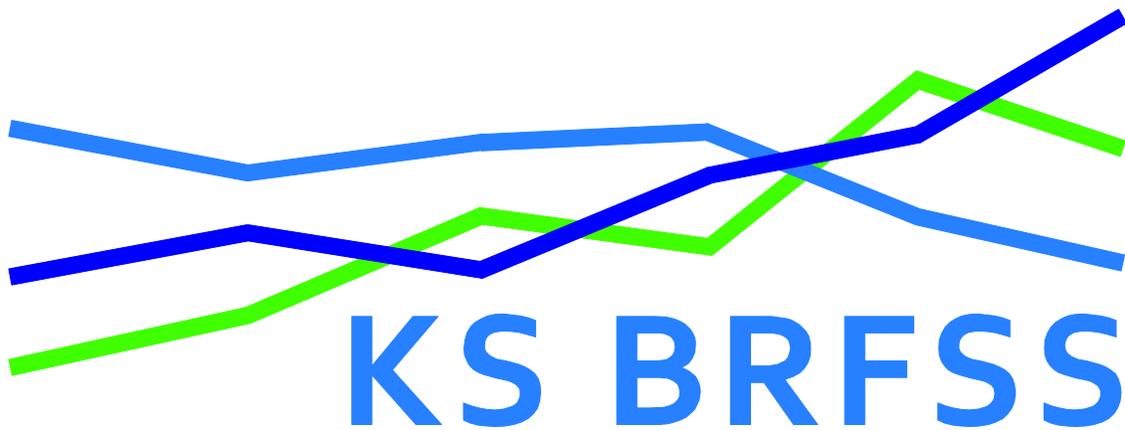


Health Risk Behaviors of Kansas 2012



KS BRFSS

Kansas Behavioral Risk Factor Surveillance System



Health Risk Behaviors of Kansans 2012

Kansas Department of Health and Environment
Dr. Robert Moser, Secretary and State Health Officer

Paula F. Clayton, MS, RD, LD
Director, Bureau of Health Promotion, KDHE

REPORT PREPARATION:

Jeanie Santaularia, MPH
Health Survey Coordinator/Epidemiologist
Bureau of Health Promotion, KDHE

REPORT SUPERVISION:

Ghazala Perveen, MBBS, PhD, MPH
Director of Science and Surveillance/Health Officer II
Bureau of Health Promotion, KDHE

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Bureau of Health Promotion
1000 SW Jackson, Suite 230
Topeka, KS 66612
(785) 291-3742
healthpromotion@kdheks.gov
www.kdheks.gov/bhp

Project Funding:

Partial funding for the 2012 Behavioral Risk Factor Survey was provided by cooperative agreements CDC-RFA-SO11-110102CONT12 from the Centers for Disease Control and Prevention, Atlanta GA.

Kansas Department of Health and Environment
Bureau of Health Promotion
March 2014

Table of Contents

Behavioral Risk Factor Surveillance System (BRFSS) Overview	4
Executive Summary	7
Access to Health Care: Health Insurance	11
Access to Health Care: No Personal Health Care Provider	17
Injury and Violence: Seatbelt	23
Injury and Violence: Falls	26
Clinical Preventative Services: Flu shot.....	29
Clinical Preventative Services: Cervical Cancer.....	32
Clinical Preventative Services: Breast Cancer.....	34
Clinical Preventative Services: Colorectal Cancer	38
Nutrition, Physical Activity, and Obesity: Obesity.....	41
Nutrition, Physical Activity, and Obesity: Leisure-time Physical Activity	44
Tobacco Use: Current Cigarette Smoking.....	47
Tobacco Use: Smokeless Tobacco	50
Oral Health: Oral Health Care System.....	53
Oral Health: Dental Insurance.....	56
Oral Health: Lost of All Permanent Teeth.....	59
Substance Abuse: Binge Drinking.....	62
Substance Abuse: Drinking and Driving.....	65
Mental Health: Serious Psychological Distress.....	68
Mental Health: Depression.....	71
Reproductive and Sexual Health: HIV	74
Chronic Health Conditions: Diabetes.....	77
Chronic Health Conditions: Pre-Diabetes.....	77
Chronic Health Conditions: Hypertension.....	80
Chronic Health Conditions: Asthma.....	83
Chronic Health Conditions: Diabetes.....	86
Chronic Health Conditions: Arthritis.....	89
Technical Notes.....	92
References.....	94

BRFSS Overview

The Behavioral Risk Factor Surveillance System (BRFSS) is a random digit dial telephone survey of non-institutionalized adults age 18 years and older. If applicable, adult respondents also provide limited data on a randomly selected child in the household via surrogate interview. The 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 United States territories. The first BRFSS survey in Kansas was conducted as a point-in-time survey in 1990. Kansas has conducted the BRFSS survey annually since 1992.

The overall goal of the BRFSS is to develop and 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 such that 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 been rising steadily. The increase has been more rapid since 2009. More than 3 of every 10 American households (31.6%) had only cell phone service during the first half of 2011. In the first half of 2003 cell phone only service was only 3 percent. The percentage of households with both landline and cell phone service, receiving all or almost all calls on the cell phone is also increasing. In 2011, nearly 1 of every 6 U.S. households (16.4%) with dual phone service received all or almost all calls on cell phones. The demographic characteristics of adults living in cell phone only service households are different. These adults are more likely to be:

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

young, males, Hispanics, non-Hispanics African Americans, living alone or with unrelated adults, living in poverty or near poverty, and renting a home. These changes in phone use represent a threat to the validity of traditional Random Digit Dialing landline phone surveys such as the BRFSS.

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

1. Use of dual frame sampling method (landline and cell phone samples) instead of single frame method (landline phone sample). The sample includes:
 - Adults 18 years and older living in a private residence with landline phone service
 - Adults 18 years and older living in a private residence with cell phone only service (at least 20% of total sample of complete interviews)
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. The raking method adjusted the survey sample for age, sex, race and ethnicity, education level, marital status, home ownership and telephone type (landline/cell) to increase the representativeness of survey estimates for the general population.

Impact of New Survey Methodology on 2011 and 2012 BRFSS

Changes in the 2011 BRFSS methodology will 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. Comparisons cannot be made between the prevalence estimates of the health indicators generated for the previous years and those generated for 2011. The 2012 and 2011 data cannot be compared to 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.

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

Analysis, Interpretation and Use of 2012 Kansas BRFSS Data

For analysis, the 2011 and 2012 Kansas BRFSS dataset cannot be combined with those from previous years as sampling and weighting methods are different. Continue using weighted data analysis techniques for analysis of 2012 data. Interpretation of prevalence estimates has not changed. 2012 BRFSS provides prevalence estimates of diseases, risk factors/behaviors and other health indicators for adult Kansans 18 years and older. 2012 BRFSS also provides prevalence estimates of health indicators for various socio-demographic subgroups in Kansas. The prevalence estimates from 2012 Kansas BRFSS are representative of non-institutionalized adults' ages 18 years and older living in private residences with landline and/or cell phone service.

2012 BRFSS data can be reliably used for: examining 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 2012 and previous years, please visit: <http://www.kdheks.gov/brfss/index.html>

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

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 were selected based on their relevance to broad public health topics and availability of data to measure their progress. They serve as a snapshot of the nation's progress toward improving overall health status 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

2012 Kansas BRFSS has collected data on several topics of the Healthy People 2020. This report examined the Kansas data in context with the targets set for several objectives outlined in the Healthy People 2020 document.

Report Highlights:

Access to Health Services

- Kansas has not yet met the HP 2020 targets for objectives related to health care insurance and ongoing primary care.
- The percentage of Kansas adults aged 18-64 years with no health care coverage was significantly **higher** among adults with less than high school education compared to those with higher levels of education.
- The percentage of Kansas adults aged 18 years and older with no personal health care provider was significantly **higher** among males compared to females.

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

Injury and Violence

- Kansas has not yet met the HP 2020 targets for objectives related to seatbelt use.
- The percentage of Kansas adults aged 18 years and older who did not always wear a seatbelt when they drove or rode in a car was significantly **higher** among younger adults compared to adults in older age groups.
- The percentage of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months was significantly **higher** among adults with an annual household income less than \$15,000 compared to adults with annual household income with \$50,000 or more.

Clinical Preventive Services

- Kansas has not yet met the HP 2020 targets for objectives related to breast, cervical and colorectal cancer screening.
- 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 to adults with insurance.
- The percentage of Kansas women aged 21-65 who did not get a pap smear test within the preceding three years was significantly **higher** among women with lower annual household income compared to women in higher annual household income groups.
- The percentage of Kansas women aged 50-74 years who did not receive a mammogram within the preceding two years was significantly **higher** among younger women compared to women in older age groups.
- The percentage of Kansas adults aged 50-75 years who were not up-to-date with colorectal screening was significantly **higher** among Hispanics as compared to non-Hispanic whites and non-Hispanic African Americans.

Nutrition, Physical Activity, and Obesity

- Kansas has met the HP 2020 targets for objectives related to obesity and leisure-time physical activity.
- Disparities are seen in population subgroups. HP 2020 target was not met yet in these population subgroups.
- The percentage of Kansas adults aged 18 years and older who were obese was significantly **higher** among Non-Hispanic African Americans compared to non-Hispanic whites (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 females compared to males.

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

Tobacco

- Kansas has not yet met the HP 2020 targets for objectives related to smoking and smokeless tobacco.
- Disparities are seen in population subgroups.
- The percentage of Kansas adults aged 18 years and older who currently smoke cigarettes was significantly **higher** among non-Hispanic Whites, non-Hispanic African Americans, and non-Hispanic Other/Multi-Races compared to 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 adults with lower education compared to adults in higher education groups.

Oral Health

- Kansas has met the HP 2020 targets for objectives related to loss of all natural teeth.
- Disparities are seen in population subgroups. HP 2020 target was not met yet in these population subgroups.
- The percentage of Kansas adults aged 18 years and older who did not use the oral health care system in the past 12 months was significantly **higher** among adults with lower annual household income compared to adults in higher annual household income groups.
- The percentage of Kansas adults aged 18 years and older with no dental insurance was significantly **higher** among Hispanics and non-Hispanic other/multiracial adults compared to non-Hispanic whites (age-adjusted prevalence).
- The percentage of Kansas adults aged 65-74 years who have lost all their permanent teeth was significantly **higher** among adults with lower education compared to adults in higher education groups.

Substance Abuse

- Kansas has met the HP 2020 targets for objectives related to binge drinking.
- Disparities are seen in population subgroups. HP 2020 target was not met in these population subgroups.
- 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 to females.
- The percentage of Kansas adults aged 18 years and older who reported drinking and driving in the past 30 days was significantly **higher** among younger adults compared to adults in older age groups

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

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 Serious Psychological Distress (SPD) was significantly **higher** among adults living with a disability compared to adults living without a disability.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with depression was significantly **higher** among females compared to males.

Reproductive and Sexual Health

- The percentage of Kansas adults aged 18 -64 years who have been tested for HIV in the past year was significantly **higher** among adults with lower annual household income compared to adults in higher annual household income groups.

Chronic Health Conditions

- Kansas has high prevalence of chronic health conditions including: diabetes, pre-diabetes, hypertension, current asthma and arthritis.
- Disparities are seen in prevalence of these 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 to adults living without a disability.
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with pre-diabetes was significantly **higher** among older adults compared to younger adults.
- Kansas has met the HP 2020 targets for objectives related to hypertension, however, this target is not met in certain population subgroups. The percentage of Kansas adults aged 18 years and older who were ever diagnosed with hypertension was significantly **higher** among non-Hispanic African Americans compared to non-Hispanic whites and non-Hispanic other/multi-races (age-adjusted prevalence).
- The percentage of Kansas adults aged 18 years and older who were ever diagnosed with current asthma was significantly **higher** among females compared to 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 to adults in higher annual household income groups.

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

Access to Health Care: Health Insurance

Access to health services is one of the leading health indicators of Healthy People 2020. The United States Institute of Medicine defined 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 18-64 years:

In 2012, approximately 1 in 5 Kansas adults 18-64 years lacked health care coverage. The percentage of Kansas adults ages 18-64 years with no health care coverage was significantly **higher** among:

- Adults aged 25-34 years compared to those in older age groups.
- Non-Hispanic African Americans and Hispanics compared to non-Hispanic whites (age-adjusted prevalence).
- Adults with less than high school education compared to those with higher levels of education.
- Adults with an annual household income of less than \$25,000 compared to 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 males and females or between adults living with a disability compared to those living without a disability.

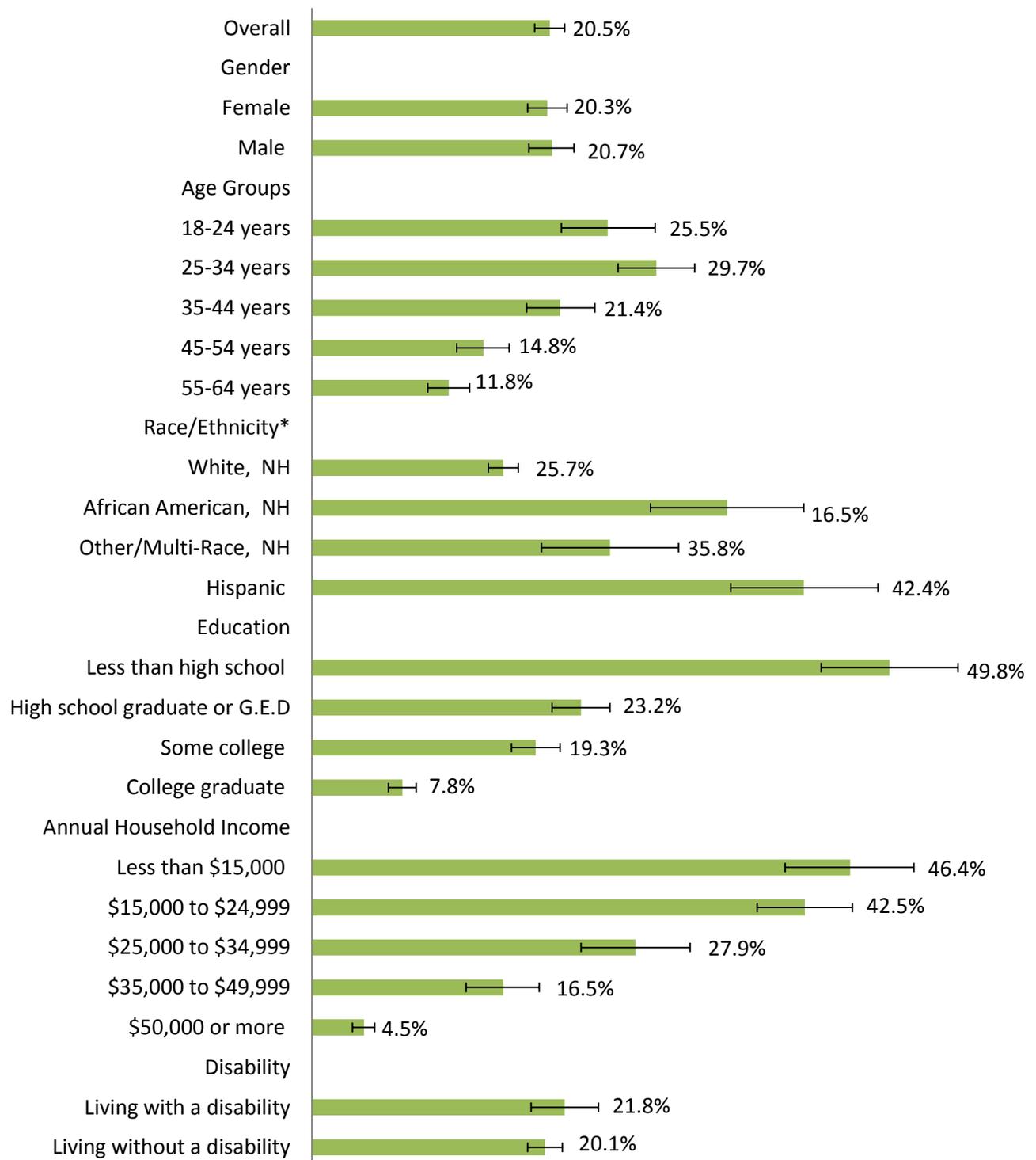
Percentage of Adults 18-64 Years Old Who Lack Health Care Coverage, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	20.5	19.2-21.8
Gender		
Female	20.3	18.6-22.0
Male	20.7	18.7-22.6
Age Groups		
18-24 years	25.5	21.5-29.6
25-34 years	29.7	26.4-33.0
35-44 years	21.4	18.5-24.4
45-54 years	14.8	12.5-17.0
55-64 years	11.8	10.0-13.6
Race/Ethnicity*		
White, NH	16.5	15.2-17.8
African American, NH	35.8	29.2-42.4
Other/Multi-Race, NH	25.7	19.8-31.6
Hispanic	42.4	36.1-48.8
Education		
Less than high school	49.8	43.9-55.7
High school graduate or G.E.D	23.2	20.7-25.7
Some college	19.3	17.2-21.4
College graduate	7.8	6.6-9.0
Annual Household Income		
Less than \$15,000	46.4	40.8-51.9
\$15,000 to \$24,999	42.5	38.4-46.6
\$25,000 to \$34,999	27.9	23.2-32.6
\$35,000 to \$49,999	16.5	13.3-19.6
\$50,000 or more	4.5	3.5-5.4
Disability		
Living with a disability	21.8	18.9-24.7
Living without a disability	20.1	18.6-21.6

