, non-Hispanic whites, adults with an annual household income of \$50,000 or more, adults without insurance, adults without arthritis, adults without diabetes and adults living without a disability.

The Healthy People 2020 goal is to reduce the proportion of people engaging in binge drinking to 24.4 percent. Kansas is meeting the Healthy People 2020 goal. However, overall prevalence is still high and there are disparities in population subgroups that have not met the HP 2020 target. Therefore further public health efforts are needed to address overall prevalence and disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Mental Health: Depression

Depression and anxiety are considered leading causes of mental health disorders. They are associated with increased risk of morbidity, mortality and poor quality of life.²² Healthy People 2020 included mental health as a leading health indicator and included an objective to reduce the proportion of adults aged 18 years and older who experience major depressive episodes.

In 2015, approximately 1 in 5 Kansas adults aged 18 years and older had ever been diagnosed with depression. The percentage of Kansas adults aged 18 years and older who were ever diagnosed with depression was significantly **higher** among:

- Females compared with males
- Adults aged 25 to 64 years compared with adults aged 65 years and older
- Non-Hispanic whites or other/multi-race compared with Hispanic adults (age-adjusted prevalence)
- Adults who are not college graduates compared with college graduates
- Adults with lower annual household income compared with adults with higher annual household income
- Adults living with a disability compared with adults living without a disability
- Adults with no insurance compared with adults with insurance

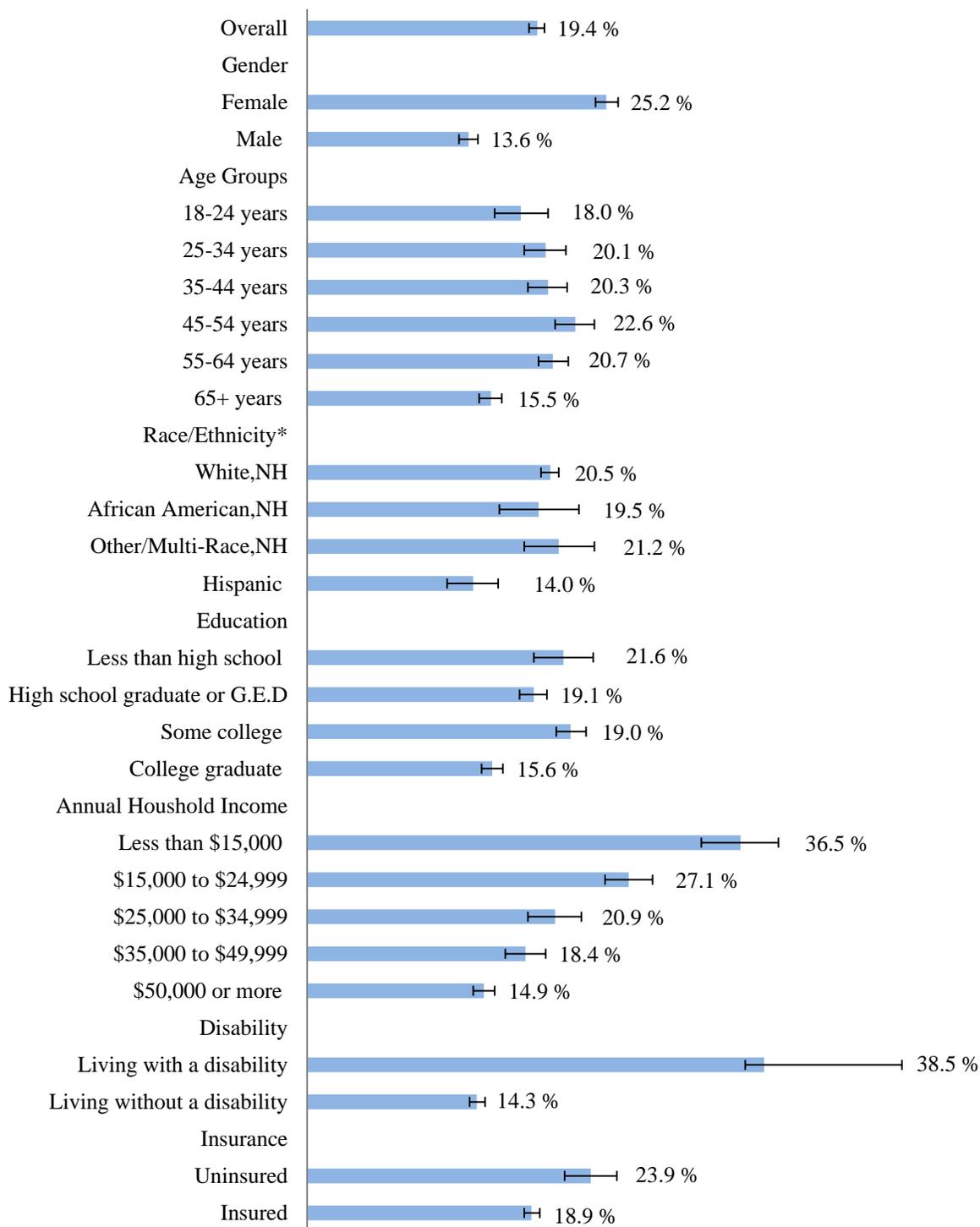
Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	19.4	18.8-20.1
Gender		
Female	25.2	24.2-26.1
Male	13.6	12.8-14.4
Age Groups		
18-24 years	18.0	15.7-20.2
25-34 years	20.1	18.4-21.9
35-44 years	20.3	18.7-22.0
45-54 years	22.6	21.0-24.3
55-64 years	20.7	19.4-21.9
65+ years	15.5	14.6-16.5
Race/Ethnicity*		
White, NH	20.5	19.8-21.3
African-American, NH	19.5	16.1-22.8
Other/Multi-Race, NH	21.2	18.2-24.1
Hispanic	14.0	11.9-16.2
Education		
Less than high school	21.6	19.1-24.1
High school graduate or G.E.D	19.1	18.0-20.3
Some college	22.2	20.9-23.4
College graduate	15.6	14.7-16.5
Annual Household Income		
Less than \$15,000	36.5	33.3-39.8
\$15,000 to \$24,999	27.1	25.1-29.1
\$25,000 to \$34,999	20.9	18.7-23.2
\$35,000 to \$49,999	18.4	16.7-20.1
\$50,000 or more	14.9	14.0-15.8
Disability		
Living with a disability	38.5	26.9-40.1
Living without a disability	14.3	13.6-14.9
Insurance		
Uninsured	23.9	21.7-26.1
Insured	18.9	18.2-19.5

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, KS BRFSS 2015



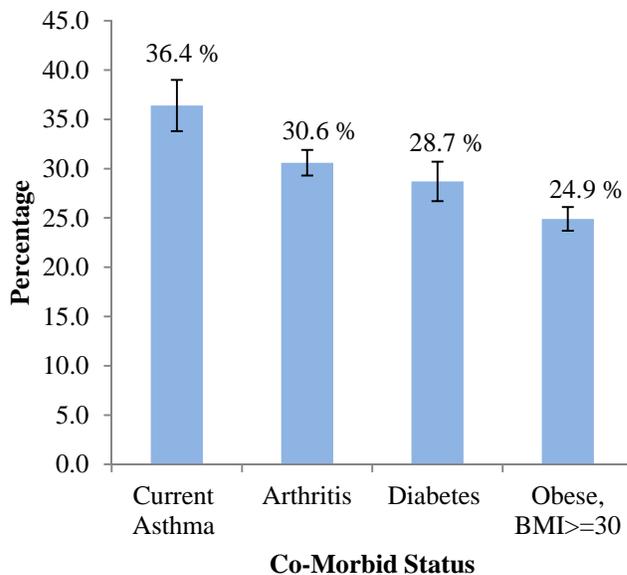
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	36.4	33.8-39.1
No	17.7	17.1-18.4
Arthritis Status		
Yes	30.6	29.3-32.0
No	15.8	15.0-16.5
Diabetes Status		
Yes	28.7	26.7-30.7
No	18.4	17.7-19.1
Weight Category		
Normal or Underweight, BMI<25	17.6	16.4-18.9
Overweight, 25<= BMI<30	16.5	15.5-17.6
Obese, BMI>=30	24.9	23.7-26.2

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were ever diagnosed with depression was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were normal weight, underweight or overweight

SUMMARY

Approximately 19 percent of Kansas adults aged 18 years and older have ever been diagnosed with depression. In addition, higher percentages of adults who have ever been diagnosed with depression were seen among: females, adults 25 to 64 years old, Non-Hispanic whites, other/multi-race adults, adults who were not college graduate, adults with lower annual household income, adults with co-morbid conditions (current asthma, arthritis, diabetes or obesity), those living with a disability and adults with no insurance.

To address high prevalence of depression and associated disparities among adults aged 18 years and older, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Diabetes

Diabetes is the seventh leading cause of death in the U.S.²³ Diabetes is a major cause of heart disease and stroke, and the leading cause of kidney failure, non-traumatic lower limb amputations, and new cases of blindness among adults in the U.S.²³ The Healthy People 2020 goal for diabetes is to reduce the disease and economic burden of diabetes mellitus, and improve the quality of life for all persons who have or are at risk for diabetes mellitus.