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

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

Percentage of Adults 18-64 Years Old Who Lack Health Care Coverage, KS BRFSS 2012



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

Percentage of Adults 18-64 Years Old Who Lack Health Care Coverage, by Co-Morbid Conditions, KS BRFSS 2012

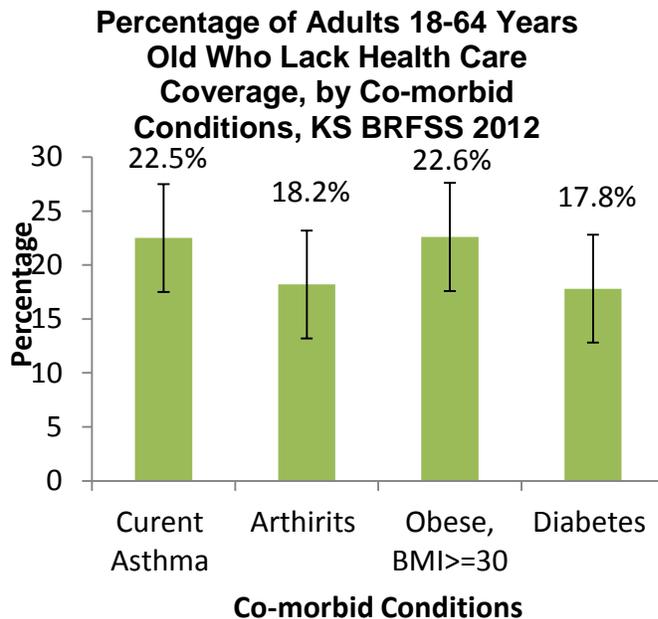
Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	22.5	18.1-26.8
No	20.3	18.9-21.6
Arthritis Status		
Yes	18.2	15.8-20.7
No	20.9	19.4-22.4
Weight Category		
Normal or Underweight, BMI<25	19.6	17.3-21.9
Overweight, 25<= BMI<30	18.0	15.9-20.2
Obese, BMI>=30	22.6	20.2-25.1
Diabetes Status		
Yes	17.8	13.5-22.0
No	20.7	19.3-22.1

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

SUMMARY

Approximately 21percent of Kansas adults 18-64 years lacked health care coverage. In addition, higher percentages of younger adults, non-Hispanic African Americans, Hispanics, as well as adults with lower income and education lacked health insurance.

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 in Kansas and to address observed disparities among population subgroups.



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

**Percentage of Adults 18 Years and Older
Who Lack Health Care Coverage, KS BRFSS
2012**

**Access to Health Care among Kansans
18 years and older:**

In 2012, approximately 1 in 6 Kansas adults 18 years and older lacked health care coverage. The percentage of Kansas adults ages 18 years and older with no health care coverage was significantly **higher** among:

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

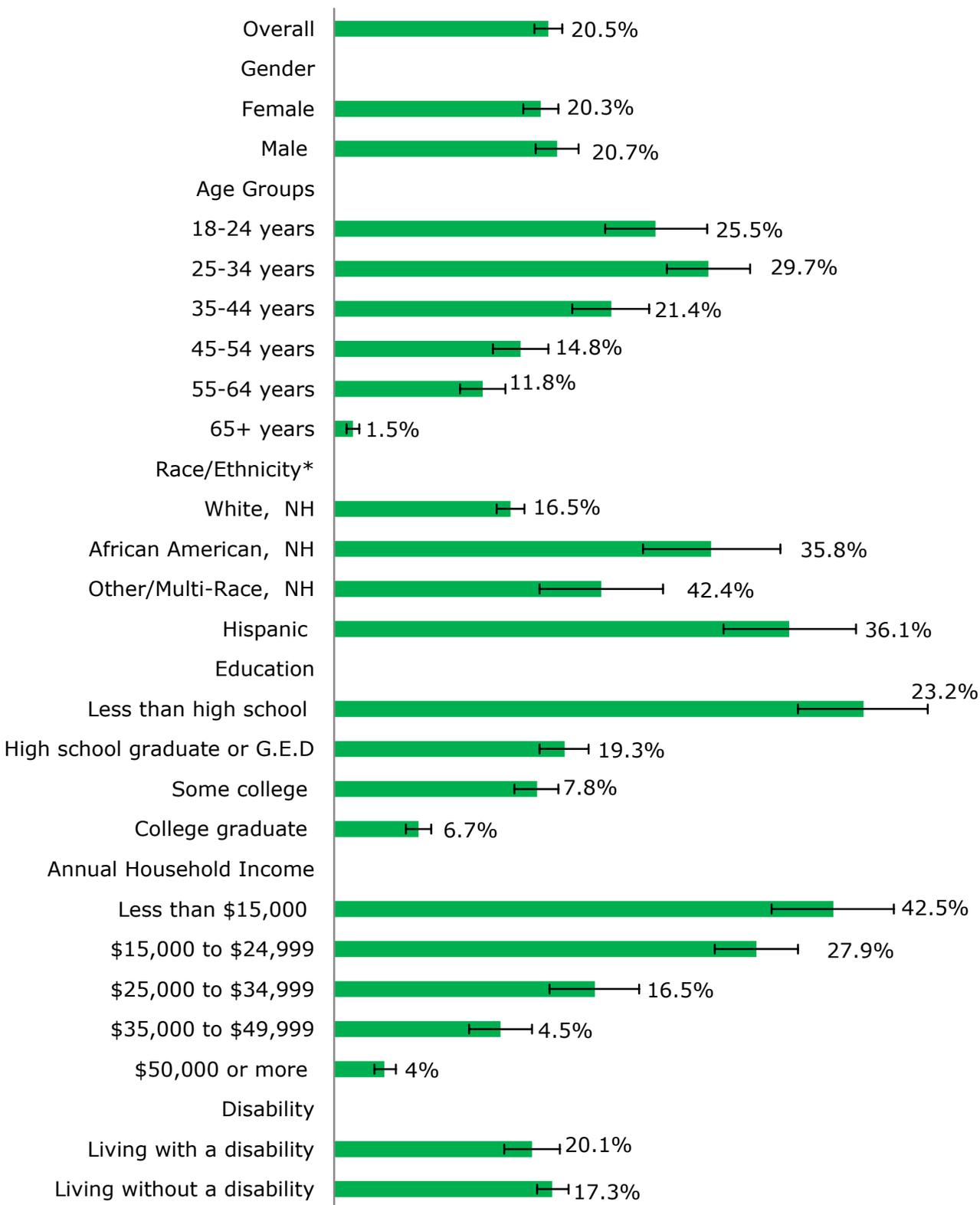
The percentage of Kansas adults with no health care coverage did not differ significantly between males and females or between adults living with a disability compared to those living without a disability.

Demographic Characteristics	Weighted Percentage	95% CI
Overall	17	15.9-18.1
Gender		
Female	16.4	15.0-17.8
Male	17.7	16.0-19.4
Age Groups		
18-24 years	25.5	21.5-29.6
25-34 years	29.7	26.4-33.0
35-44 years	22	18.9-25.0
45-54 years	14.8	12.6-17.0
55-64 years	11.8	10.0-13.6
65+ years	1.5	1.0-2.0
Race/Ethnicity*		
White, NH	14	12.9-15.1
African American, NH	29.9	24.5-35.4
Other/Multi-Race, NH	21.2	16.3-26.1
Hispanic	36.1	30.9-41.4
Education		
Less than high school	42	36.8-47.1
High school graduate or G.E.D	18.3	16.3-20.2
Some college	16.1	14.3-17.8
College graduate	6.7	5.7-.7.
Annual Household Income		
Less than \$15,000	39.6	34.7-44.4
\$15,000 to \$24,999	33.5	30.2-36.8
\$25,000 to \$34,999	20.7	17.1-24.2
\$35,000 to \$49,999	13.2	10.7-15.7
\$50,000 or more	4	3.2-4.9
Disability		
Living with a disability	15.7	13.5-17.9
Living without a disability	17.3	16.1-18.6

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

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

Percentage of Adults 18 Years and Older Who Lack Health Care Coverage



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

Percentage of Adults 18 Years and Older Who Lack Health Care Coverage, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	19.3	15.6-23.0
No	16.8	15.6-17.9
Arthritis Status		
Yes	11.7	10.1-20.0
No	18.6	17.3-20.0
Weight Category		
Normal or Underweight, BMI<25	16.1	14.2-17.9
Overweight, 25<= BMI<30	14.5	12.8-16.3
Obese, BMI>=30	19.4	17.3-21.6
Diabetes Status		
Yes	11.5	8.7-14.2
No	17.6	16.4-18.8

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

- Adults who were obese compared to those who were overweight.
- Adults with no diabetes compared to those with diabetes.

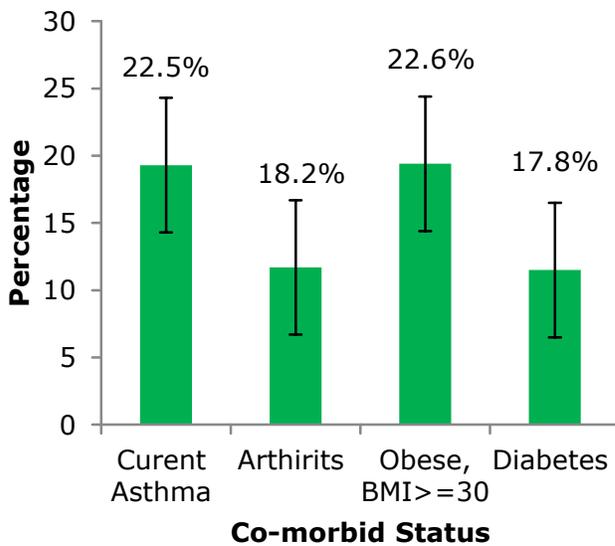
The percentage of Kansas adults 18 years and older with no health care coverage did not differ significantly by current asthma status and arthritis status.

SUMMARY

Approximately 17 percent of Kansas adults 18 years and older lacked health care coverage. Also, significant disparities were seen among 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.

Percentage of Adults 18 Years and Older Who Lack Health Care Coverage, by Co-morbid Conditions



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

Access to Health Care: No Personal Health Care Provider

Access to primary health care and having a personal doctor have shown to substantially improve health-related outcomes. People who have a personal health care provider also indicate that 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 18 - 64 years:

In 2012, approximately 1 in 4 Kansas adults 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 to females.
- Younger adults compared to adults in older age groups.
- Non-Hispanic African Americans as compared to non-Hispanic whites; Hispanics as compared to all other race/ethnicity groups (age-adjusted prevalence).
- Adults with less than high school education compared to those with higher levels of education.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living without a disability as compared to those living with a disability.

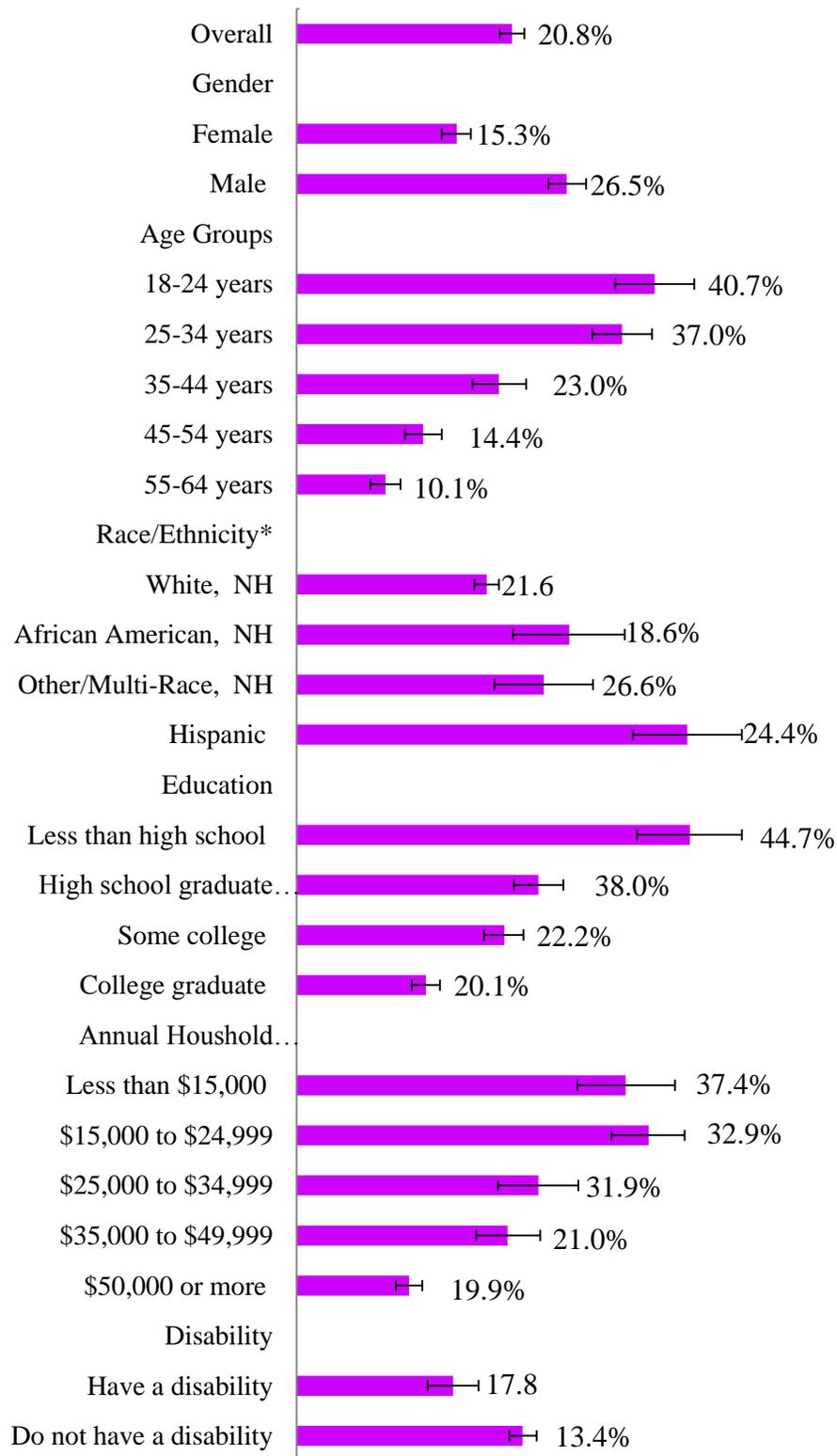
Percentage of Adults 18-64 Years With No Personal Doctor, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	24.5	23.1-25.9
Gender		
Female	18.2	16.5-19.8
Male	30.7	28.6-32.9
Age Groups		
18-24 years	40.7	36.2-45.2
25-34 years	37.0	33.6-40.4
35-44 years	23.0	20.0-26.1
45-54 years	14.4	12.3-16.5
55-64 years	10.1	8.4-11.8
Race/Ethnicity*		
White, NH	21.6	20.2-23.0
African American, NH	31.0	24.6-37.3
Other/Multi-Race, NH	28.1	22.5-33.7
Hispanic	44.4	38.2-50.6
Education		
Less than high school	44.7	38.7-50.6
High school graduate or G.E.D	27.5	24.7-30.3
Some college	23.6	21.3-25.8
College graduate	14.7	13.1-16.3
Annual Household Income		
Less than \$15,000	37.4	31.9-43.0
\$15,000 to \$24,999	40.0	35.8-44.1
\$25,000 to \$34,999	27.5	22.9-32.0
\$35,000 to \$49,999	24.0	20.4-27.7
\$50,000 or more	12.8	11.3-14.3
Disability		
Living with a disability	17.8	14.9-20.7
Living without a disability	25.7	24.2-27.3

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

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

Percentage of Adults 18 -64 Years With No Personal Doctor



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

Percentage of Adults 18 - 64 Years With No Personal Doctor, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	21.5	16.9-26.1
No	24.8	23.3-26.2
Arthritis Status		
Yes	12.3	10.1-14.5
No	27.2	25.6-28.8
Weight Category		
Normal or Underweight, BMI<25	27.3	24.8-29.8
Overweight, 25<= BMI<30	24.1	21.7-26.5
Obese, BMI>=30	21.7	19.2-24.2
Diabetes Status		
Yes	11	6.8-15.2
No	25.4	24.0-26.9

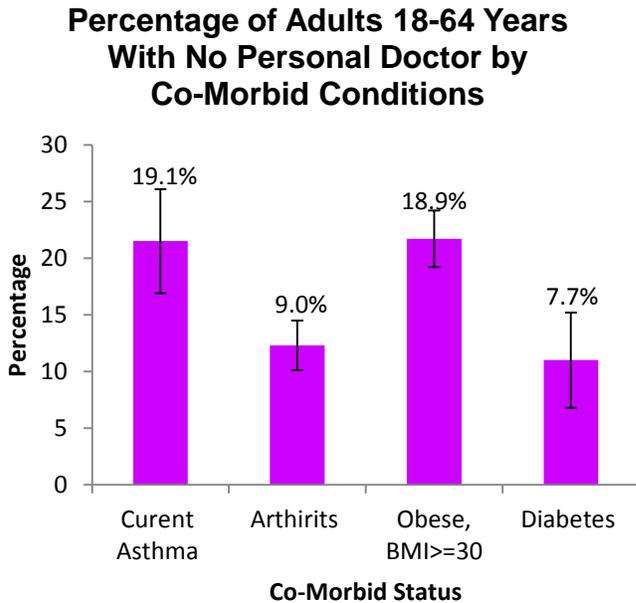
The percentage of Kansas adults 18-64 years with no personal health care provider was significantly **higher** among:

- Adults with no arthritis compared to those with arthritis.
- Adults with no diabetes compared to those with diabetes.
- Adults who were obese compared to those who were normal or underweight.

The percentage of Kansas adults 18 years and older with no personal health care provider not differ significantly by current asthma status.

SUMMARY

Approximately 25 percent of Kansas adults 18 – 64 years did not have personal health care provider. In addition, higher percentages of males, young adults, African Americans, Hispanics, adults with lower income and education, and those without chronic diseases or disabilities did not have a personal doctor. To increase the percentage of adults ages 18-64 years with a personal doctor and to address associated disparities, further public health efforts are needed in Kansas.



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

No personal doctor among Kansans 18 years and older:

In 2012, approximately 1 in 5 Kansas adults 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 to females.
- Younger adults compared to adults in older age groups.
- Non-Hispanic African Americans as compared to non-Hispanic whites; Hispanics as compared to all other race/ethnicity groups (age-adjusted prevalence).
- Adults with less than high school education compared to those with higher levels of education.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living without a disability as compared to those living with a disability.

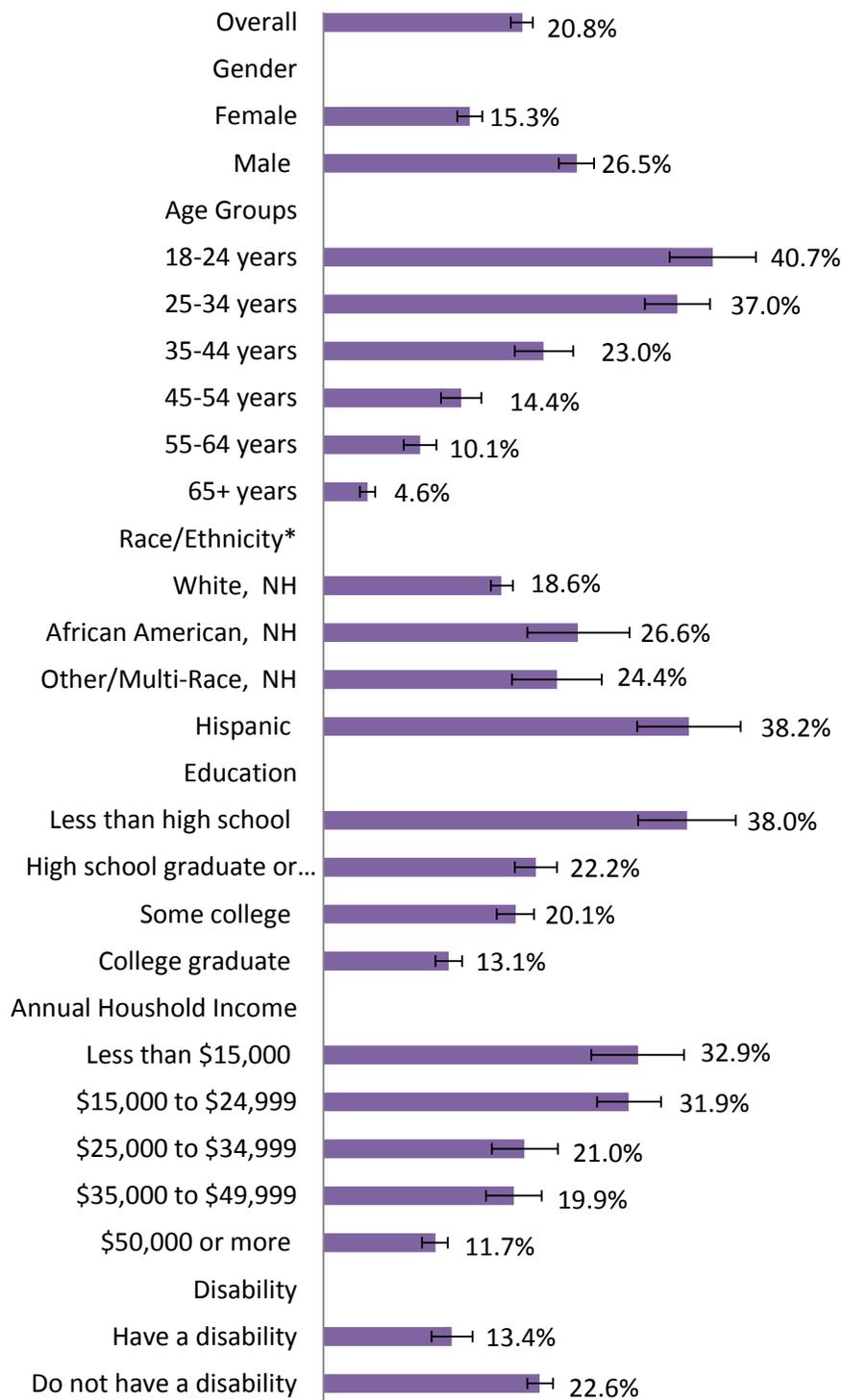
Percentage of Adults 18 Years and Older With No Personal Doctor, KS BRFSS 2012

Demographic Characteristics	Weighted	
	Percentage	95% CI
Overall	20.8	19.6-21.9
Gender		
Female	15.3	14.0-16.6
Male	26.5	24.6-28.3
Age Groups		
18-24 years	40.7	36.2-45.2
25-34 years	37.0	33.6-40.4
35-44 years	23.0	20.0-26.1
45-54 years	14.4	12.3-16.5
55-64 years	10.1	8.4-11.8
65+ years	4.6	3.8-5.4
Race/Ethnicity*		
White, NH	18.6	17.5-19.8
African American, NH	26.6	21.3-32.0
Other/Multi-Race, NH	24.4	19.7-29.1
Hispanic	38.2	32.8-43.6
Education		
Less than high school	38.0	32.9-43.1
High school graduate or G.E.D	22.2	20.0-24.4
Some college	20.1	18.1-22.0
College graduate	13.1	11.7-14.5
Annual Household Income		
Less than \$15,000	32.9	28.0-37.7
\$15,000 to \$24,999	31.9	28.6-35.3
\$25,000 to \$34,999	21.0	17.6-24.5
\$35,000 to \$49,999	19.9	17.0-22.8
\$50,000 or more	11.7	10.3-13.0
Disability		
Living with a disability	13.4	11.3-15.6
Living without a disability	22.6	21.3-24.0

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

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

Percentage of Adults 18 Years and Older With No Personal Doctor, KS BRFSS 2012



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

Percentage of Adults 18 Years and Older With No Personal Doctor by Co-Morbid Conditions, BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	19.1	15.1-23.0
No	20.9	19.7-22.1
Arthritis Status		
Yes	9.0	7.6-10.4
No	24.5	23.1-26.0
Weight Category		
Normal or Underweight, BMI<25	23	20.9-25.1
Overweight, 25<= BMI<30	19.9	17.9-21.9
Obese, BMI>=30	18.9	16.8-21.0
Diabetes Status		
Yes	7.7	5.1-10.4
No	22.1	20.9-23.3

The percentage of Kansas adults with no personal health care provider was significantly **higher** among:

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

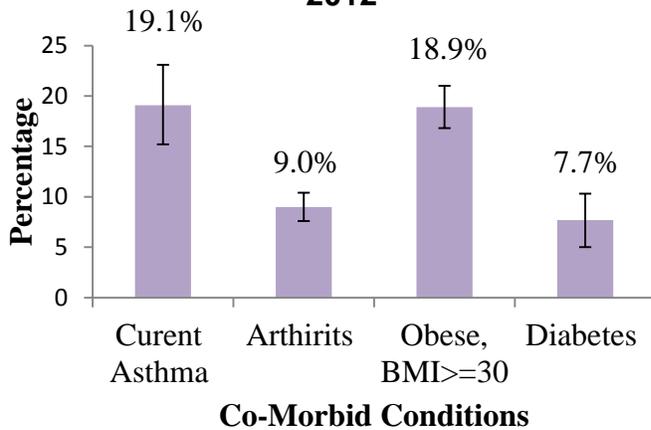
The percentage of Kansas adults 18 years and older with no personal health care provider did not differ significantly by current asthma status and weight categories.

SUMMARY

Approximately 21 percent of Kansas adults 18 years and older did not have a personal health care provider. In addition, higher percentages of males, young adults, African Americans, Hispanics, adults with lower income and education, and those without chronic diseases or disabilities did not have a personal doctor.

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

Percentage of Adults 18 Years and Older With No Personal Doctor by Co-Morbid Conditions, KS BRFSS 2012



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

Injury and Violence: Seatbelt Use

Motor vehicle crashes are the leading cause of death for people age 5 – 34. It can lead to premature death, disability, poor mental health, high medical cost and lost productivity.⁴ The most effective way to reduce injuries and mortality due to motor vehicle crashes is the use of seatbelts.⁵ Increasing use of seatbelts 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 2012, approximately 1 in 5 Kansas adults did not always wear a seatbelt when they drove or rode in a car. The percentage of Kansas adults who did not always wear a seatbelt when they drove or rode in a car was significantly **higher** among:

- Males compared to females.
- Younger adults compared to adults in older age groups.
- Non-Hispanic Other/Multi-Race as compared to non-Hispanic whites (age-adjusted prevalence).
- Adults with less than high school education compared to those who were college graduates.

The percentage of Kansas adults who do not always wear a seatbelt when they drive or ride in a car did not differ significantly between annual household income groups, disability status and insurance status.

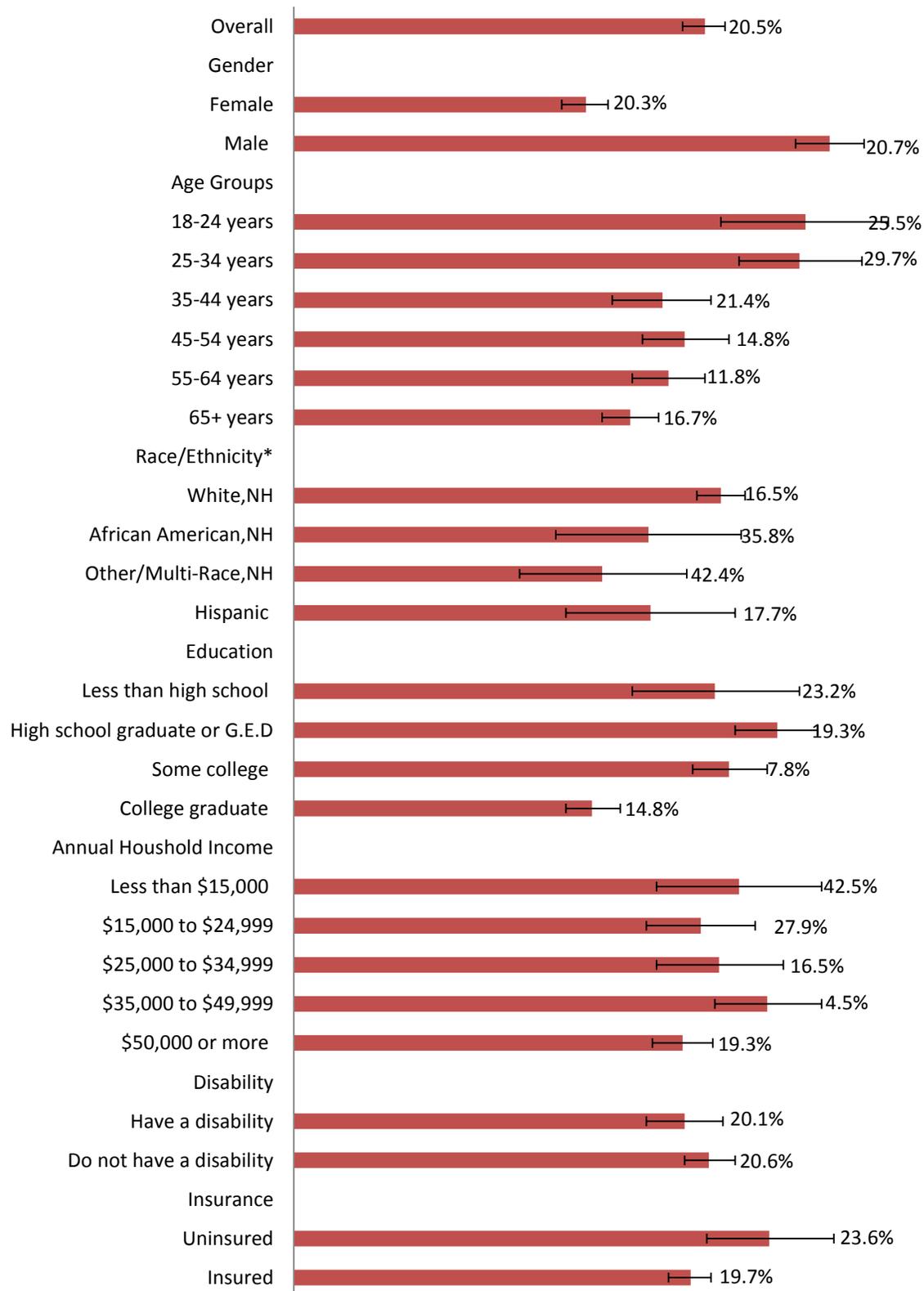
Percentage of Adults Who Do Not Always Wear a Seatbelt When They Drive or Ride in a Car, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	20.4	19.3-21.4
Gender		
Female	14.5	13.3-15.6
Male	26.6	24.9-28.3
Age Groups		
18-24 years	25.4	21.2-29.5
25-34 years	25.1	22.1-28.2
35-44 years	18.3	15.8-20.7
45-54 years	19.4	17.3-21.6
55-64 years	18.6	16.8-20.4
65+ years	16.7	15.3-18.1
Race/Ethnicity*		
White,NH	21.2	20.0-22.4
African American,NH	17.6	13.0-22.2
Other/Multi-Race,NH	15.3	11.2-19.5
Hispanic	17.7	13.5-21.9
Education		
Less than high school	20.9	16.8-25.1
High school graduate or G.E.D	24	21.9-26.0
Some college	21.6	19.8-23.5
College graduate	14.8	13.5-16.2
Annual Household Income		
Less than \$15,000	22.1	18.0-26.2
\$15,000 to \$24,999	20.2	17.5-22.9
\$25,000 to \$34,999	21.1	18.0-24.3
\$35,000 to \$49,999	23.5	20.9-26.2
\$50,000 or more	19.3	17.8-20.8
Disability		
Living with a disability	19.4	17.5-21.3
Living without a disability	20.6	19.4-21.9
Insurance		
Uninsured	23.6	20.5-26.8
Insured	19.7	18.6-20.7

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

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

Percentage of Adults Who Do Not Always Wear a Seatbelt When They Drive or Ride in a Car

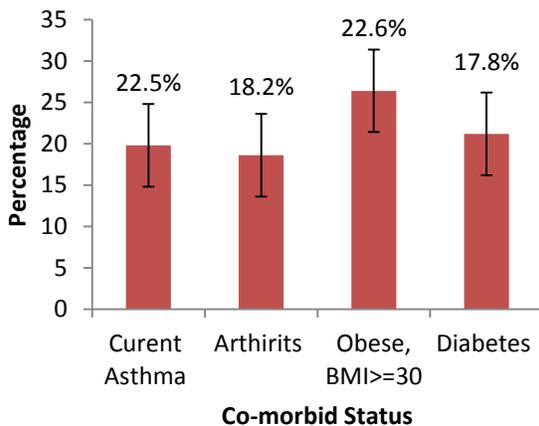


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Who Do Not Always Wear a Seatbelt When They Drive or Ride in a Car, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	19.8	16.4-23.2
No	20.4	19.3-21.5
Arthritis Status		
Yes	18.6	17.0-20.2
No	20.9	19.6-22.1
Weight Category		
Normal or Underweight, BMI<25	16.5	14.7-18.3
Overweight, 25<= BMI<30	20.1	18.3-21.8
Obese, BMI>=30	26.4	24.3-28.5
Diabetes Status		
Yes	21.2	18.4-24.0
No	20.3	19.2-21.4

Percentage of Adults Who Reported That They Do Not Always Wear a Seatbelt When They Drive or Ride in a Car, by Co-morbid Conditions



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

- Adults who were obese compared to those who were overweight or normal weight.