In 2015, approximately 1 in 10 Kansas adults aged 18 years and older had ever been diagnosed with diabetes. The percentage of Kansas adults aged 18 years and older who were ever diagnosed with diabetes was significantly **higher** among:

- Older adults compared with younger adults
- Non-Hispanic African-Americans, other/multi-race adults and Hispanics compared with non-Hispanics whites (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with annual household income of less than \$15,000 compared with adults with annual household income of \$35,000 or more
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with diabetes did not differ significantly by gender groups.

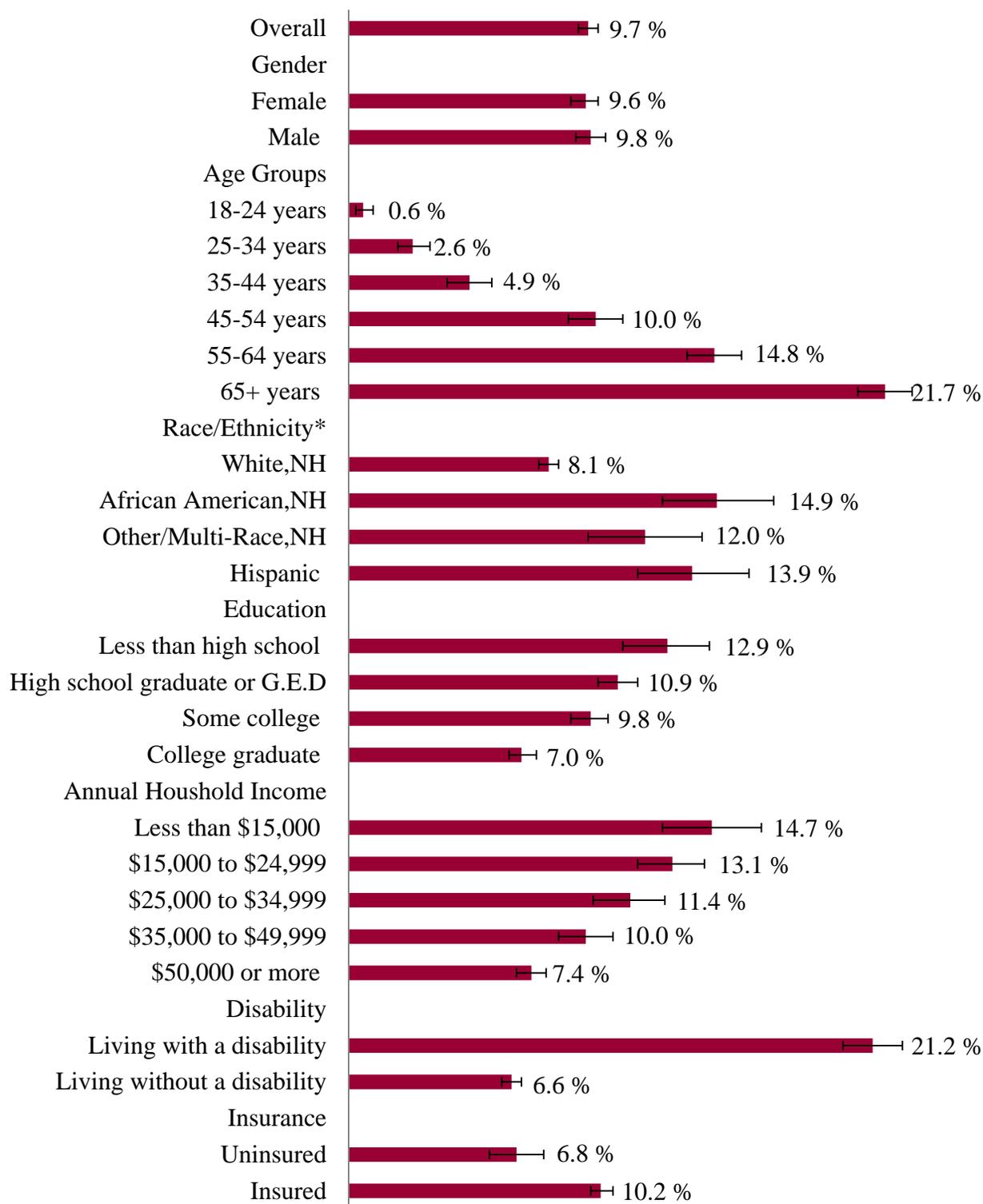
Percentage of Adults Aged 18 Years and Older With Diagnosed Diabetes, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	9.7	9.3-10.1
Gender		
Female	9.6	9.1-10.2
Male	9.8	9.2-10.4
Age Groups		
18-24 years	0.6	0.2-0.9
25-34 years	2.6	1.9-3.2
35-44 years	4.9	4.0-5.8
45-54 years	10.0	8.9-11.1
55-64 years	14.8	13.7-15.9
65+ years	21.7	20.6-22.8
Race/Ethnicity*		
White, NH	8.1	7.7-8.5
African-American, NH	14.9	12.6-17.1
Other/Multi-Race, NH	12.0	9.7-14.3
Hispanic	13.9	11.6-16.1
Education		
Less than high school	12.9	11.2-14.7
High school graduate or GED	10.9	10.1-11.7
Some college	9.8	9.1-10.6
College graduate	7.0	6.4-7.5
Annual Household Income		
Less than \$15,000	14.7	12.7-16.7
\$15,000 to \$24,999	13.1	11.8-14.5
\$25,000 to \$34,999	11.4	10.0-12.9
\$35,000 to \$49,999	9.6	8.5-10.7
\$50,000 or more	7.4	6.8-8.0
Disability		
Living with a disability	21.2	20.0-22.4
Living without a disability	6.6	6.2-7.0
Insurance		
Uninsured	6.8	5.7-7.9
Insured	10.2	9.7-10.6

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Diagnosed Diabetes, KS BRFSS 2015

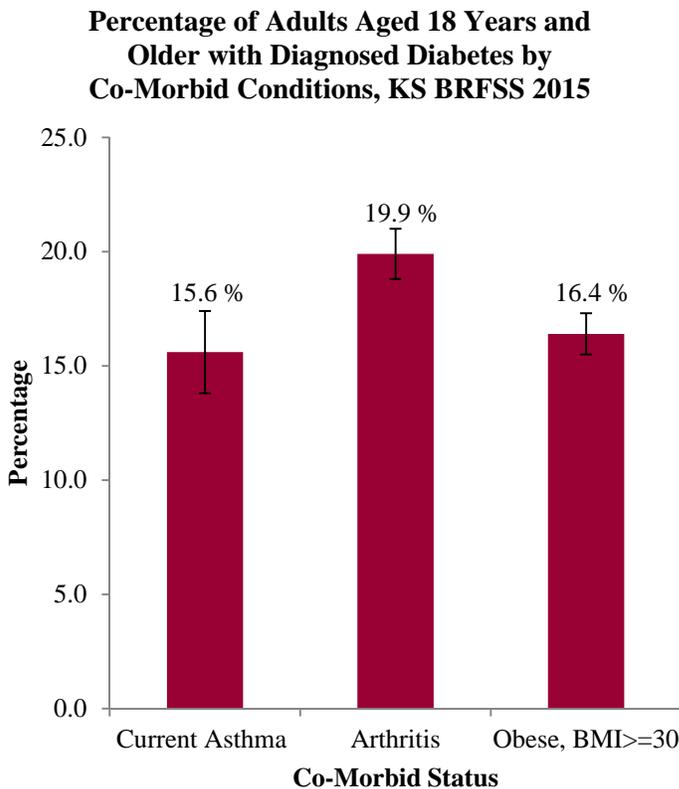


*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With Diagnosed Diabetes by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	15.6	13.8-17.5
No	9.1	8.7-9.6
Arthritis Status		
Yes	19.9	18.8-21.0
No	6.4	6.0-6.8
Weight Category		
Normal or Underweight, BMI<25	4.0	3.5-4.5
Overweight, 25<= BMI<30	8.3	7.6-8.9
Obese, BMI>=30	16.4	15.5-17.4



The percentage of Kansas adults aged 18 years and older who were ever diagnosed with diabetes was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults who were obese compared with those who were overweight, normal weight or underweight

SUMMARY

Approximately 10 percent of Kansas adults aged 18 years and older have ever been diagnosed with diabetes. In addition, higher percentages of adults who have ever been diagnosed with diabetes were seen among: older adults, non-Hispanic African-Americans, other/multi-race adults, Hispanics, those with lower education, those with lower annual household income, those with insurance, those with chronic health conditions (current asthma, arthritis or obesity) and those living with a disability.

To reduce prevalence of diabetes among adults aged 18 years and older and to address associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Asthma

Asthma affects not only the individual but also their families, schools, neighborhoods, cities and states. The cost of asthma also affects the health care system since the annual health care expenditures for asthma are estimated at \$20.7 billion.²⁴ The Healthy People 2020 goal for asthma is to reduce the disease, death and economic burden, and improve the quality of life for all persons with asthma.

In 2015, approximately 1 in 10 Kansas adults aged 18 years and older had been diagnosed with current asthma. The percentage of Kansas adults aged 18 years and older who were diagnosed with current asthma was significantly **higher** among:

- Females compared with males
- Non-Hispanic African-Americans compared with non-Hispanic whites (age-adjusted prevalence)
- Adults who had some college compared with college graduates
- Adults with annual household incomes of less than \$15,000 compared with adults in all higher income groups
- Adults with annual household incomes of \$15,000-\$24,999 compared with adults with an annual household income of \$50,000 or more
- Adults living with a disability compared with adults living without a disability

The percentage of Kansas adults aged 18 years and older who were diagnosed with current asthma did not differ significantly by age groups or insurance status.