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

SUMMARY

Approximately 20 percent of Kansas adults did not always wear a seatbelt when they drove or rode in a car. In addition, higher percentages of males, young adults, Other/Multi-Race, adults with less than a high school education, and adults who were obese did not always wear a seatbelt when they drove or rode in a car.

The Healthy People 2020 target is for 92 percent of persons to use a seatbelt 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Injury and Violence: Falls

Twenty to 30 percent of falls result in moderate to severe injuries.⁶ But death can also be an outcome of falls. The death rates from falls among older men and women have risen drastically during the past decade increasing the need for injury prevention. The Healthy People 2020 goal for injury prevention is to prevent an increase in fall-related deaths.¹

In 2012, approximately 1 in 3 Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months. The percentage of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months was significantly **higher** among:

- Adults with an annual household income less than \$15,000 compared to adults with annual household income of \$50,000 or more.
- Adults with a disability compared to adults without a disability.

The percentage of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months did not differ significantly between gender groups, age groups, race/ethnicity groups, education groups and insurance status.

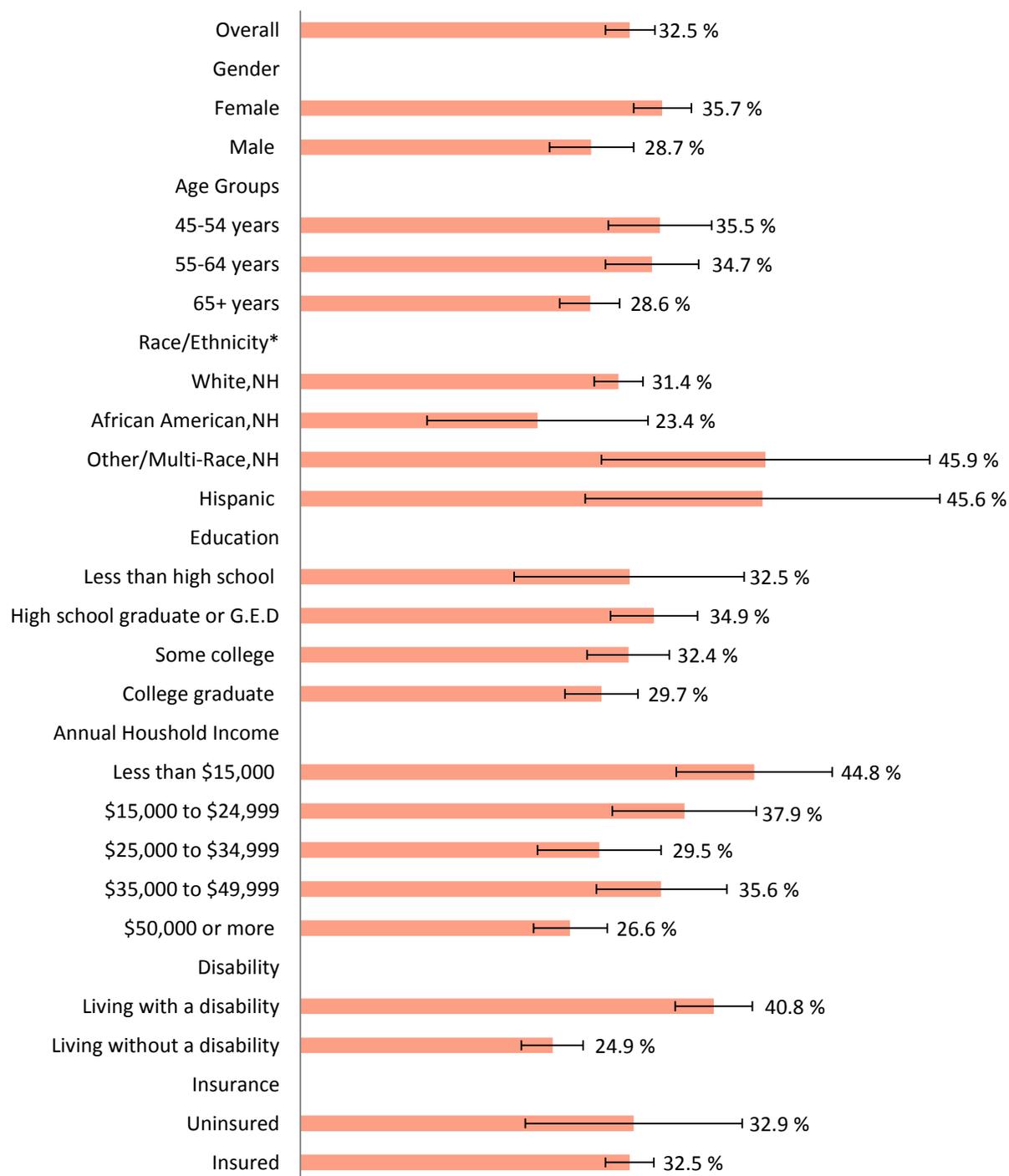
Percentage of Adults Ages 45 Years and Older with at Least One Fall Related Injury During the Preceding 12 Months, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	32.5	30.1-35.0
Gender		
Female	35.7	32.9-38.6
Male	28.7	24.6-32.9
Age Groups		
45-54 years	35.5	30.4-40.6
55-64 years	34.7	30.1-39.9
65+ years	28.6	25.6-31.5
Race/Ethnicity*		
White,NH	31.4	29.0-33.8
African American,NH	23.4	12.5-34.3
Other/Multi-Race,NH	45.9	29.7-62.1
Hispanic	45.6	28.1-63.1
Education		
Less than high school	32.5	21.1-43.8
High school graduate or G.E.D	34.9	30.6-39.2
Some college	32.4	28.3-36.4
College graduate	29.7	26.1-33.3
Annual Household Income		
Less than \$15,000	44.8	37.1-52.5
\$15,000 to \$24,999	37.9	30.8-45.0
\$25,000 to \$34,999	29.5	23.4-35.6
\$35,000 to \$49,999	35.6	29.2-42.1
\$50,000 or more	26.6	23.0-30.3
Disability		
Living with a disability	40.8	37.0-44.6
Living without a disability	24.9	21.8-27.9
Insurance		
Uninsured	32.9	22.2-43.6
Insured	32.5	30.1-34.9

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

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

Percentage of Adults Ages 45 years and Older with at Least One Fall Related Injury During the Preceding 12 Months

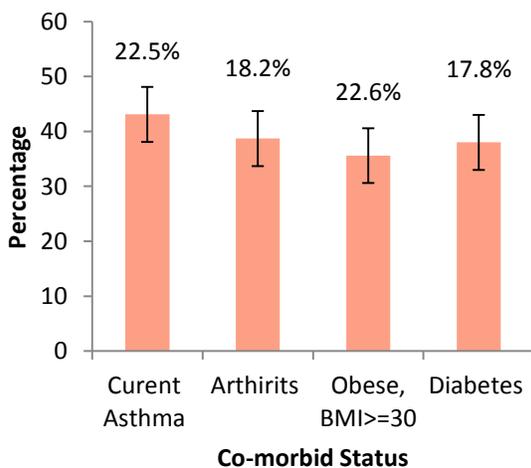


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Ages 45 Years and Older with at Least One Fall Related Injury During the Preceding 12 Months, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	43.1	35.4-50.8
No	31	28.4-33.6
Arthritis Status		
Yes	38.7	35.2-42.2
No	26.3	22.9-29.7
Weight Category		
Normal or Underweight, BMI<25	32.2	27.9-36.6
Overweight, 25<= BMI<30	29.1	24.6-33.7
Obese, BMI>=30	35.6	31.5-39.7
Diabetes Status		
Yes	38	32.2-43.7
No	31.2	28.5-33.9

Percentage of Adults Ages 45 Years and Older with at Least One Fall Related Injury During the Preceding 12 Months, by Co-morbid Conditions



The percentage of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months was significantly **higher** among:

- Adults with current asthma compared to those with no asthma.
- Adults with arthritis compared to those without arthritis.

The percentage of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months did not differ significantly by weight category and diabetes status.

SUMMARY

Approximately 33 percent of Kansas adults 45 years and older who had at least one fall related injury during the preceding 12 months. In addition, higher percentages of adults with annual household income of less than \$15,000, adults with a disability, current asthma and arthritis had at least one fall related injury during the preceding 12 months

A Healthy People 2020 objective is to prevent an increase in fall-related deaths and the best way to do this is to prevent falls from initially occurring. 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Clinical Preventative Services: Flu Shot

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.⁷ Influenza can have a costly impact on the person resulting in doctor visits, hospitalization, loss of productivity and death.⁸ The Healthy People 2020 goal is to increase the percentage of adults who get vaccinated annually against seasonal influenza.

In 2012, approximately 3 in 5 Kansas adults 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 to females.
- Younger adults compared to adults in older age groups.
- Adults with less than high school education / high school graduate or GED, or some college education compared to those who were college graduates.
- Adults with an annual household income less than \$25,000 compared to adults with annual household income of \$50,000 or more.
- Adults who do not have a disability compared to adults with a disability.
- Adults with no insurance compared to adults with insurance

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

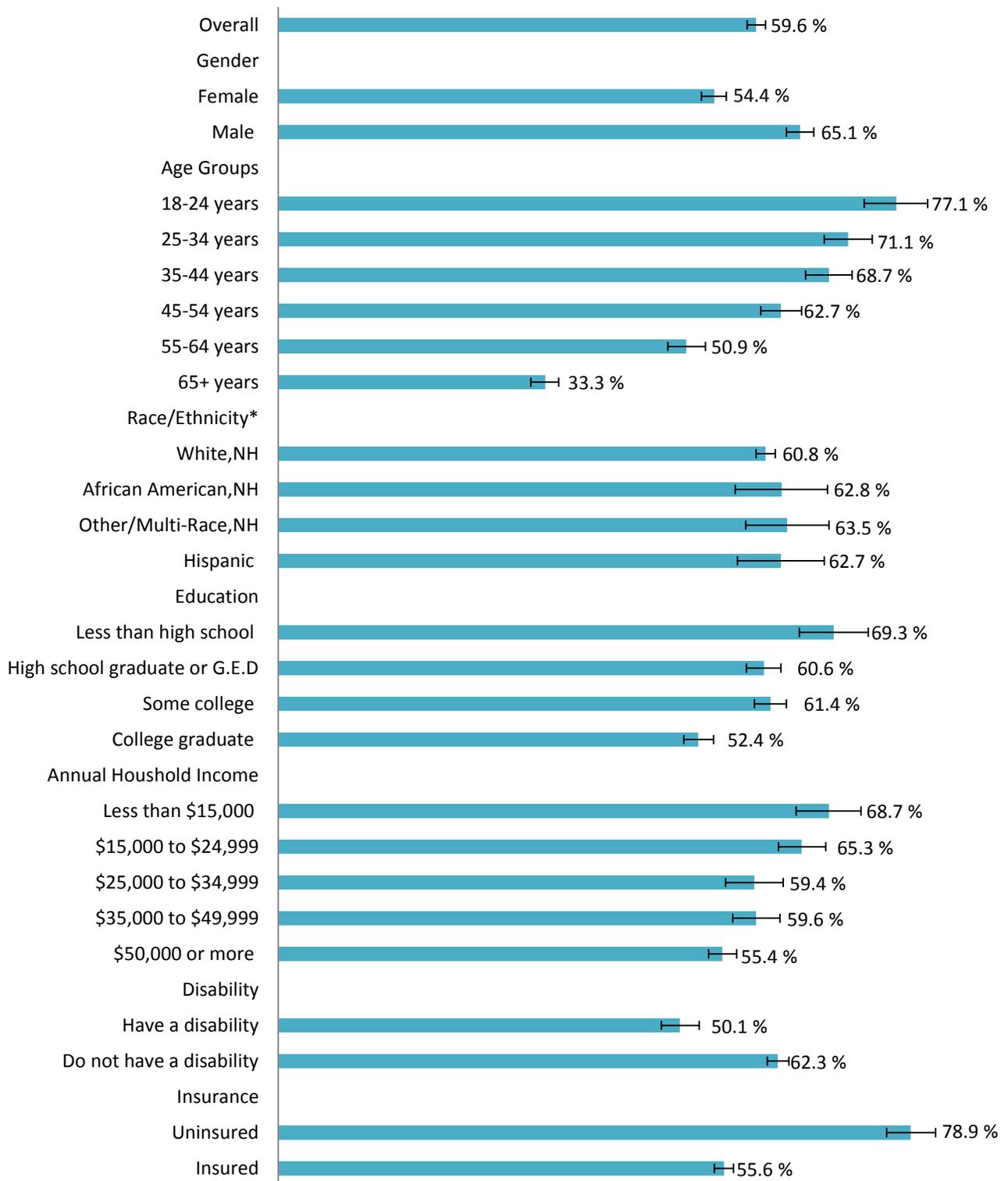
Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	59.6	58.5-60.8
Gender		
Female	54.4	52.8-55.9
Male	65.1	63.4-66.8
Age Groups		
18-24 years	77.1	73.1-81.0
25-34 years	71.1	68.1-74.1
35-44 years	68.7	65.8-71.6
45-54 years	62.7	60.2-65.3
55-64 years	50.9	48.6-53.3
65+ years	33.3	31.5-35.0
Race/Ethnicity*		
White,NH	60.8	59.6-62.0
African American,NH	62.8	57.0-68.5
Other/Multi-Race,NH	63.5	58.3-68.7
Hispanic	62.7	57.3-68.1
Education		
Less than high school	69.3	65.0-73.6
High school graduate or G.E.D	60.6	58.4-62.7
Some college	61.4	59.4-63.4
College graduate	52.4	50.6-54.3
Annual Household Income		
Less than \$15,000	68.7	64.6-72.7
\$15,000 to \$24,999	65.3	62.4-68.3
\$25,000 to \$34,999	59.4	55.8-63.0
\$35,000 to \$49,999	59.6	56.7-62.6
\$50,000 or more	55.4	53.7-57.2
Disability		
Living with a disability	50.1	47.8-52.5
Living without a disability	62.3	61.0-63.7
Insurance		
Uninsured	78.9	75.9-82.0
Insured	55.6	54.4-56.8

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

Percentage of Adults 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months

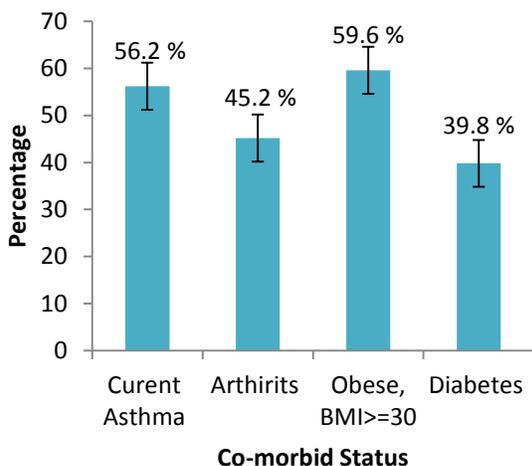


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults 18 Years and Older Who Did Not Get Immunized Against Influenza During the Past 12 Months, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	56.2	52.1-60.3
No	59.9	58.7-61.1
Arthritis Status		
Yes	45.2	43.1-47.2
No	64.3	62.9-65.6
Weight Category		
Normal or Underweight, BMI<25	60.7	58.7-62.7
Overweight, 25<= BMI<30	58.7	56.8-62.7
Obese, BMI>=30	59.6	57.4-61.8
Diabetes Status		
Yes	39.8	36.4-43.2
No	61.7	60.5-62.9

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



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

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

The percentage of Kansas adults who did not get immunized against influenza during the past 12 months did not differ significantly by weight category and current asthma status.

SUMMARY

Approximately 60 percent of Kansas adults did not get immunized against influenza during the past 12 months. In addition, higher percentages of males, young adults, and adults with no insurance, adults with lower income and education, and those without chronic diseases (diabetes and arthritis) or disabilities did not get immunized against influenza during the past 12 months.

To increase the percentage of adults who get immunized against influenza and to address associated disparities, further public health efforts are needed in Kansas.

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

Clinical Preventative Services: Cervical Cancer

The number of cervical cancer cases and deaths have decreased during the past 40 years likely due to the increase in women getting regular cervical screenings.⁹ It is important to continue this trend as the Healthy People 2020 goal is to increase the percentage of women aged 21-65 years who receive a cervical cancer screening based on the most recent guidelines.

In 2012, approximately 1 in 5 Kansas women aged 21-65 years did not get a Pap smear test within the preceding three years. The percentage of Kansas women aged 21-65 years who did not get a Pap smear test within the preceding three years was significantly **higher** among:

- Older women compared to women in younger age groups.
- Non-Hispanic Other/Multi-race women compared to non-Hispanic white women (age-adjusted prevalence).
- Women with less than high school education, high school graduate or GED, or some college education compared to those who were college graduates.
- Women with lower annual household income compared to women in higher annual household income groups.
- Women living with a disability compared to women not living with a disability.
- Women with no insurance compared to women with insurance.

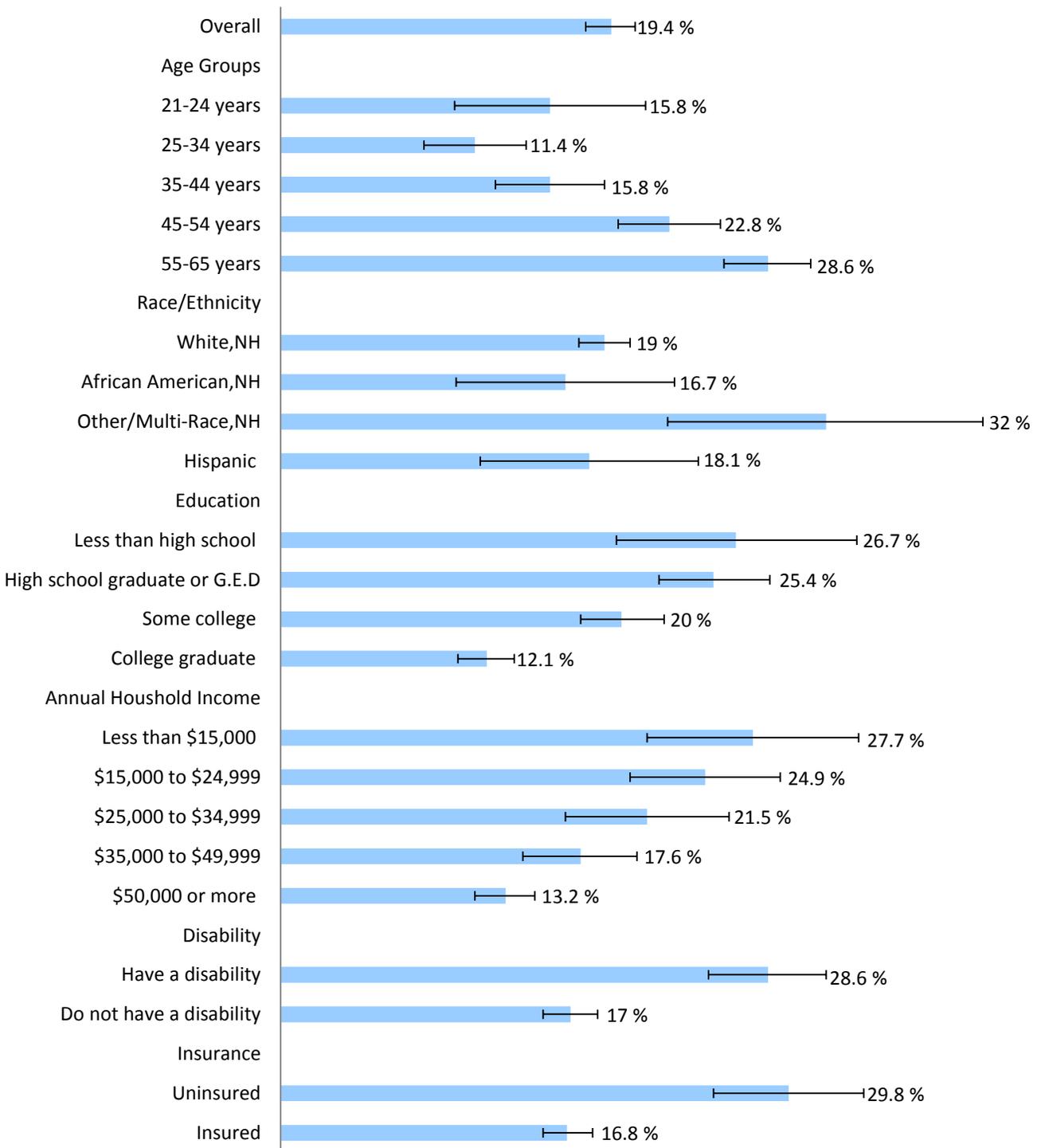
Percentage of Women aged 21-65 Years Who Did Not Have a Pap Smear Test Within the Preceding Three Years, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	19.4	18.0-20.9
Age Groups		
21-24 years	15.8	10.2-21.4
25-34 years	11.4	8.4-14.4
35-44 years	15.8	12.6-19.0
45-54 years	22.8	19.8-25.8
55-65 years	28.6	26.1-31.2
Race/Ethnicity*		
White,NH	19	17.5-20.5
African American,NH	16.7	10.3-23.1
Other/Multi-Race,NH	32	22.8-41.3
Hispanic	18.1	11.7-24.5
Education		
Less than high school	26.7	19.6-33.7
High school graduate or G.E.D	25.4	22.1-28.6
Some college	20	17.5-22.4
College graduate	12.1	10.5-13.8
Annual Household Income		
Less than \$15,000	27.7	21.5-33.9
\$15,000 to \$24,999	24.9	20.5-29.3
\$25,000 to \$34,999	21.5	16.7-26.3
\$35,000 to \$49,999	17.6	14.3-21.0
\$50,000 or more	13.2	11.5-15.0
Disability		
Living with a disability	28.6	25.2-32.1
Living without a disability	17	15.4-18.6
Insurance		
Uninsured	29.8	25.4-34.2
Insured	16.8	15.3-18.2

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

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

Percentage of Women aged 21-65 Years Who Did Not Have a Pap Smear Test Within the Preceding Three Years

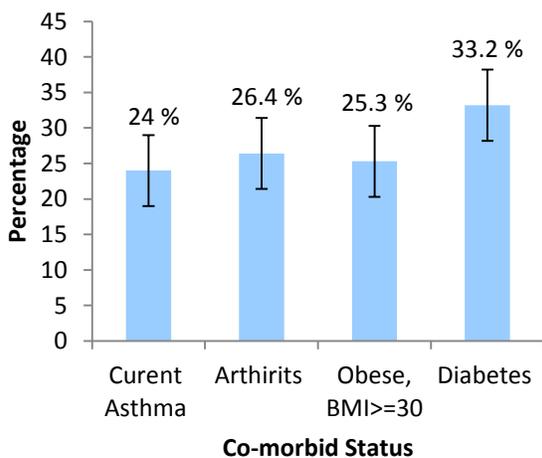


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Women Aged 21-65 Years Who Did Not Have a Pap Smear Test Within the Preceding Three Years, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	24	19.1-28.8
No	18.9	17.4-20.5
Arthritis Status		
Yes	26.4	23.4-29.4
No	17.5	15.8-19.1
Weight Category		
Normal or Underweight, BMI<25	16.2	13.8-18.5
Overweight, 25<= BMI<30	19.2	16.3-22.1
Obese, BMI>=30	25.3	22.3-28.3
Diabetes Status		
Yes	33.2	27.5-38.9
No	18.4	16.9-19.9

Percentage of Women Aged 21-65 Years Who Did Not Have a Pap Smear Test Within the Preceding Three Years, by Co-morbid Conditions



The percentage of Kansas women aged 21-65 years who did not get a Pap smear test within the preceding three years was significantly **higher** among:

- Women with arthritis compared to those without arthritis.
- Women who are obese compared to those who are overweight or normal weight.
- Women with diabetes compared to those without diabetes

The percentage of Kansas women aged 21-65 years who did not get a Pap smear test within the preceding three years did not differ significantly by current asthma status.

SUMMARY

Approximately 19 percent of Kansas women aged 21-65 years did not get a Pap smear test within the preceding three years. In addition, higher percentages of older women, women with no insurance, women with lower income and education, and those with chronic conditions (diabetes, arthritis, and obesity) or living with disabilities did not get a Pap smear test within the preceding three years.

A Healthy People 2020 objective is to increase the percentage of women ages 21-65 years who receive a cervical cancer screening based on guidelines to 93 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Clinical Preventative Services: Breast Cancer

In the United States breast cancer is the most common cancer among women.¹⁰ Thus women receiving breast cancer screening based on the most recent guidelines is essential. The Healthy People 2020 goal is to increase the percentage of women ages 50-74 years who receive breast cancer screening based on the most recent guidelines.

In 2012, approximately 1 in 5 Kansas women aged 50-74 years did not receive a mammogram within the preceding two years. The percentage of Kansas women aged 50-74 years who did not receive a mammogram within the preceding two years was significantly **higher** among:

- Younger women compared to women in older age groups.
- Non-Hispanic Other/Multi-Race as compared to non-Hispanic whites No difference is seen among other race groups and Hispanics as compared to whites (age adjusted prevalence).
- Women with less than high school education / high school graduate or GED compared to those who were college graduates.
- Women in lower annual household income groups compared to women in annual household income groups of \$50,000 or more.
- Women living with a disability compared to women living without a disability.
- Women with no insurance compared to women with insurance.

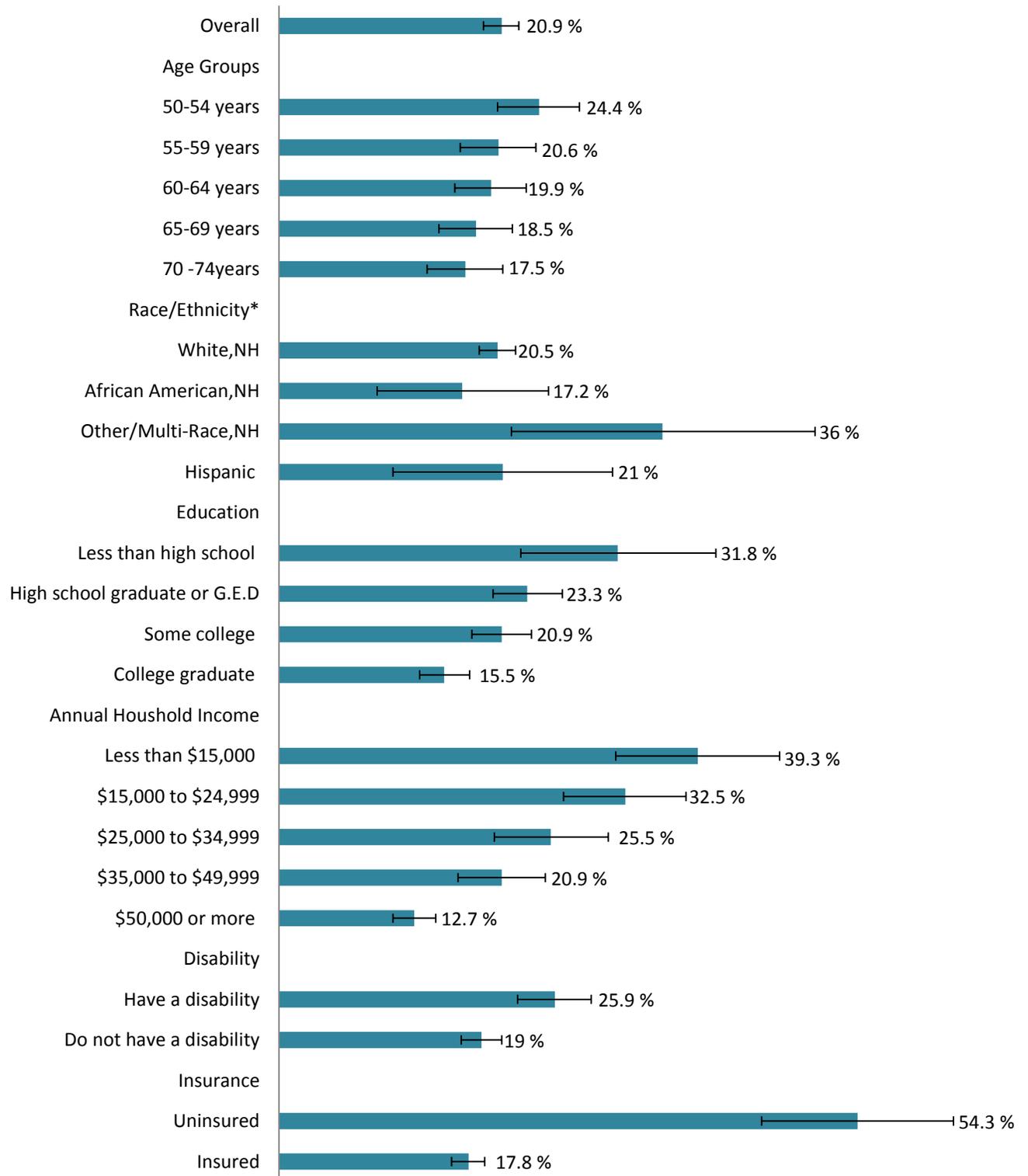
Percentage of Women Ages 50-74 Years Who Did Not Have a Mammogram Within the Preceding Two Years, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	20.9	19.3-22.6
Age Groups		
50-54 years	24.4	20.6-28.3
55-59 years	20.6	17.1-24.2
60-64 years	19.9	16.6-23.3
65-69 years	18.5	15.1-22.0
70 -74years	17.5	14.0-21.1
Race/Ethnicity*		
White,NH	20.5	18.8-22.2
African American,NH	17.2	9.1-25.2
Other/Multi-Race,NH	36	21.7-50.2
Hispanic	21	10.7-31.3
Education		
Less than high school	31.8	22.6-40.9
High school graduate or G.E.D	23.3	20.0-26.5
Some college	20.9	18.1-23.7
College graduate	15.5	13.1-17.9
Annual Household Income		
Less than \$15,000	39.3	31.6-47.0
\$15,000 to \$24,999	32.5	26.8-38.3
\$25,000 to \$34,999	25.5	20.1-30.8
\$35,000 to \$49,999	20.9	16.8-25.0
\$50,000 or more	12.7	10.7-14.7
Disability		
Living with a disability	25.9	22.5-29.4
Living without a disability	19	17.1-20.9
Insurance		
Uninsured	54.3	45.3-63.3
Insured	17.8	16.3-19.4

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

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

Percentage of Women Aged 50-74 Years Who Did Not Have a Mammogram Within the Preceding Two Years

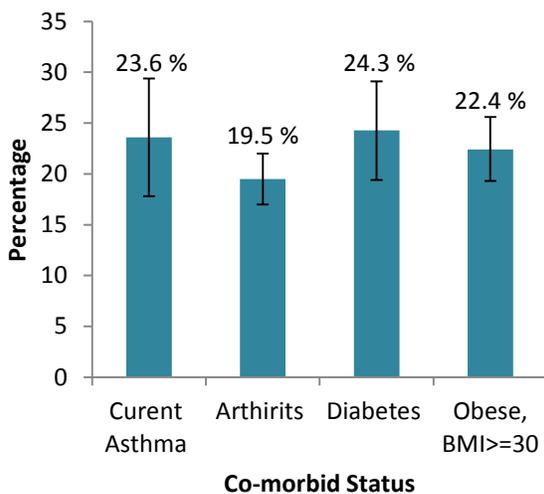


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Women Aged 50-74 Years Who Did Not Have a Mammogram Within the Preceding Two Years, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	23.6	17.8-29.4
No	20.7	18.9-22.4
Arthritis Status		
Yes	19.5	17.0-22.0
No	21.7	19.5-24.0
Diabetes Status		
Yes	24.3	19.5-29.2
No	20.3	18.6-22.1
Weight Category		
Normal or Underweight, BMI<25	20.8	17.9-23.6
Overweight, 25<= BMI<30	18.8	15.9-21.8
Obese, BMI>=30	22.4	19.2-25.5

Percentage of Women Aged 50-74 Years Did Not Have a Mammogram Within the Preceding Two Years, by Co-morbid Conditions



The percentage of Kansas women aged 50-74 years who did not receive a mammogram within the preceding two years did not differ significantly by current asthma status, arthritis status, diabetes, status and weight status.