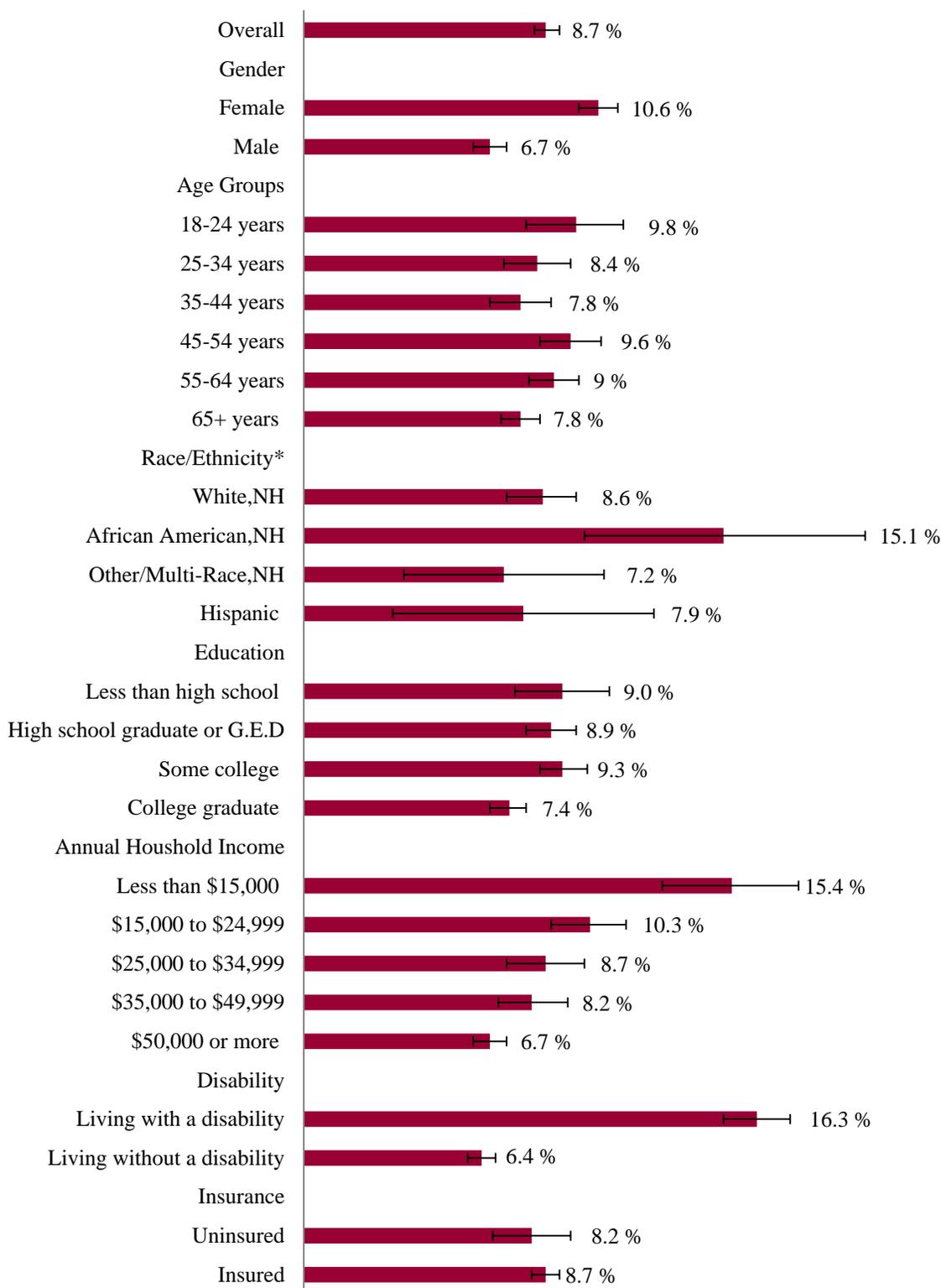
Percentage of Adults Aged 18 Years and Older With Current Asthma, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	8.7	8.2-9.1
Gender		
Female	10.6	9.9-11.3
Male	6.7	6.1-7.3
Age Groups		
18-24 years	9.8	8.1-11.6
25-34 years	8.4	7.2-9.6
35-44 years	7.8	6.7-8.9
45-54 years	9.6	8.5-10.7
55-64 years	9.0	8.1-9.9
65+ years	7.8	7.1-8.5
Race/Ethnicity*		
White, NH	8.6	7.4-9.9
African-American, NH	15.1	10.0-20.1
Other/Multi-Race, NH	7.2	3.6-10.8
Hispanic	7.9	3.2-12.6
Education		
Less than high school	9.3	7.6-11.0
High school graduate or G.E.D	8.9	8.0-9.8
Some college	9.3	8.4-10.1
College graduate	7.4	6.8-8.1
Annual Household Income		
Less than \$15,000	15.4	13.0-17.9
\$15,000 to \$24,999	10.3	9.0-11.7
\$25,000 to \$34,999	8.7	7.3-10.1
\$35,000 to \$49,999	8.2	6.9-9.4
\$50,000 or more	6.7	6.1-7.3
Disability		
Living with a disability	16.3	15.1-17.5
Living without a disability	6.4	5.9-6.9
Insurance		
Uninsured	8.2	6.8-9.6
Insured	8.7	8.2-9.2

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Current Asthma, KS BRFSS 2015



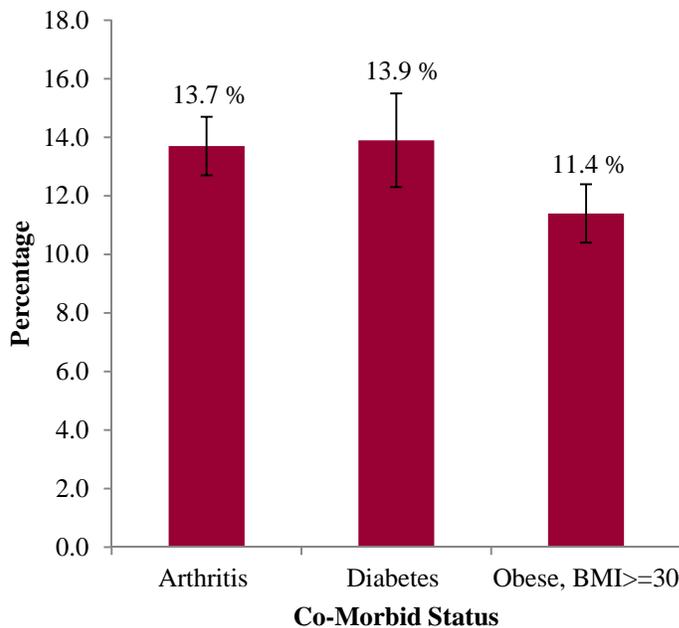
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Current Asthma by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions		Weighted Percentage	95% CI
Arthritis Status			
	Yes	13.7	12.7-14.7
	No	7.0	6.5-7.5
Diabetes Status			
	Yes	13.9	12.3-15.5
	No	8.1	7.6-8.6
Weight Category			
	Normal or Underweight, BMI<25	7.2	6.4-8.0
	Overweight, 25<= BMI<30	7.2	6.5-8.0
	Obese, BMI>=30	11.4	10.4-12.3

Percentage of Adults Aged 18 Years and Older with Current Asthma by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were diagnosed with current asthma was significantly **higher** among:

- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were overweight, normal weight or underweight

SUMMARY

About 9 percent of Kansas adults aged 18 years and older have been diagnosed with current asthma. In addition, higher percentages of adults who have been diagnosed with current asthma were seen among: females, non-Hispanic African-Americans, adults who had some college, adults with annual household incomes of less than \$24,999, those with chronic health conditions (arthritis, diabetes or obesity) and those living with a disability.

To address overall burden of current asthma and associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Arthritis

Arthritis is the most common cause of disability.²⁵ In 2003 the U.S. total attributable cost for arthritis and other rheumatic conditions was about \$128 billion (\$80.8 medical expenditures and \$47.1 billion as loss of earnings).²⁶ Arthritis includes people who have ever been told they have some form of arthritis, rheumatoid arthritis, gout, lupus or fibromyalgia. The Healthy People 2020 goal for arthritis is to reduce the disease and economic burden, and improve the quality of life for all persons with arthritis.

In 2015, approximately 1 in 4 Kansas adults aged 18 years and older had diagnosed arthritis. The percentage of Kansas adults aged 18 years and older who were diagnosed with arthritis was significantly **higher** among:

- Females compared with males
- Older adults compared with younger adults
- Non-Hispanic African-Americans, non-Hispanic whites and other/multi-race adults compared with Hispanics (age-adjusted prevalence)
- Adults with lower education compared with college graduates
- Adults with lower annual household incomes compared with adults in higher annual household income groups
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

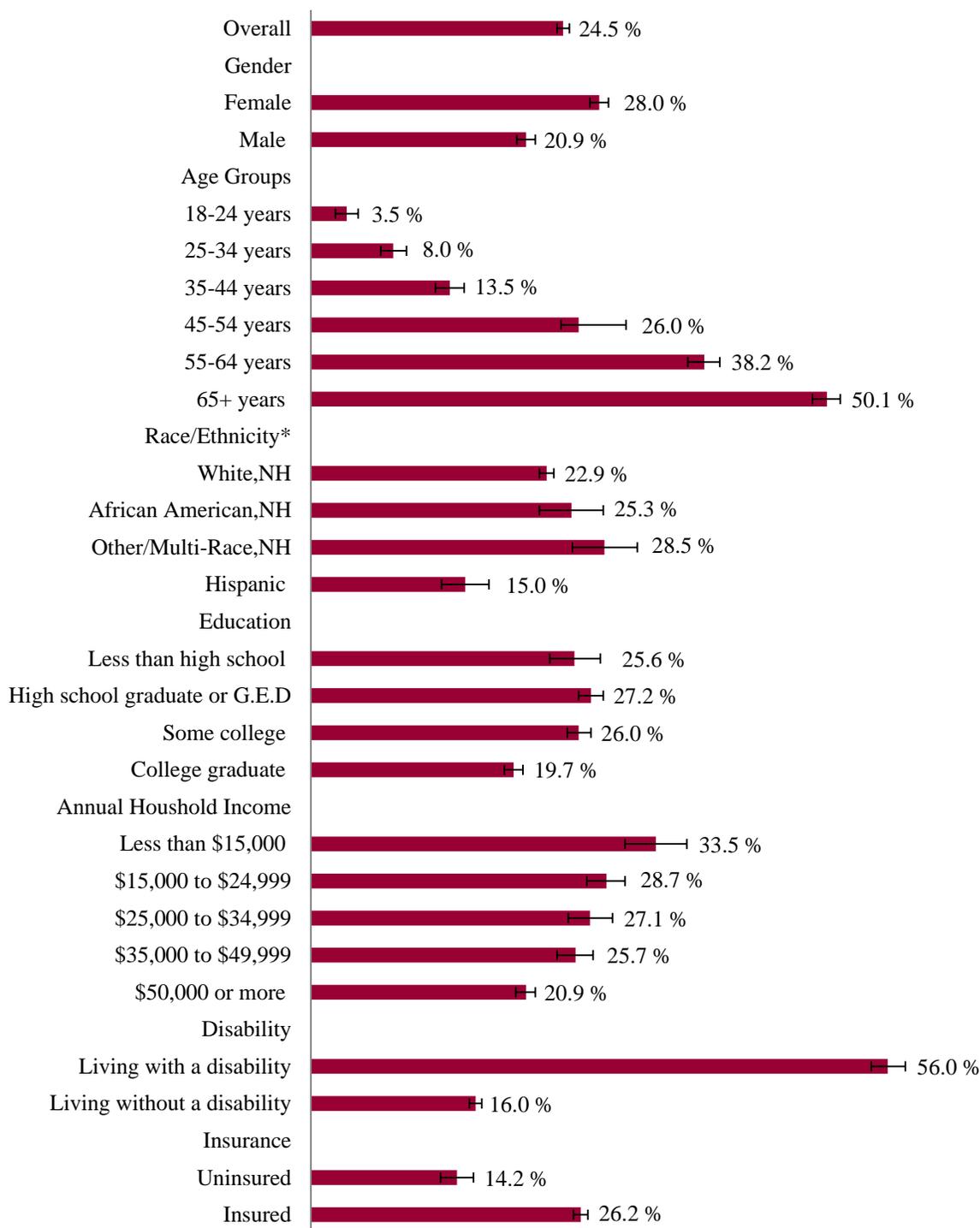
Percentage of Adults Aged 18 Years and Older Diagnosed With Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	24.5	23.9-25.1
Gender		
Female	28.0	27.1-28.9
Male	20.9	20.0-21.8
Age Groups		
18-24 years	3.5	2.4-4.6
25-34 years	8.0	6.7-9.2
35-44 years	13.5	12.1-14.9
45-54 years	26.0	21.4-27.7
55-64 years	38.2	36.7-39.8
65+ years	50.1	48.8-51.5
Race/Ethnicity*		
White, NH	22.9	22.2-23.6
African-American, NH	25.3	22.2-28.4
Other/Multi-Race, NH	28.5	25.3-31.6
Hispanic	15.0	12.7-17.3
Education		
Less than high school	25.6	23.1-28.0
High school graduate or G.E.D	27.2	26.0-28.4
Some college	26.0	24.8-27.1
College graduate	19.7	18.8-20.6
Annual Household Income		
Less than \$15,000	33.5	30.5-36.5
\$15,000 to \$24,999	28.7	26.9-30.6
\$25,000 to \$34,999	27.1	24.9-29.2
\$35,000 to \$49,999	25.7	24.0-27.5
\$50,000 or more	20.9	20.0-21.9
Disability		
Living with a disability	56.0	54.3-57.6
Living without a disability	16.0	15.4-16.6
Insurance		
Uninsured	14.2	12.6-15.8
Insured	26.2	25.5-26.9

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Diagnosed with Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia, KS BRFSS 2015



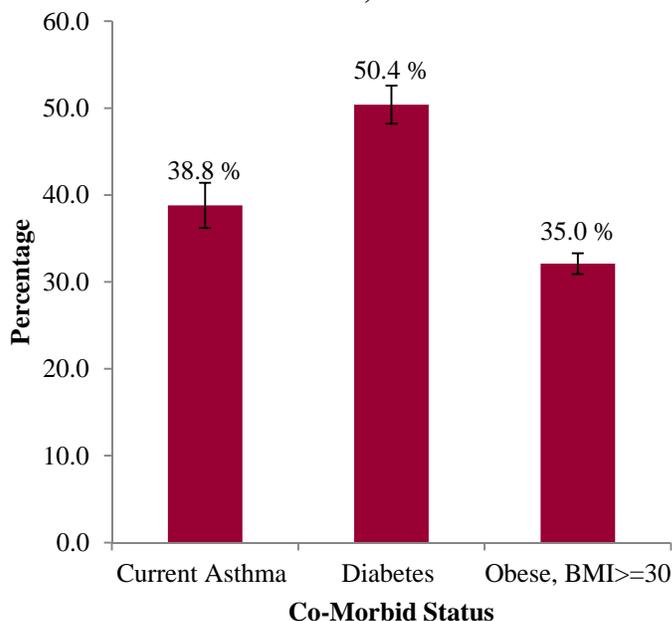
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Diagnosed With Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions		Weighted Percentage	95% CI
Current Asthma			
	Yes	38.8	36.2-41.4
	No	23.1	22.5-23.7
Diabetes Status			
	Yes	50.4	48.2-52.6
	No	21.7	21.1-22.4
Weight Category			
	Normal or Underweight, BMI<25	18.5	17.5-19.5
	Overweight, 25<= BMI<30	24.2	23.1-25.3
	Obese, BMI>=30	32.1	30.9-33.4

Percentage of Adults Aged 18 Years and Older Diagnosed with Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus or Fibromyalgia by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were diagnosed with arthritis was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with diabetes compared with those without diabetes
- Adults who were obese or overweight compared with those who were normal weight or underweight

SUMMARY

Approximately 25 percent of Kansas adults aged 18 years and older have been diagnosed with arthritis. In addition, higher percentages of adults who have ever been diagnosed with arthritis were seen among: females, older adults, those with lower education, those with a lower annual household income, non-Hispanic African-Americans, non-Hispanic whites, other/multi race adults, those with insurance, those with chronic health conditions (current asthma, diabetes or obesity) and those living with a disability.

To address high prevalence of arthritis and associated disparities in population subgroups, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Heart Disease

In 2015, the second leading cause of death among Kansans was heart disease.²⁷ Heart disease refers to several different types of heart conditions, the most common being coronary artery disease.²⁸ Coronary artery disease can cause heart attacks, angina and heart failure.²⁸ In the U.S., coronary heart disease costs \$108.9 billion each year.²⁹ One Healthy People 2020 goal for heart disease is to increase overall cardiovascular health in the U.S. population.

In 2015, approximately 1 in 25 Kansas adults aged 18 years and older had ever been diagnosed with heart disease. The percentage of Kansas adults aged 18 years and older that had ever been diagnosed with heart disease was significantly **higher** among:

- Males compared with females
- Older adults compared with younger adults
- Adults who did not receive a high school diploma or GED or did not graduate college compared with college graduates
- Adults with an annual household income of less than \$50,000 compared with adults with an annual household income of \$50,000 or more
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

The percentage of Kansas adults aged 18 years and older who had ever been diagnosed with heart disease did not differ significantly by race/ethnicity groups (age-adjusted prevalence).