SUMMARY

Approximately 21 percent of Kansas women aged 50-74 years did not receive a mammogram within the preceding two years. In addition, higher percentages of young women, Other/Multi-race non-Hispanic, women with no insurance, women with lower income and education, and those living with a disability did not receive a mammogram with the preceding two years.

A Healthy People 2020 objective is to increase the percentage of women aged 50-74 years who receive a breast cancer screening based on most recent guidelines to 81.1 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Clinical Preventative Services: Colorectal Cancer

Colorectal cancer is the second leading cause of all cancer deaths among males and females in the United States, thus adults being up-to-date on screening is essential.¹¹ The United States Preventative Task force has given the most up-to-date screening guidelines, which advise for Fecal Occult Blood Test (FOBT) done within 1 year, or Sigmoidoscopy done within 5 years with FOBT done within 3 years, or Colonoscopy done within 10 years. The Healthy People 2020 goal is to increase the percentage of adults aged 50-75 years who received colorectal cancer screening based on the most recent guidelines.

In 2012, approximately 1 in 3 Kansas adults aged 50-75 years were not up-to-date with colorectal screening. The percentage of Kansas adults aged 50-75 years who were not up-to-date with colorectal screening was significantly **higher** among:

- Younger adults compared to adults in older age groups.
- Hispanics as compared to non-Hispanic whites and non-Hispanic African Americans.
- Adults with less than high school education / high school graduate or GED compared to those who were college graduates.
- Adults in an annual household income group of less than \$34,999 compared to adults in the annual household income groups of \$50,000 or more.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

The percentage Kansas adults aged 50-75 years who were not up-to-date with colorectal screening did not differ significantly by gender groups.

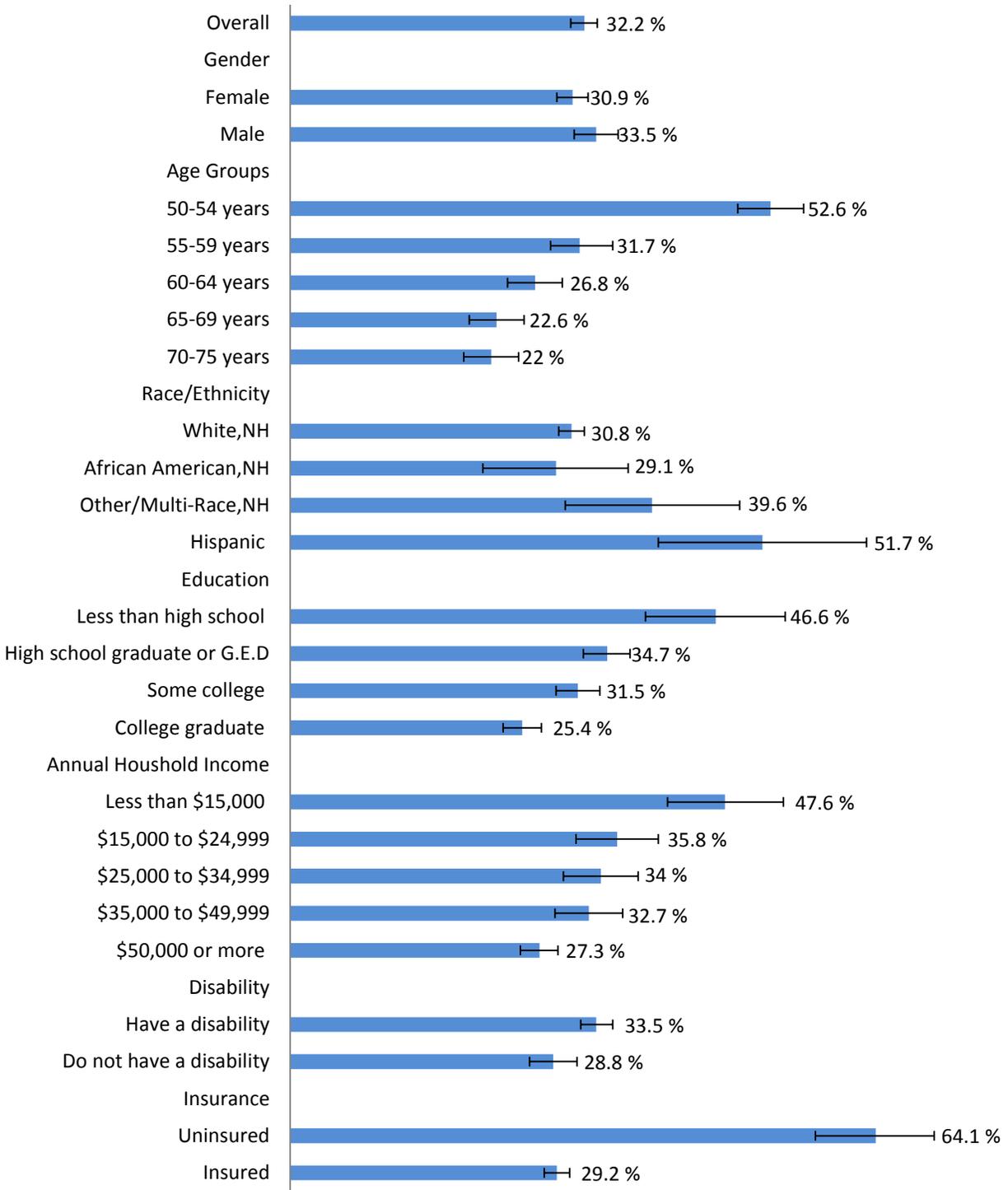
Percentage of Adults Aged 50-75 Years Who Were Not Up-To-Date With Colorectal Cancer Screening*, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	32.2	30.7-33.6
Gender		
Female	30.9	29.2-32.6
Male	33.5	31.1-35.9
Age Groups		
50-54 years	52.6	49.0-56.2
55-59 years	31.7	28.5-35.3
60-64 years	26.8	23.8-29.8
65-69 years	22.6	19.6-25.6
70-75 years	22	19.0-25.0
Race/Ethnicity		
White,NH	30.8	29.4-32.2
African American,NH	29.1	21.1-37.0
Other/Multi-Race,NH	39.6	30.1-49.2
Hispanic	51.7	40.3-63.1
Education		
Less than high school	46.6	38.9-54.2
High school graduate or G.E.D	34.7	32.1-37.2
Some college	31.5	29.1-33.9
College graduate	25.4	23.3-27.5
Annual Household Income		
Less than \$15,000	47.6	41.3-54.0
\$15,000 to \$24,999	35.8	31.3-40.3
\$25,000 to \$34,999	34	29.9-38.1
\$35,000 to \$49,999	32.7	29.0-36.4
\$50,000 or more	27.3	25.2-29.3
Disability		
Living with a disability	33.5	31.8-35.3
Living without a disability	28.8	26.2-31.4
Insurance		
Uninsured	64.1	57.7-70.5
Insured	29.2	27.8-30.6

*FOBT within 1 year, or Sigmoidoscopy within 5 years with FOBT within 3 years, or Colonoscopy within 10 years (United States Preventive Services Task Force, 2008).

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

Percentage of Adults Aged 50-75 Years Who Were Not Up-To-Date With Colorectal Cancer Screening**

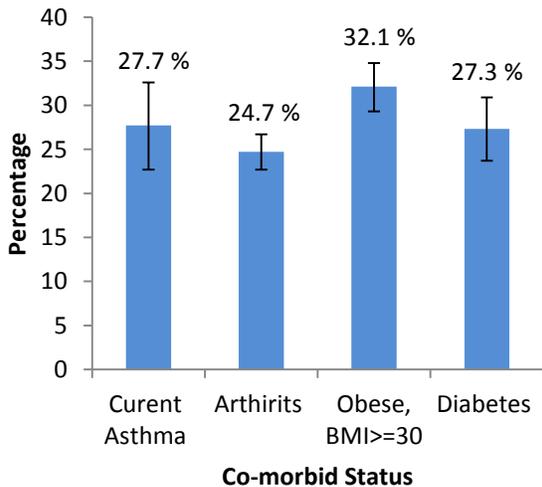


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 50-75 Years Who Were Not Up-To-Date With Colorectal Cancer Screening, KS BRFSS 2012**

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	27.7	22.8-32.7
No	32.6	31.1-34.1
Arthritis Status		
Yes	24.7	22.7-26.7
No	37	35.0-39.0
Weight Category		
Normal or Underweight, BMI<25	33.7	31.1-36.2
Overweight, 25<= BMI<30	30.5	28.0-33.0
Obese, BMI>=30	32.1	29.4-34.9
Diabetes Status		
Yes	27.3	23.7-30.9
No	33.1	31.5-34.7

Percentage of Adults Aged 50-75 Years Who Were Not Up-To-Date With Colorectal Cancer Screening, by Co-morbid Conditions**



The percentage of Kansas adults aged 50-75 years who were not up-to-date with colorectal screening was significantly **higher** among:

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

The percentage of Kansas adults aged 50-75 years who were not up-to-date with colorectal screening did not differ significantly by weight and current asthma status.

SUMMARY

Approximately 32 percent of Kansas adults aged 50-75 years were not up-to-date with colorectal screening. In addition, higher percentages of younger adults, Hispanics and adults with no insurance, adults with lower income and education, and those without chronic diseases (diabetes and arthritis) or disabilities were not up-to-date with colorectal screening.

The Healthy People 2020 goal is to increase the percentage of adults aged 50-75 who received colorectal cancer screening based on the most recent guidelines to 70.5 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Nutrition, Physical Activity, and 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.¹² 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 2012, approximately 3 in 10 Kansas adults aged 18 years and older were obese. The percentage of Kansas adults who were obese was significantly **higher** among:

- Older adults compared to adults aged 18-24 years.
- Non-Hispanic African Americans compared to non-Hispanic whites (age-adjusted prevalence).
- Adults with less than high school education / high school graduate or GED compared to those who were college graduates.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

The percentage Kansas adults who were obese did not differ significantly by gender groups.

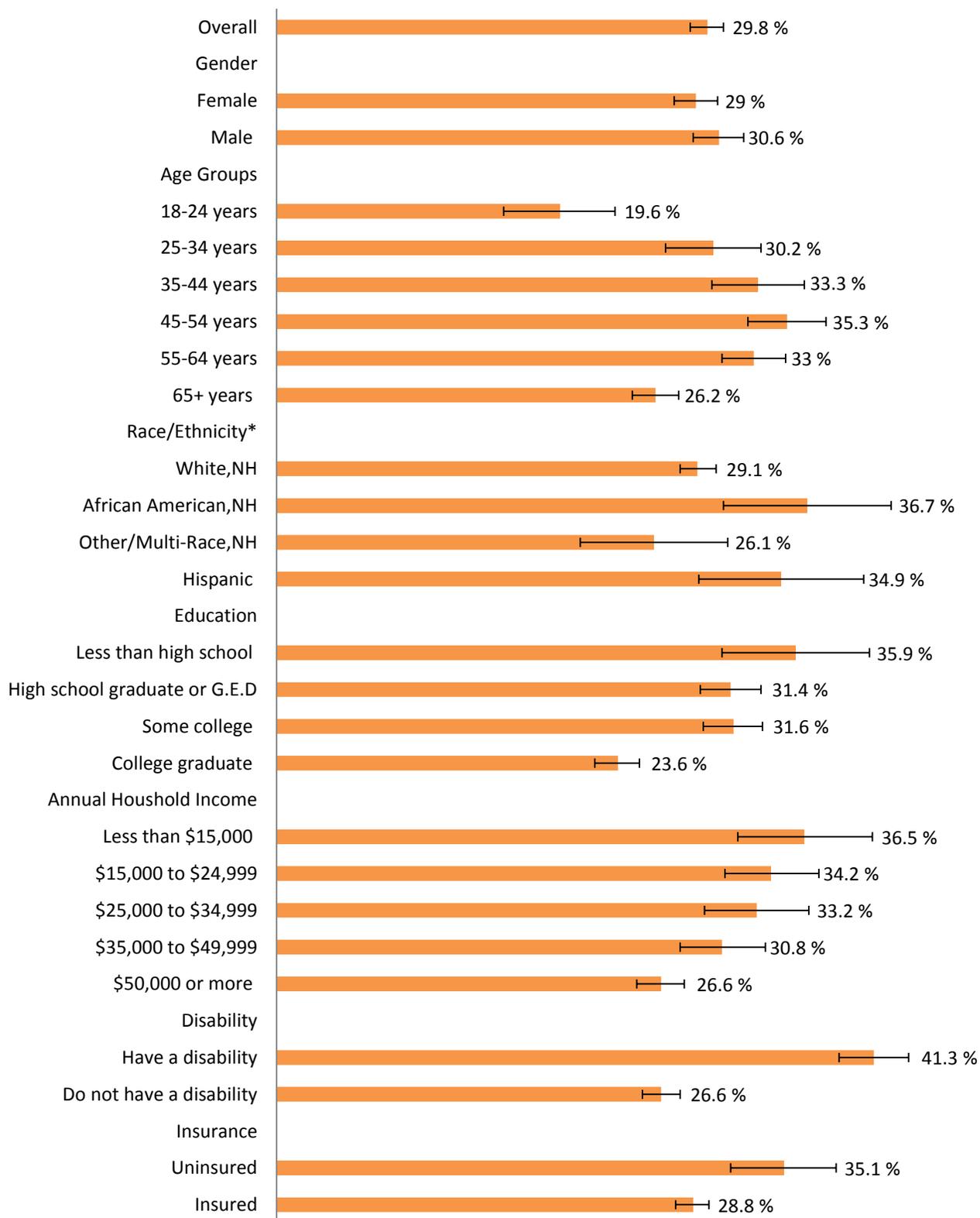
Percentage of Adults Who Were Obese Aged 18 Years and Older, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	29.8	28.7-31.0
Gender		
Female	29	27.5-30.5
Male	30.6	28.9-32.4
Age Groups		
18-24 years	19.6	15.8-23.5
25-34 years	30.2	26.9-33.5
35-44 years	33.3	30.1-36.5
45-54 years	35.3	32.6-38.0
55-64 years	33	30.8-35.2
65+ years	26.2	34.6-27.8
Race/Ethnicity*		
White,NH	29.1	27.8-30.3
African American,NH	36.7	30.9-42.5
Other/Multi-Race,NH	26.1	21.0-31.2
Hispanic	34.9	29.2-40.6
Education		
Less than high school	35.9	30.8-41.0
High school graduate or G.E.D	31.4	29.3-33.5
Some college	31.6	29.6-33.7
College graduate	23.6	22.1-25.2
Annual Household Income		
Less than \$15,000	36.5	31.8-41.1
\$15,000 to \$24,999	34.2	30.9-37.4
\$25,000 to \$34,999	33.2	29.6-36.8
\$35,000 to \$49,999	30.8	27.8-33.7
\$50,000 or more	26.6	25.0-38.3
Disability		
Living with a disability	41.3	38.9-43.7
Living without a disability	26.6	25.3-27.3
Insurance		
Uninsured	35.1	31.5-38.8
Insured	28.8	27.7-30.0

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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



Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	37.6	33.5-41.7
No	29.1	27.9-30.3
Arthritis Status		
Yes	39.9	37.9-42
No	26.6	25.3-28
Diabetes Status		
Yes	56.4	52.9-59.8
No	27.1	25.8-28.3

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

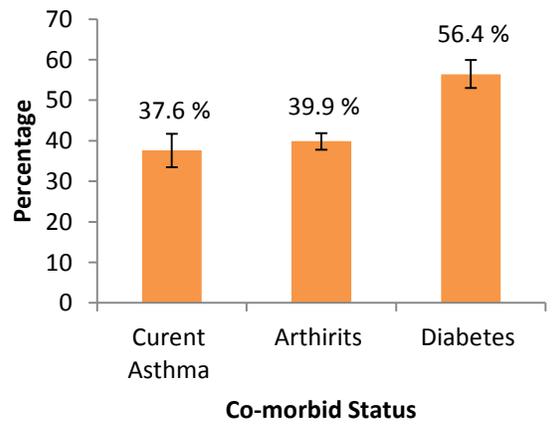
- Adults with current asthma compared to those without current asthma.
- Adults with arthritis compared to those without arthritis.
- Adults with diabetes compared to those without diabetes

SUMMARY

Approximately 30 percent of Kansas adults aged 18 years and older were obese. In addition, higher percentages of older adults, Non-Hispanic African Americans and adults with no insurance, adults with lower income and education, and those with chronic diseases (current asthma, diabetes and arthritis) or those living with a disability were obese.