Percentage of Adults Aged 18 Years and Older With Diagnosed Heart Disease, KS BRFSS 2015

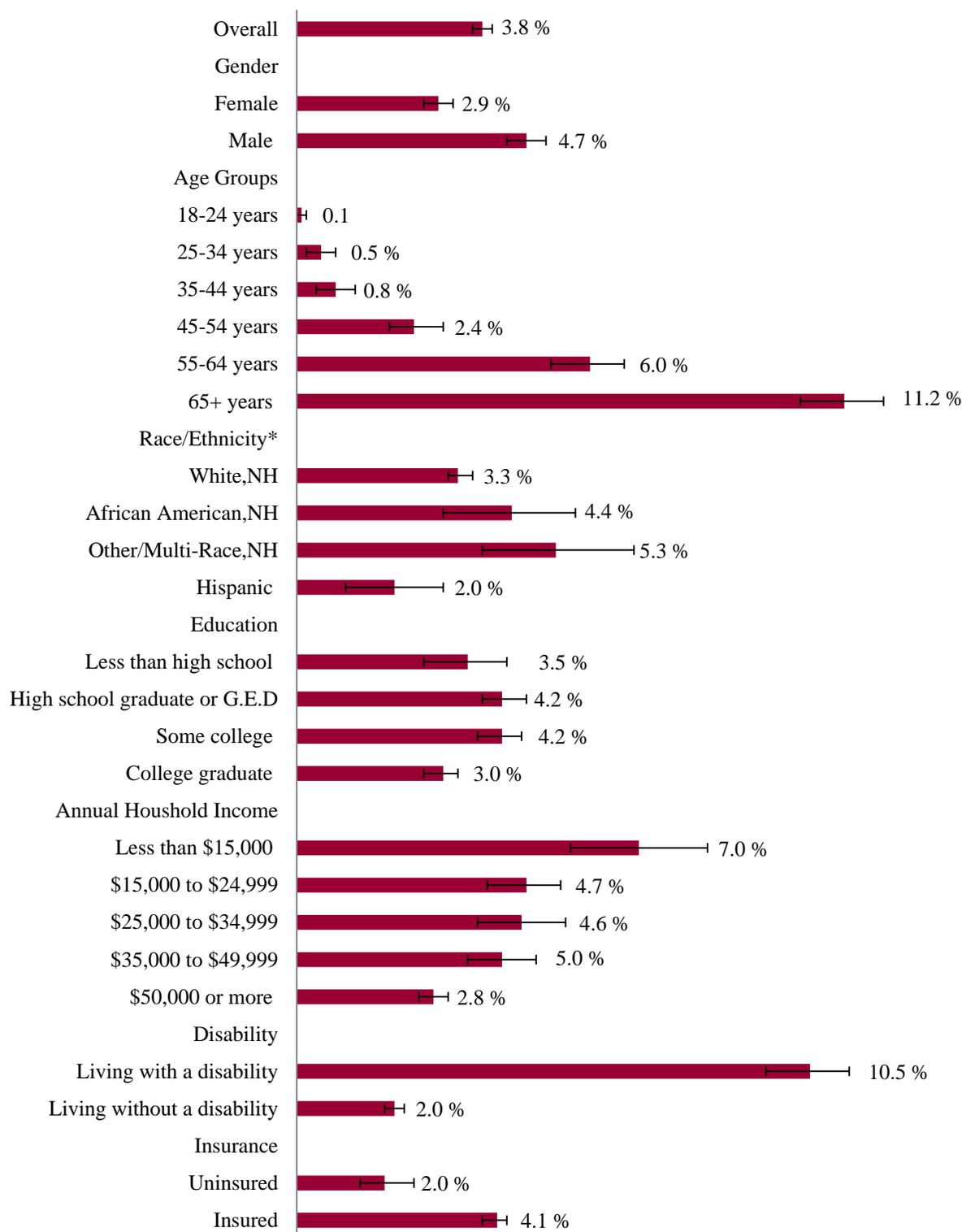
Demographic Characteristics	Weighted Percentage	95% CI
Overall	3.8	3.6-4.0
Gender		
Female	2.9	2.6-3.2
Male	4.7	4.3-5.1
Age Groups		
18-24 years	0.1	0.0-0.2
25-34 years	0.5	0.2-0.8
35-44 years	0.8	0.4-1.2
45-54 years	2.4	1.8-2.9
55-64 years	6.0	5.3-6.8
65+ years	11.2	10.4-12.1
Race/Ethnicity*		
White, NH	3.3	3.0-3.5
African-American, NH	4.4	3.1-5.8
Other/Multi-Race, NH	5.3	3.7-6.8
Hispanic	2.0	1.0-3.0
Education		
Less than high school	3.5	2.7-4.4
High school graduate or G.E.D	4.2	3.7-4.6
Some college	4.2	3.8-4.7
College graduate	3.0	2.7-3.4
Annual Household Income		
Less than \$15,000	7.0	5.6-8.4
\$15,000 to \$24,999	4.7	4.0-5.5
\$25,000 to \$34,999	4.6	3.7-5.5
\$35,000 to \$49,999	4.2	3.5-4.9
\$50,000 or more	2.8	2.5-3.1
Disability		
Living with a disability	10.5	9.7-11.4
Living without a disability	2.0	1.8-2.2
Insurance		
Uninsured	1.8	1.2-2.3
Insured	4.1	3.9-4.4

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population.

** Insufficient sample and/or statistically unreliable estimate

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Diagnosed Heart Disease, KS BRFSS 2015



*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population.

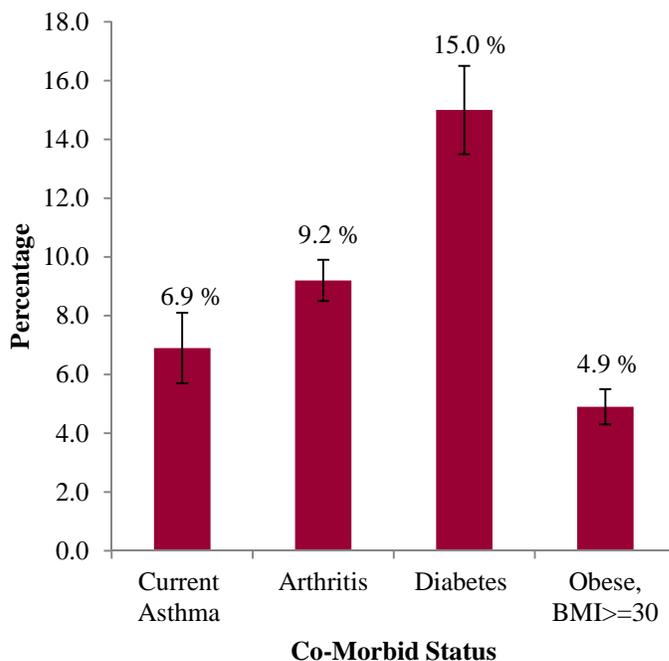
** Insufficient sample and/or statistically unreliable estimate.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

**Percentage of Adults Aged 18 Years and Older
With Diagnosed Heart Disease by
Co-Morbid Conditions, KS BRFSS 2015**

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	6.9	5.7-8.1
No	3.5	3.3-3.8
Arthritis Status		
Yes	9.2	8.5-9.9
No	2.0	1.8-2.2
Diabetes Status		
Yes	15.0	13.5-16.5
No	2.6	2.4-2.8
Weight Category		
Normal or Underweight, BMI<25	2.9	2.5-3.3
Overweight, 25<= BMI<30	4.3	3.8-4.7
Obese, BMI>=30	4.9	4.3-5.4

Percentage of Adults Aged 18 Years and Older with Diagnosed Heart Disease by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were ever diagnosed with heart disease was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were overweight, normal weight or underweight
- Adults who were overweight compared with those who were normal weight or underweight

SUMMARY

About 4 percent of Kansas adults aged 18 years and older have ever been diagnosed with heart disease. In addition, higher percentages of adults who have ever been diagnosed with heart disease were seen among: males, older adults, those who did not receive a high school diploma or GED, adults with annual household income of less than \$50,000, those with insurance, those with chronic health conditions (current asthma, arthritis, diabetes or obesity) and those living with a disability.

One Healthy People 2020 goal for heart disease is to increase overall cardiovascular health in the U.S. To address this, Kansas needs to reduce prevalence and risk factors of heart disease among adults aged 18 years and older as well as address associated disparities.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Stroke

Stroke, also called cerebrovascular disease, occurs when the blood supply to the brain is abruptly interrupted. It is the third leading cause of death in the United States and fifth in Kansas.^{27,30} Stroke is a medical emergency and can lead to permanent disability and death. The Healthy People 2020 goal for stroke is to reduce the stroke deaths.

In 2015, approximately 1 in 30 Kansas adults aged 18 years and older had a stroke. The percentage of Kansas adults aged 18 years and older who had a stroke was significantly **higher** among:

- Older adults compared with younger adults
- Non-Hispanic African-Americans and Non-Hispanic Other/Multi-Race compared with non-Hispanic whites (age-adjusted prevalence)
- Adults with lower education compared with adults in higher education groups
- Adults with lower annual household incomes compared with adults with an annual household income of \$50,000 or more
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

The percentage of Kansas adults aged 18 years and older who had a stroke did not differ significantly by gender.

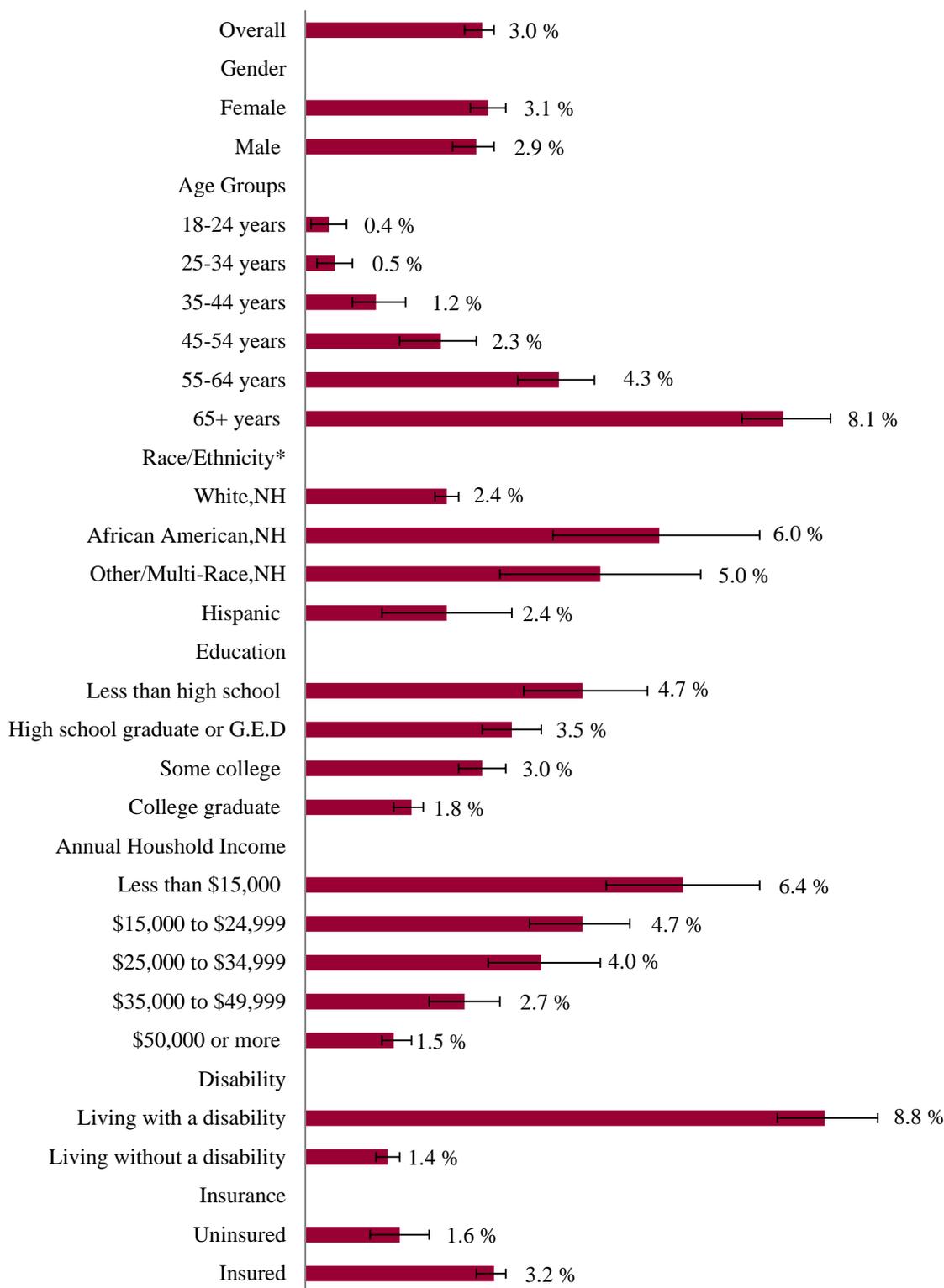
Percentage of Adults Aged 18 Years and Older Who Had a Stroke, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	3.0	2.8-3.3
Gender		
Female	3.1	2.8-3.4
Male	2.9	2.6-3.3
Age Groups		
18-24 years	0.4	0.1-0.7
25-34 years	0.5	0.2-0.8
35-44 years	1.2	0.7-1.6
45-54 years	2.3	1.7-3.0
55-64 years	4.3	3.7-5.0
65+ years	8.1	7.3-8.8
Race/Ethnicity*		
White, NH	2.4	2.2-2.6
African-American, NH	6.0	4.3-7.8
Other/Multi-Race, NH	5.0	3.3-6.7
Hispanic	2.4	1.3-3.5
Education		
Less than high school	4.7	3.6-5.7
High school graduate or G.E.D	3.5	3.0-4.0
Some college	3.0	2.6-3.4
College graduate	1.8	1.6-2.1
Annual Household Income		
Less than \$15,000	6.4	5.1-7.7
\$15,000 to \$24,999	4.7	3.9-5.6
\$25,000 to \$34,999	4.0	3.0-4.9
\$35,000 to \$49,999	2.7	2.1-3.3
\$50,000 or more	1.5	1.2-1.7
Disability		
Living with a disability	8.8	7.9-9.6
Living without a disability	1.4	1.2-1.6
Insurance		
Uninsured	1.6	1.1-2.1
Insured	3.2	3.0-3.5

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Had a Stroke, KS BRFSS 2015



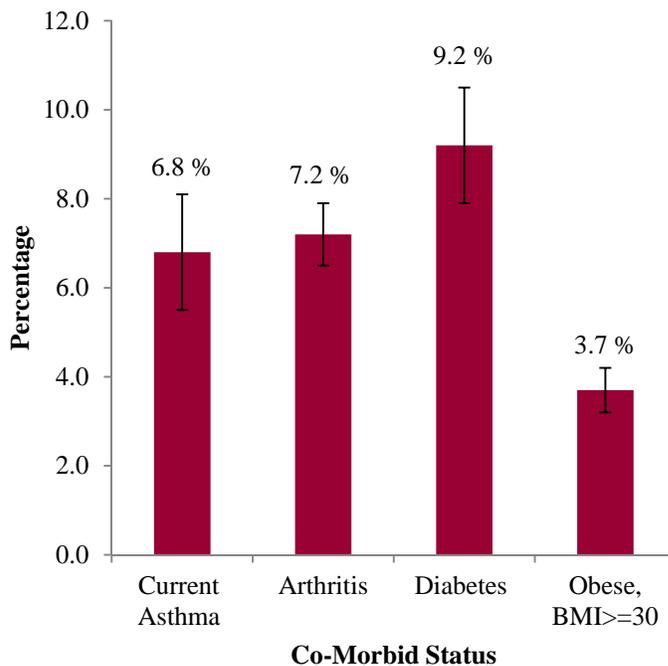
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Had a Stroke by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	6.8	5.5-8.1
No	2.6	2.4-2.9
Arthritis Status		
Yes	7.2	6.5-7.8
No	1.6	1.4-1.8
Diabetes Status		
Yes	9.2	7.9-10.4
No	2.4	2.1-2.6
Weight Category		
Normal or Underweight, BMI<25	2.7	2.3-3.0
Overweight, 25<= BMI<30	2.9	2.5-3.4
Obese, BMI>=30	3.7	3.2-4.2

Percentage of Adults Aged 18 Years and Older Who Had a Stroke by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who had a stroke was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were obese compared with those who were normal or underweight

SUMMARY

Approximately 3.0 percent of Kansas adults aged 18 years and older had a stroke. In addition, higher percentages of adults who had a stroke were seen among: older adults, non-Hispanic African-Americans, non-Hispanic other/multi-racial, those with lower education, adults with lower annual household income, those with insurance, those with chronic health conditions (current asthma, arthritis, diabetes or obesity) and those living with a disability.

The Healthy People 2020 goal for stroke is to reduce deaths due to stroke. Therefore to reduce prevalence of stroke among adults aged 18 years and older and to address associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Cancer

In 2015, the leading cause of death among Kansans was cancer.²⁷ Yet, many cancers are preventable by reducing risk factors such as tobacco use, physical inactivity, poor nutrition and obesity.³¹ It is important to continue to monitor cancer prevalence in Kansas. Healthy People 2020 has several objectives related to reducing the death rate of specific types of cancers, such as lung, uterine, colorectal and prostate cancer.

In 2015, approximately 1 in 14 Kansas adults aged 18 years and older had ever been diagnosed with cancer (excluding skin cancer). The percentage of Kansas adults aged 18 years and older who were ever diagnosed with cancer (excluding skin cancer) was significantly **higher** among:

- Females compared with males
- Older adults compared with younger adults
- Non-Hispanic whites compared Hispanics (age-adjusted prevalence)
- Adults with an annual household income of lower than \$35,000 compared with adults with an annual household income of \$50,000 or more
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with cancer (excluding skin cancer) did not differ significantly by education groups.