The Healthy People 2020 goal is to reduce the proportion of adults who are obese to 30.5 percent. The goal for overall population is met in Kansas, however, further public health efforts are needed to reach the objective in population subgroups in Kansas.

Percentage of Adults Aged 18 Years and Older Who Were Obese by Co-morbid Conditions



Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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.¹³ 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 2012, 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 who did not participate in leisure-time physical activity in the past 30 days was significantly **higher** among:

- Females compared to males.
- Older adults compared to adults in younger age groups.
- Hispanics and non-Hispanic African Americans compared to non-Hispanic whites and (age-adjusted prevalence).
- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

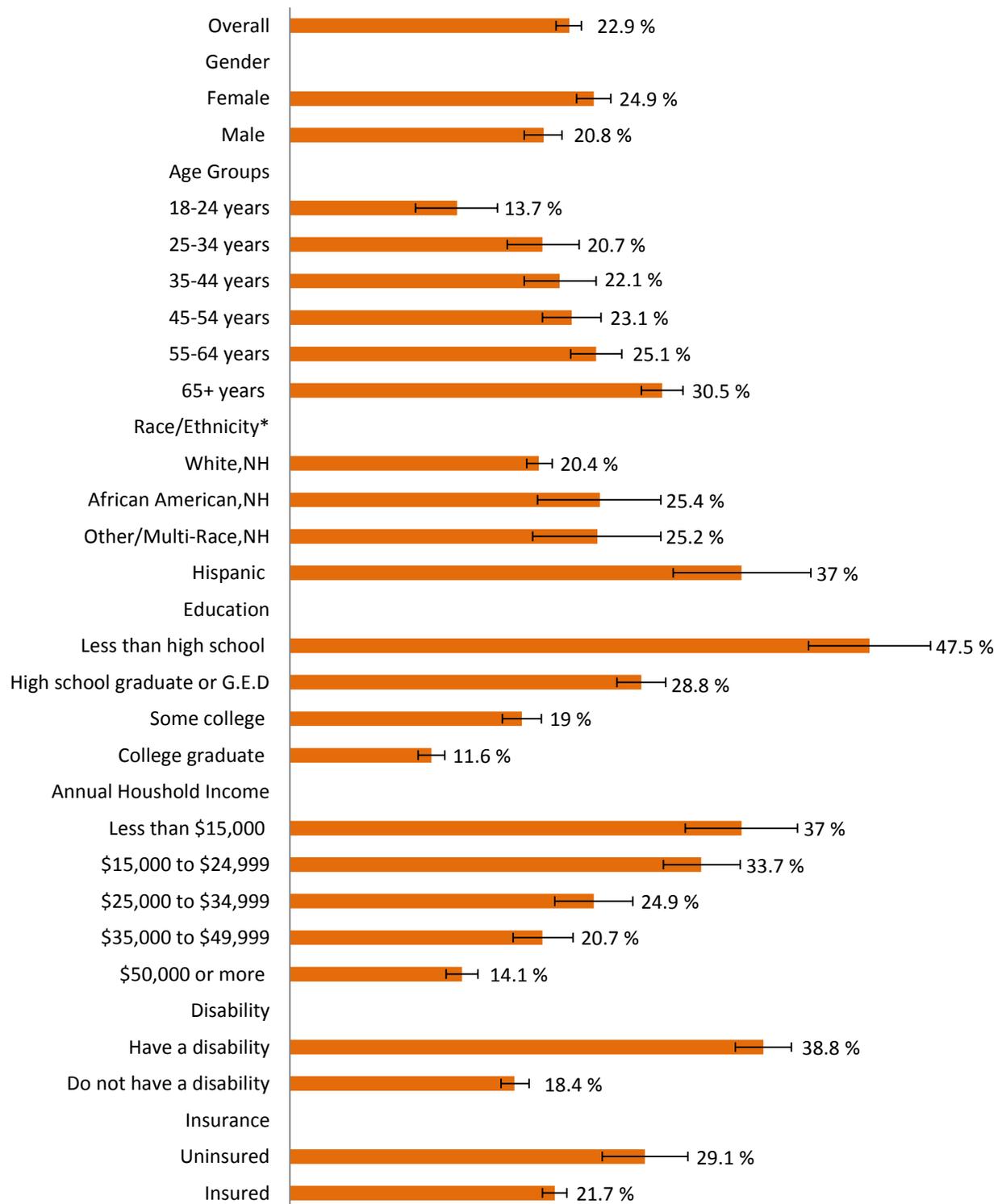
Percentage of Adults Aged 18 Years and Older Not Participating in Leisure-Time Physical Activity in the Past 30 Days, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	22.9	21.9-24.0
Gender		
Female	24.9	23.5-26.3
Male	20.8	19.3-22.4
Age Groups		
18-24 years	13.7	10.4-17.1
25-34 years	20.7	17.7-23.6
35-44 years	22.1	19.1-25.0
45-54 years	23.1	20.7-25.5
55-64 years	25.1	23.0-27.2
65+ years	30.5	28.8-32.2
Race/Ethnicity*		
White,NH	20.4	19.3-21.4
African American,NH	25.4	20.4-30.5
Other/Multi-Race,NH	25.2	20.0-30.5
Hispanic	37	31.3-42.6
Education		
Less than high school	47.5	42.5-52.5
High school graduate or G.E.D	28.8	26.8-30.8
Some college	19	17.4-20.6
College graduate	11.6	10.5-12.7
Annual Household Income		
Less than \$15,000	37	32.4-41.6
\$15,000 to \$24,999	33.7	30.5-36.8
\$25,000 to \$34,999	24.9	21.7-28.1
\$35,000 to \$49,999	20.7	18.2-23.1
\$50,000 or more	14.1	12.8-15.4
Disability		
Living with a disability	38.8	36.5-41.1
Living without a disability	18.4	17.2-19.5
Insurance		
Uninsured	29.1	25.6-32.6
Insured	21.7	20.7-22.7

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

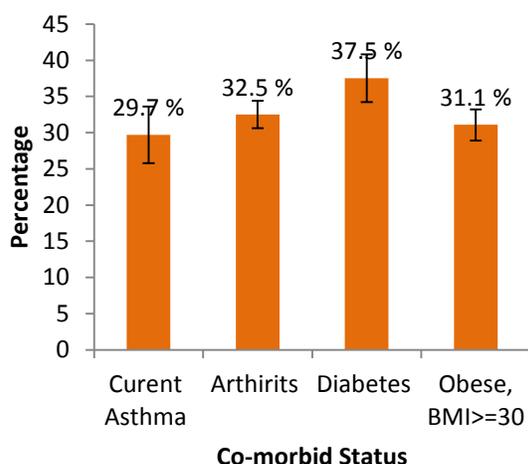


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Not Participating In Leisure-Time Physical Activity in the Past 30 Days, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	29.7	25.8-33.6
No	22.3	21.2-23.4
Arthritis Status		
Yes	32.5	30.6-34.4
No	19.8	18.6-21.1
Diabetes Status		
Yes	37.5	34.2-40.8
No	21.3	20.2-22.4
Weight Category		
Normal or Underweight, BMI<25	17.1	15.5-18.7
Overweight, 25<= BMI<30	19.6	18.0-21.3
Obese, BMI>=30	31.1	29.0-33.3

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



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

SUMMARY

Approximately 23 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 females, younger adults, Hispanics, non-Hispanic African Americans and adults with no insurance, adults with lower income and education, and those without chronic diseases (current asthma, diabetes and arthritis) or those living with disabilities did not participate in leisure-time physical activity in the past 30 days

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, further public health efforts are needed to address disparities in some population subgroups in Kansas.

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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.¹⁴ 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.^{15,16} The Healthy People 2020 goal is to reduce smoking by adults.

In 2012, approximately 1 in 5 Kansas adults aged 18 years and older currently smoke cigarettes. Current smoking is defined as adults who have smoked 100 cigarettes in their entire life and smoke now, either every day or some days. The percentage of Kansas adults aged 18 years and older who currently smoke cigarettes was significantly **higher** among:

- Males compared to females.
- Adults aged 18-24 years compared to those aged 55 plus years; and adults aged 55-64 years as compared to those aged 65 years and older.
- Non-Hispanic Whites, non-Hispanic African Americans, and non-Hispanic Other/Multi-Race adults as compared to Hispanics (age-adjusted prevalence).
- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

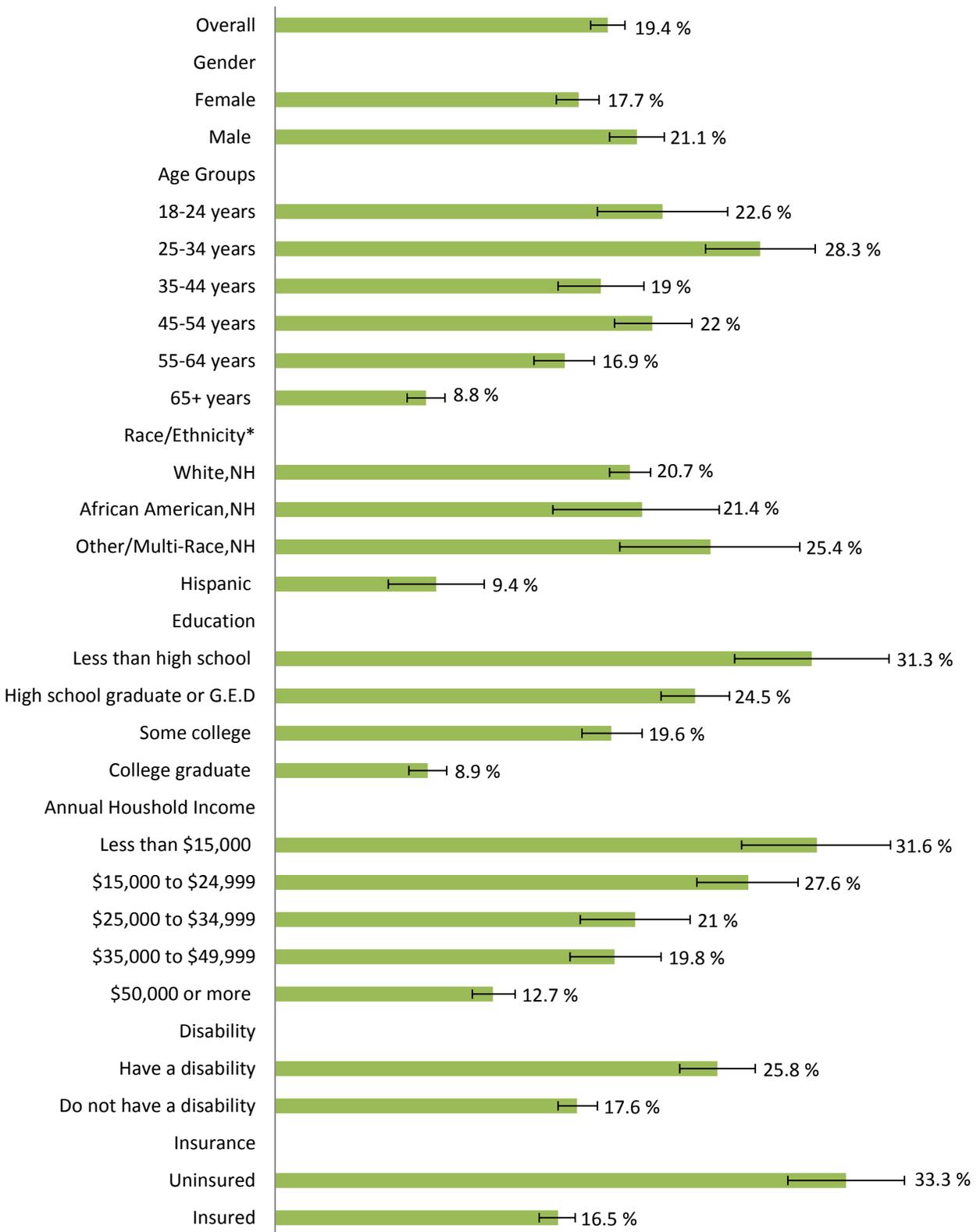
Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	19.4	18.4-20.4
Gender		
Female	17.7	16.5-19.0
Male	21.1	19.5-22.7
Age Groups		
18-24 years	22.6	18.8-26.4
25-34 years	28.3	25.1-31.5
35-44 years	19	16.5-21.5
45-54 years	22	19.7-24.2
55-64 years	16.9	15.2-18.7
65+ years	8.8	7.7-9.9
Race/Ethnicity*		
White,NH	20.7	19.5-21.9
African American,NH	21.4	16.9-26.6
Other/Multi-Race,NH	25.4	20.2-30.7
Hispanic	9.4	6.6-12.2
Education		
Less than high school	31.3	26.8-35.8
High school graduate or G.E.D	24.5	22.5-26.5
Some college	19.6	17.8-21.3
College graduate	8.9	7.8-10
Annual Household Income		
Less than \$15,000	31.6	27.3-36.0
\$15,000 to \$24,999	27.6	24.7-30.6
\$25,000 to \$34,999	21	17.8-24.2
\$35,000 to \$49,999	19.8	17.1-22.4
\$50,000 or more	12.7	11.4-13.9
Disability		
Living with a disability	25.8	23.6-28.0
Living without a disability	17.6	16.4-18.7
Insurance		
Uninsured	33.3	29.9-36.7
Insured	16.5	15.5-17.6

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

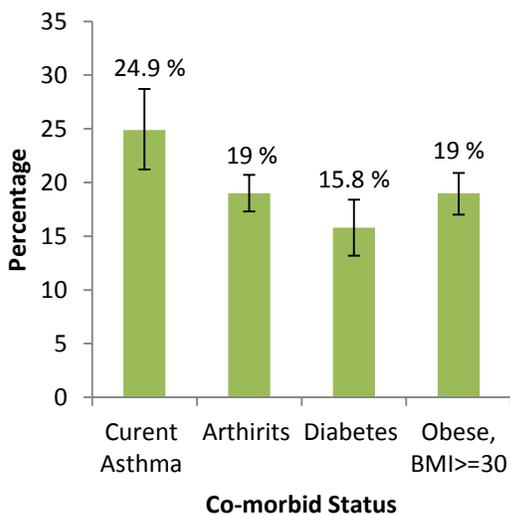


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	24.9	21.1-28.6
No	18.8	17.7-19.8
Arthritis Status		
Yes	19	17.3-20.7
No	19.5	18.2-20.7
Diabetes Status		
Yes	15.8	13.2-18.4
No	19.7	18.6-20.8
Weight Category		
Normal or Underweight, BMI<25	21.2	19.4-23.1
Overweight, 25<= BMI<30	19.1	17.4-20.8
Obese, BMI>=30	19	17.1-21.0

Percentage of Adults Aged 18 Years and Older Who Currently Smoke Cigarettes, by Co-morbid Conditions



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

- Adults with current asthma compared to those without current asthma.
- Adults without diabetes compared to those with diabetes.