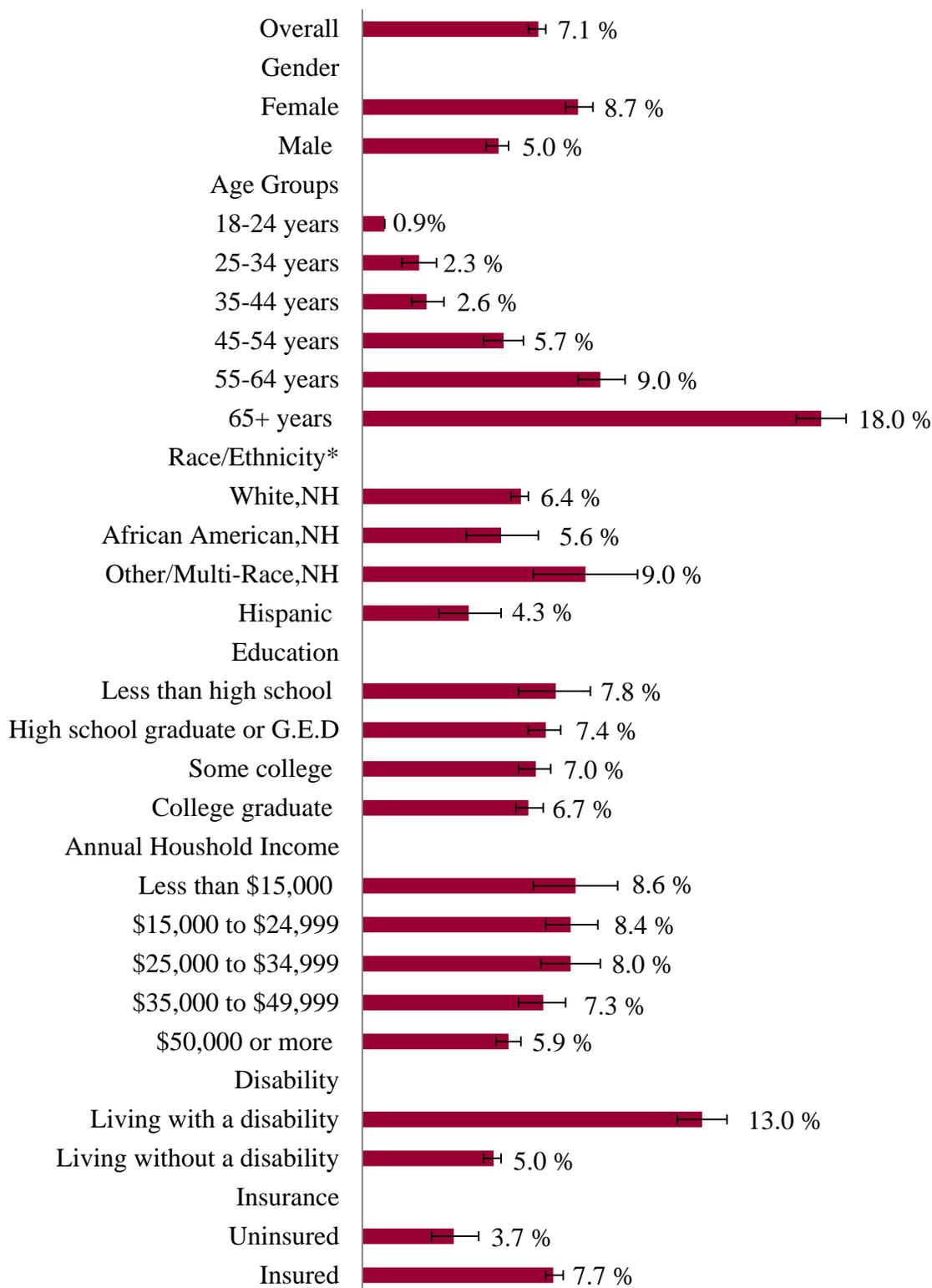
Percentage of Adults Aged 18 Years and Older With Diagnosed Cancer, KS BRFSS 2015

Demographic Characteristics	Weighted Percentage	95% CI
Overall	7.1	6.8-7.5
Gender		
Female	8.7	8.1-9.2
Male	5.5	5.1-6.0
Age Groups		
18-24 years	0.9	0.4-1.5
25-34 years	2.3	1.6-3.0
35-44 years	2.6	1.9-3.2
45-54 years	5.7	4.9-6.5
55-64 years	9.6	8.6-10.5
65+ years	18.5	17.5-19.5
Race/Ethnicity*		
White, NH	6.4	6.1-6.8
African-American, NH	5.6	4.1-7.0
Other/Multi-Race, NH	9.0	6.9-11.1
Hispanic	4.3	3.0-5.5
Education		
Less than high school	7.8	6.4-9.3
High school graduate or G.E.D	7.4	6.8-8.1
Some college	7.0	6.4-7.7
College graduate	6.7	6.1-7.2
Annual Household Income		
Less than \$15,000	8.6	6.9-10.3
\$15,000 to \$24,999	8.4	7.3-9.4
\$25,000 to \$34,999	8.4	7.2-9.6
\$35,000 to \$49,999	7.3	6.4-8.3
\$50,000 or more	5.9	5.4-6.4
Disability		
Living with a disability	13.7	12.7-14.7
Living without a disability	5.3	5.0-5.7
Insurance		
Uninsured	3.7	2.7-4.6
Insured	7.7	7.3-8.0

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Diagnosed Cancer, KS BRFSS 2015



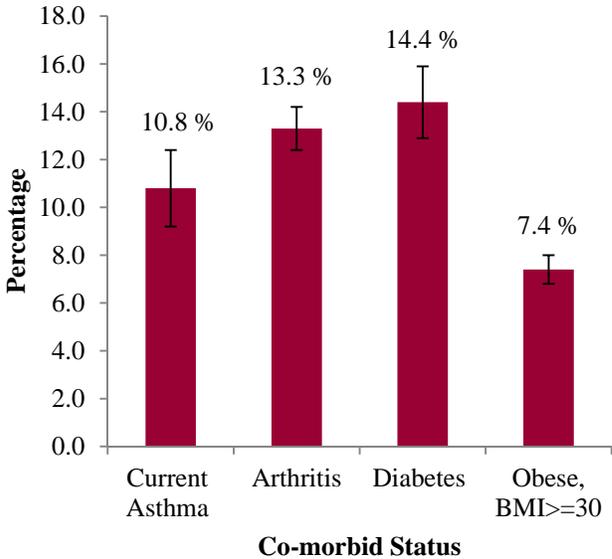
*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With Diagnosed Cancer by Co-Morbid Conditions, KS BRFSS 2015

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	10.8	9.2-12.4
No	6.7	6.4-7.1
Arthritis Status		
Yes	13.3	12.4-14.2
No	5.1	4.7-5.4
Diabetes Status		
Yes	14.4	12.9-15.8
No	6.3	6.0-6.7
Weight Category		
Normal or Underweight, BMI<25	6.8	6.2-7.4
Overweight, 25<=BMI<30	7.5	6.9-8.2
Obese, BMI>=30	7.4	6.8-8.1

Percentage of Adults 18 Years and Older with Diagnosed Cancer by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were ever diagnosed with cancer (excluding skin cancer) was significantly **higher** among:

- Adults with current asthma compared with those without current asthma
- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with cancer (excluding skin cancer) did not differ significantly by weight category.

SUMMARY

Approximately 7.1 percent of Kansas adults aged 18 years and older have ever been diagnosed with cancer (excluding skin cancer). In addition, higher percentages of adults who have ever been diagnosed with cancer (excluding skin cancer) were seen among: females, older adults, non-Hispanic whites, adults with an annual household income of less than \$35,000, those with insurance, adults with chronic health conditions (current asthma, arthritis or diabetes) and those living with a disability.

To reduce prevalence of cancer among adults aged 18 years and older and to address associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Skin Cancer

In the U.S., the most common type of cancer is skin cancer.³² The deadliest kind of skin cancer is melanoma and is caused by exposure to ultraviolet (UV) light.³² Therefore, it is important to reduce UV exposure and track the prevalence of skin cancer. The Healthy People 2020 goals for skin cancer are to reduce the melanoma cancer death rate and to increase the proportions of people who participate in behaviors that reduce their exposure to harmful UV irradiation and avoid sunburn.

In 2015, approximately 1 in 15 Kansas adults aged 18 years and older had ever been diagnosed with skin cancer. The percentage of Kansas adults aged 18 years and older who were ever diagnosed with skin cancer was significantly **higher** among:

- Older adults compared with younger adults
- Non-Hispanics whites compared with Hispanics (age-adjusted prevalence)
- Adults who are college graduates compared with adults with less than high school education or some college education
- Adults with an annual household income of \$35,000 or more compared with adults with an annual household income less than \$15,000
- Adults living with a disability compared with adults living without a disability
- Adults with insurance compared with adults with no insurance

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with skin cancer did not differ significantly by gender.

Percentage of Adults Aged 18 Years and Older With Diagnosed Skin Cancer, KS BRFSS 2015

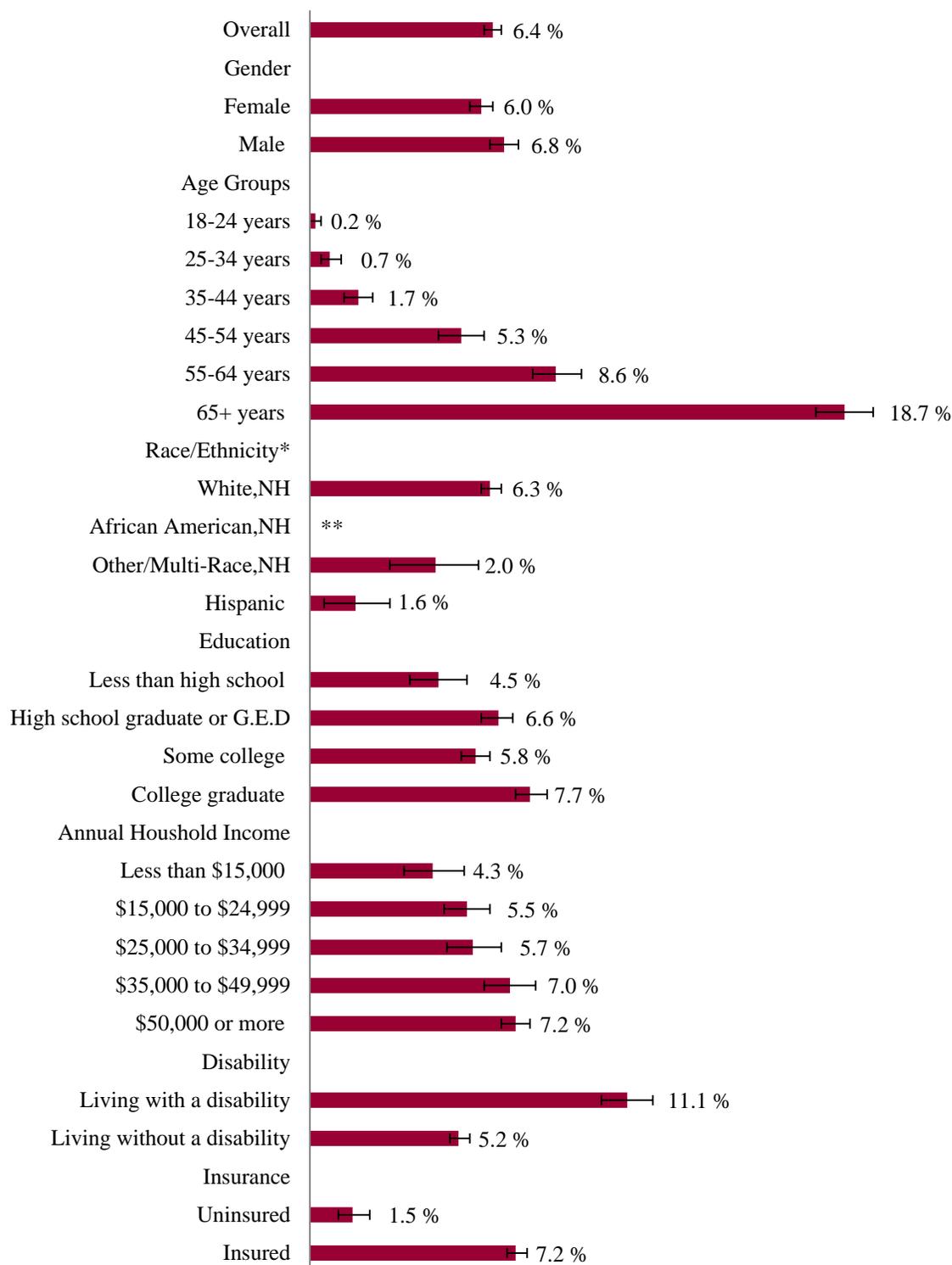
Demographic Characteristics	Weighted Percentage	95% CI
Overall	6.4	6.1-6.7
Gender		
Female	6.0	5.6-6.4
Male	6.8	6.3-7.3
Age Groups		
18-24 years	0.2	0.0-0.4
25-34 years	0.7	0.3-1.0
35-44 years	1.7	1.2-2.2
45-54 years	5.3	4.5-6.1
55-64 years	8.6	7.7-9.4
65+ years	18.7	17.7-19.7
Race/Ethnicity*		
White, NH	6.3	5.9-6.6
African-American, NH	*	*
Other/Multi-Race, NH	4.4	2.9-6.0
Hispanic	1.6	0.4-2.7
Education		
Less than high school	4.5	3.5-5.5
High school graduate or G.E.D	6.6	6.1-7.2
Some college	5.8	5.3-6.3
College graduate	7.7	7.1-8.2
Annual Household Income		
Less than \$15,000	4.3	3.2-5.3
\$15,000 to \$24,999	5.5	4.7-6.3
\$25,000 to \$34,999	5.7	4.7-6.6
\$35,000 to \$49,999	7.0	6.1-7.9
\$50,000 or more	7.2	6.7-7.7
Disability		
Living with a disability	11.1	10.2-12.0
Living without a disability	5.2	4.8-5.5
Insurance		
Uninsured	1.5	0.9-2.0
Insured	7.2	6.8-7.5

*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population.

** Insufficient sample and/or statistically unreliable estimate

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Diagnosed Skin Cancer, KS BRFSS 2015



*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population.

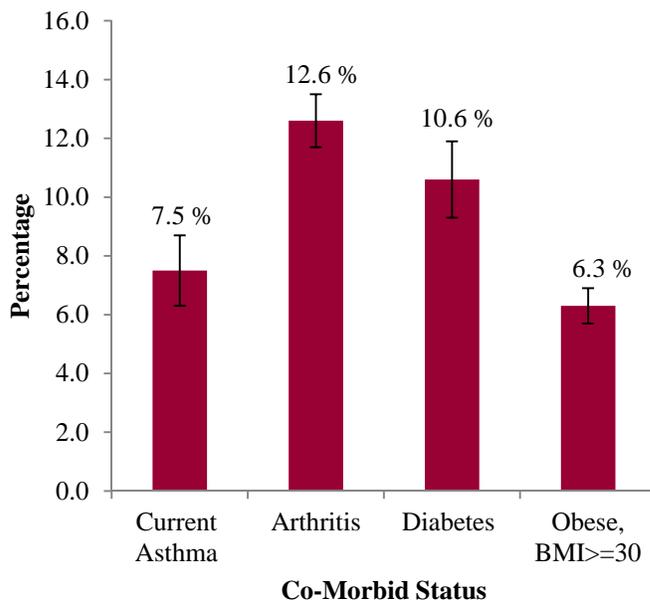
** Insufficient sample and/or statistically unreliable estimate

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

**Percentage of Adults Aged 18 Years and Older
With Diagnosed Skin Cancer
by Co-Morbid Conditions, KS BRFSS 2015**

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	7.5	6.3-8.7
No	6.3	6.0-6.6
Arthritis Status		
Yes	12.6	11.7-13.4
No	4.4	4.1-4.7
Diabetes Status		
Yes	10.6	9.3-11.9
No	5.9	5.6-6.3
Weight Category		
Normal or Underweight, BMI<25	6.1	5.5-6.7
Overweight, 25<= BMI<30	7.6	7.0-8.2
Obese, BMI>=30	6.3	5.7-6.8

Percentage of Adults Aged 18 Years and Older with Diagnosed Skin Cancer by Co-Morbid Conditions, KS BRFSS 2015



The percentage of Kansas adults aged 18 years and older who were ever diagnosed with skin cancer was significantly **higher** among:

- Adults with arthritis compared with those without arthritis
- Adults with diabetes compared with those without diabetes
- Adults who were overweight compared with those who were normal or underweight

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with skin cancer did not differ significantly by current asthma status.

SUMMARY

Approximately 6.4 percent of Kansas adults aged 18 years and older have ever been diagnosed with skin cancer. In addition, higher percentages of adults who have ever been diagnosed with skin cancer were seen among: older adults, non-Hispanic whites, college graduates, adults with high incomes, those with insurance, adults with chronic health conditions (arthritis, diabetes or overweight adults) and adults living with a disability.

To reduce prevalence of skin cancer among adults aged 18 years and older and to address associated disparities, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Technical Notes

Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS is the world's largest annual population-based survey system tracking health conditions and risk behaviors in the United States since 1984. It is coordinated by the Centers for Disease Control and Prevention (CDC) and is conducted in every state and several U.S. territories. The Kansas Department of Health and Environment (KDHE), Bureau of Health Promotion (BHP) conducted the first BRFSS survey in Kansas in 1990 as a point-in-time survey. Since 1992, BHP has conducted the Kansas BRFSS survey annually, thus providing the ability to examine the burden and monitor the trends of various diseases and risk factors/behaviors. BRFSS is the only source of population-based data for several public health indicators in Kansas. The 2015 Kansas BRFSS was conducted among non-institutionalized adults aged 18 years and older living in private residences and college housings with landline and/or cell phone service.

For the 2015 Kansas BRFSS survey, the target total (combined landline and cell phone sample) sample size was 20,000 complete interviews with a target of 14,000 complete interviews for the landline telephone survey component (70% of total sample) and 6,000 complete interviews for the cellular telephone survey component (30% of total sample).

The weighted data analysis was conducted to estimate overall prevalence of the specific indicators in relation to Healthy People 2020 i.e. risk factors, diseases and behaviors among adults aged 18 years and older in Kansas. In addition, when comparing within subgroups to overall prevalence estimates, stratified analyses was done to examine burden of the Healthy People 2020 indicators within different population subgroups based on socio-demographic factors, risk behaviors and co-morbid conditions.

Several considerations should be taken into account when interpreting BRFSS estimates:

- The prevalence estimates from 2015 Kansas BRFSS are representative of non-institutionalized adults aged 18 years and older living in private residences and college housings with landline and/or cell phone service.
- BRFSS estimates do not apply to individuals residing in residences without telephone service and those who reside on military bases, prisons or nursing homes.
- Due to changes in survey design and weighting methodology in 2011, comparisons cannot be made between the prevalence estimates generated for previous years and those generated for 2011, 2012, 2013, 2014 and 2015.

For more information on BRFSS methodology, visit www.kdheks.gov/brfss/technotes.html.

Age-adjustment:

Age-adjustment is a statistical method for standardizing prevalence estimates for groups that have different underlying age distributions thus making them more comparable. Age-adjusted prevalence estimates should be used to compare groups if the underlying population distribution is different or changes over time (for example, comparing estimates for veterans and civilians). Age-adjusted prevalence estimates should be understood as relative indices, not as actual measures of burden, and should not be compared with unadjusted prevalence estimates.

Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

All age-adjusted prevalence estimates in this report are computed using the direct method. Briefly, prevalence estimates are first computed within each age group stratum. The products of each age-specific rate multiplied by the proportion of the 2000 U.S. Standard Population in that age category are summed across the age group strata.

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Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

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Due to changes in BRFSS survey methodology 2011, 2012, 2013, 2014 and 2015 BRFSS estimates cannot be compared with estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.