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

SUMMARY

Approximately 19 percent of Kansas adults aged 18 years and older currently smoke cigarettes. In addition, higher percentages of males, younger adults, non-Hispanic African Americans, non-Hispanic other/multi-race, non-Hispanic whites, adults without insurance, adults with lower income and education, those with current asthma, those without diabetes and those living with a disability currently smoke cigarettes.

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 and 2012 BRFSS estimates cannot be compared to 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.¹⁷ The Healthy People 2020 goal is to reduce the use of smokeless tobacco products by adults.

In 2012, approximately 1 in 16 Kansas adults aged 18 years and older were currently using any smokeless tobacco product. 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. The percentage of Kansas adults aged 18 years and older who currently use any smokeless tobacco products was significantly **higher** among:

- Males compared to females.
- Younger adults compared to adults in older age groups.
- Non-Hispanic Whites compared to non-Hispanic African Americans and non-Hispanic other/multi-race adults (age-adjusted prevalence).
- Adults with lower education compared to adults in higher education groups.

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 status and insurance status.

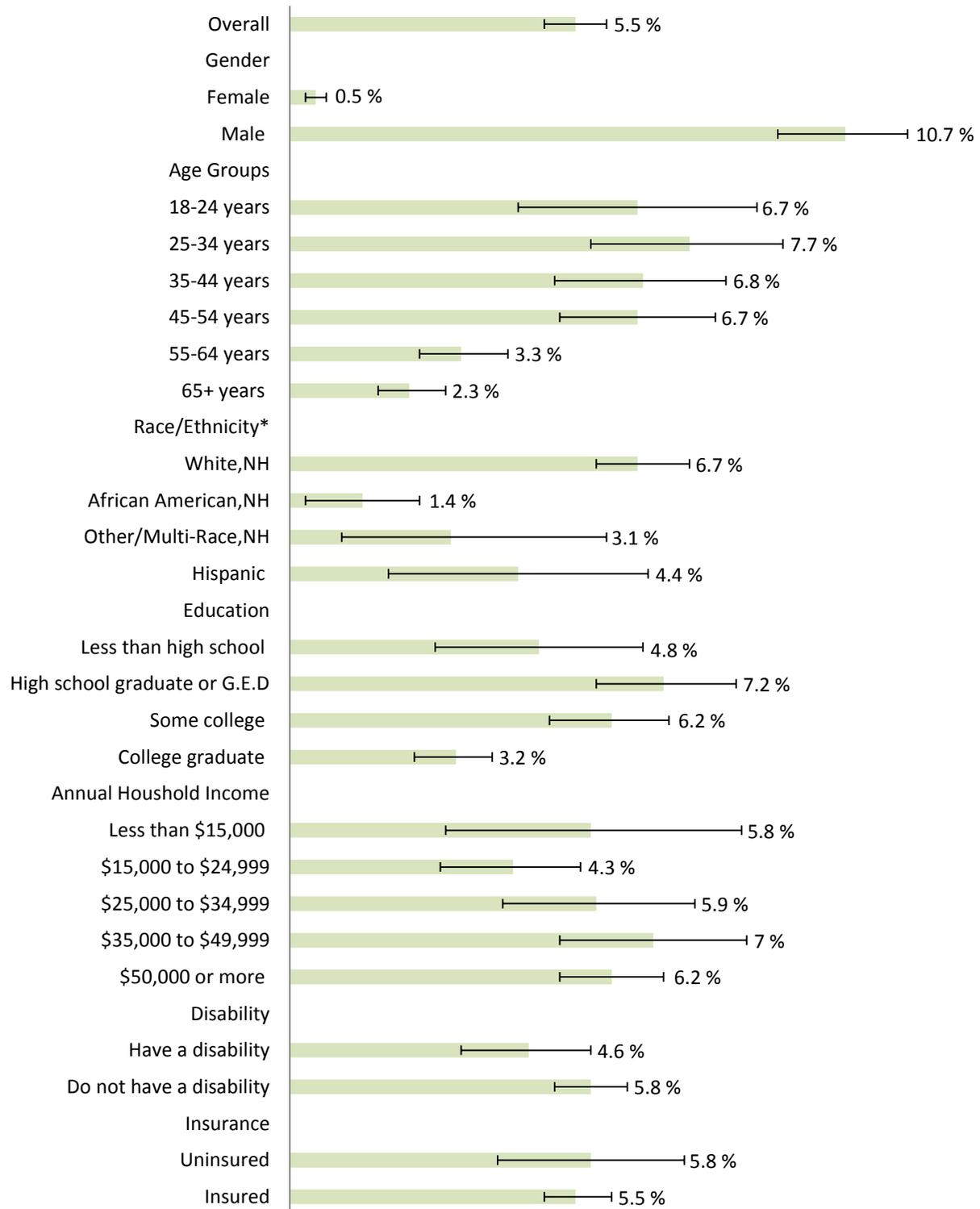
Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	5.5	4.9-6.1
Gender		
Female	0.5	0.3-0.7
Male	10.7	9.5-12.0
Age Groups		
18-24 years	6.7	4.4-9.0
25-34 years	7.7	5.9-9.6
35-44 years	6.8	5.2-8.5
45-54 years	6.7	5.2-8.2
55-64 years	3.3	2.4-4.1
65+ years	2.3	1.6-2.9
Race/Ethnicity*		
White,NH	6.7	5.9-7.5
African American,NH	1.4	0.3-2.5
Other/Multi-Race,NH	3.1	0.1-5.2
Hispanic	4.4	1.9-6.9
Education		
Less than high school	4.8	2.8-6.8
High school graduate or G.E.D	7.2	5.8-8.5
Some college	6.2	5.1-7.4
College graduate	3.2	2.5-4.0
Annual Household Income		
Less than \$15,000	5.8	2.9-8.6
\$15,000 to \$24,999	4.3	3.0-5.7
\$25,000 to \$34,999	5.9	4.0-7.7
\$35,000 to \$49,999	7	5.2-8.8
\$50,000 or more	6.2	5.2-7.2
Disability		
Living with a disability	4.6	3.4-5.9
Living without a disability	5.8	5.1-6.5
Insurance		
Uninsured	5.8	4.0-7.6
Insured	5.5	4.8-6.1

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

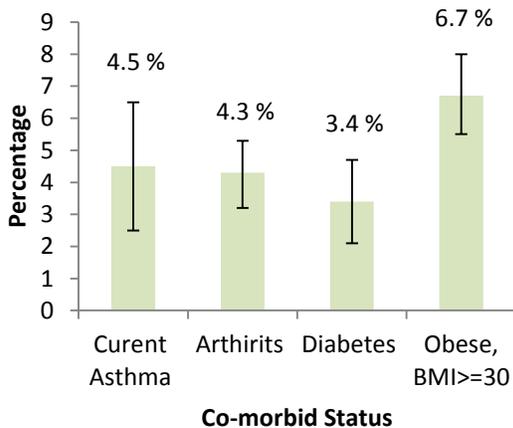


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Currently Use Any Smokeless Tobacco Products, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	4.5	2.5-6.5
No	5.6	5.0-6.3
Arthritis Status		
Yes	4.3	3.3-5.4
No	5.9	5.2-6.6
Diabetes Status		
Yes	3.4	2.1-4.7
No	5.7	5.0-6.4
Weight Category		
Normal or Underweight, BMI<25	4.8	3.7-5.9
Overweight, 25<= BMI<30	5.9	4.9-6.9
Obese, BMI>=30	6.7	5.4-7.9

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



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 to adults with diabetes.

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

SUMMARY

Approximately 6 percent of Kansas adults aged 18 years and older were current smokeless tobacco product users. In addition, higher percentages of males, younger adults, White non-Hispanics, those with lower education, and those without diabetes were currently using any smokeless tobacco products.

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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Oral Health: Oral Health Care System

Oral health is an essential and integral component of overall health throughout life. Oral refers to the whole mouth, including the teeth, gums, hard and soft palate, linings of the mouth and throat, tongue, lips, salivary glands, chewing muscles, and upper and lower jaws. Regular check-ups are essential for detecting early signs of oral health problems that can then lead to early prevention and treatment of problems.¹⁸ The Healthy People 2020 goal is to increase the proportion of adults who used the oral health care system in the past year.

In 2012, approximately 1 in 3 Kansas adults aged 18 years and older did not use the oral health care system in the past 12 months. The percentage of Kansas adults aged 18 years and older who did not use the oral health care system in the past 12 months was significantly **higher** among:

- Males compared to females.
- Adults aged 25-34 years old compared to all the other age groups.
- Hispanics, non-Hispanic African American, and non-Hispanic other/multi-race compared to non-Hispanic whites (age-adjusted prevalence).
- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

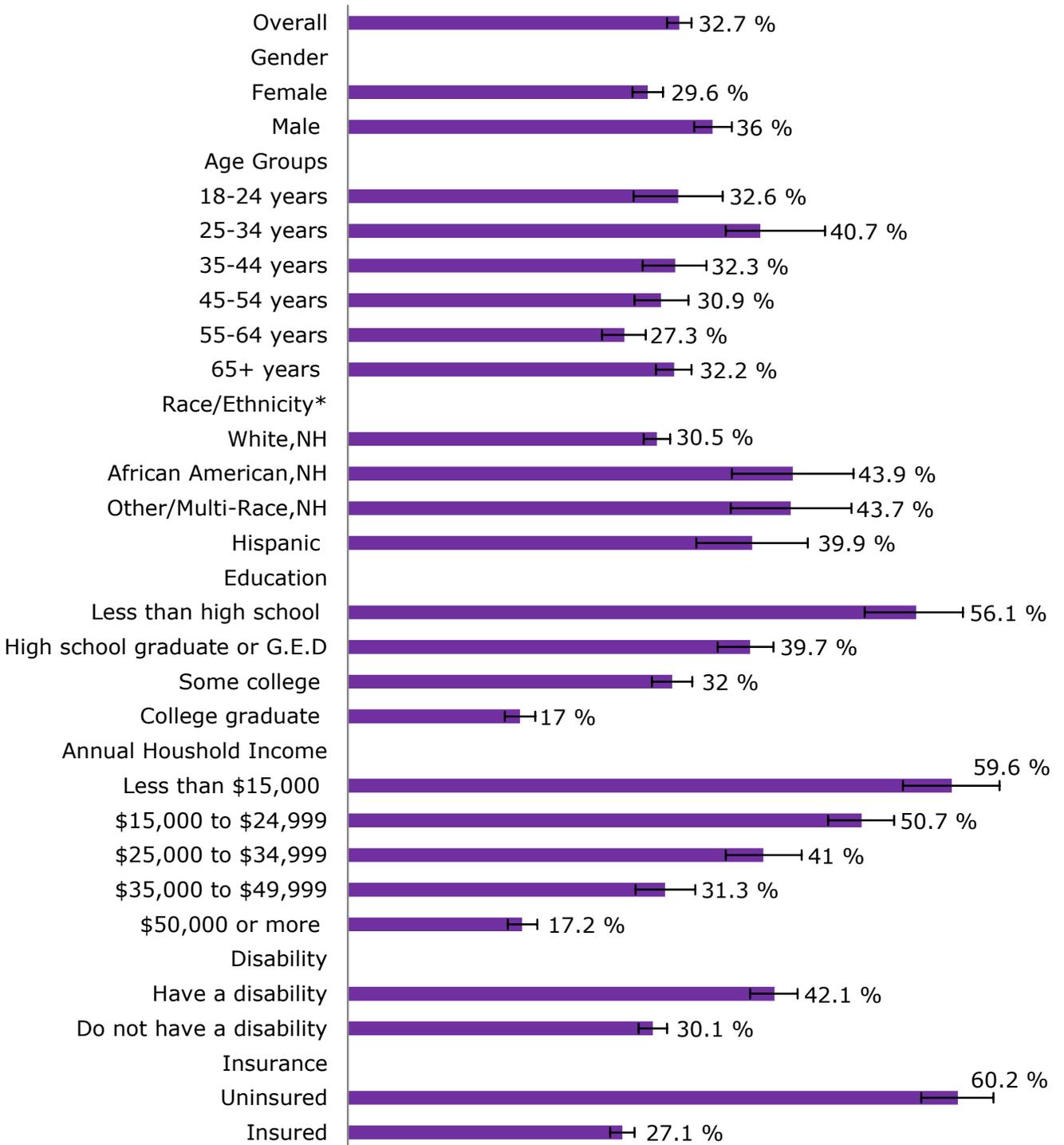
Percentage of Adults Aged 18 Years and Older Who Have Not Used the Oral Health Care System in the Past 12 Months, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	32.7	31.5-33.9
Gender		
Female	29.6	28.1-31.1
Male	36	34.1-37.8
Age Groups		
18-24 years	32.6	28.2-37.0
25-34 years	40.7	37.3-44.1
35-44 years	32.3	29.2-35.5
45-54 years	30.9	28.2-33.5
55-64 years	27.3	25.2-29.5
65+ years	32.2	30.5-34.0
Race/Ethnicity*		
White,NH	30.5	29.2-31.8
African American,NH	43.9	37.9-49.9
Other/Multi-Race,NH	43.7	37.7-49.6
Hispanic	39.9	34.4-45.4
Education		
Less than high school	56.1	51.5-61.2
High school graduate or G.E.D	39.7	37.4-42.9
Some college	32	30.0-34.0
College graduate	17	15.5-18.5
Annual Household Income		
Less than \$15,000	59.6	54.9-64.4
\$15,000 to \$24,999	50.7	47.4-54.0
\$25,000 to \$34,999	41	37.2-44.7
\$35,000 to \$49,999	31.3	28.3-34.2
\$50,000 or more	17.2	15.7-18.6
Disability		
Living with a disability	42.1	39.8-44.5
Living without a disability	30.1	28.7-31.5
Insurance		
Uninsured	60.2	56.7-63.8
Insured	27.1	25.9-28.3

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

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

Percentage of Adults Aged 18 Years and Older Who Have Not Used the Oral Health Care System in the Past 12 Months

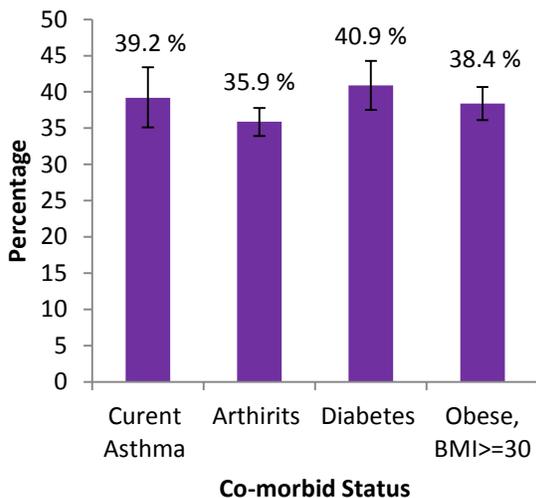


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Have Not Used the Oral Health Care System In the Past 12 Months, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	39.2	35.0-43.3
No	32	30.8-33.3
Arthritis Status		
Yes	35.9	34.0-37.9
No	31.6	30.2-33.0
Diabetes Status		
Yes	40.9	37.5-44.3
No	31.9	30.6-33.1
Weight Category		
Normal or Underweight, BMI<25	27.7	25.6-29.7
Overweight, 25<= BMI<30	32.1	30.0-34.1
Obese, BMI>=30	38.4	36.1-40.7

Percentage of Adults Aged 18 Years and Older Who Have Not Used the Oral Health Care System In the Past 12 Months, by Co-morbid Conditions



The percentage of Kansas adults aged 18 years and older who did not use the oral health care system in the past 12 months was significantly **higher** among:

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

SUMMARY

Approximately 33 percent of Kansas adults aged 18 years and older did not use the oral health care system in the past 12 months. In addition, higher percentages of males, adults aged 24-34 years old, adults, Hispanics, non-Hispanic African Americans, non-Hispanic other/multi-race, adults with insurance, adults with lower income and education, overweight and obese adults, those with chronic diseases (current asthma, diabetes and arthritis), and those living with a disability did not use the oral health care system in the past 12 months.

To address associated disparities with accessing the oral health care system, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 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 2012, more than one-third of Kansas adults aged 18 years and older did not have dental insurance. The percentage of Kansas adults with no dental insurance was significantly **higher** among:

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

The percentage of Kansas adults with no dental insurance did not differ significantly by gender groups.

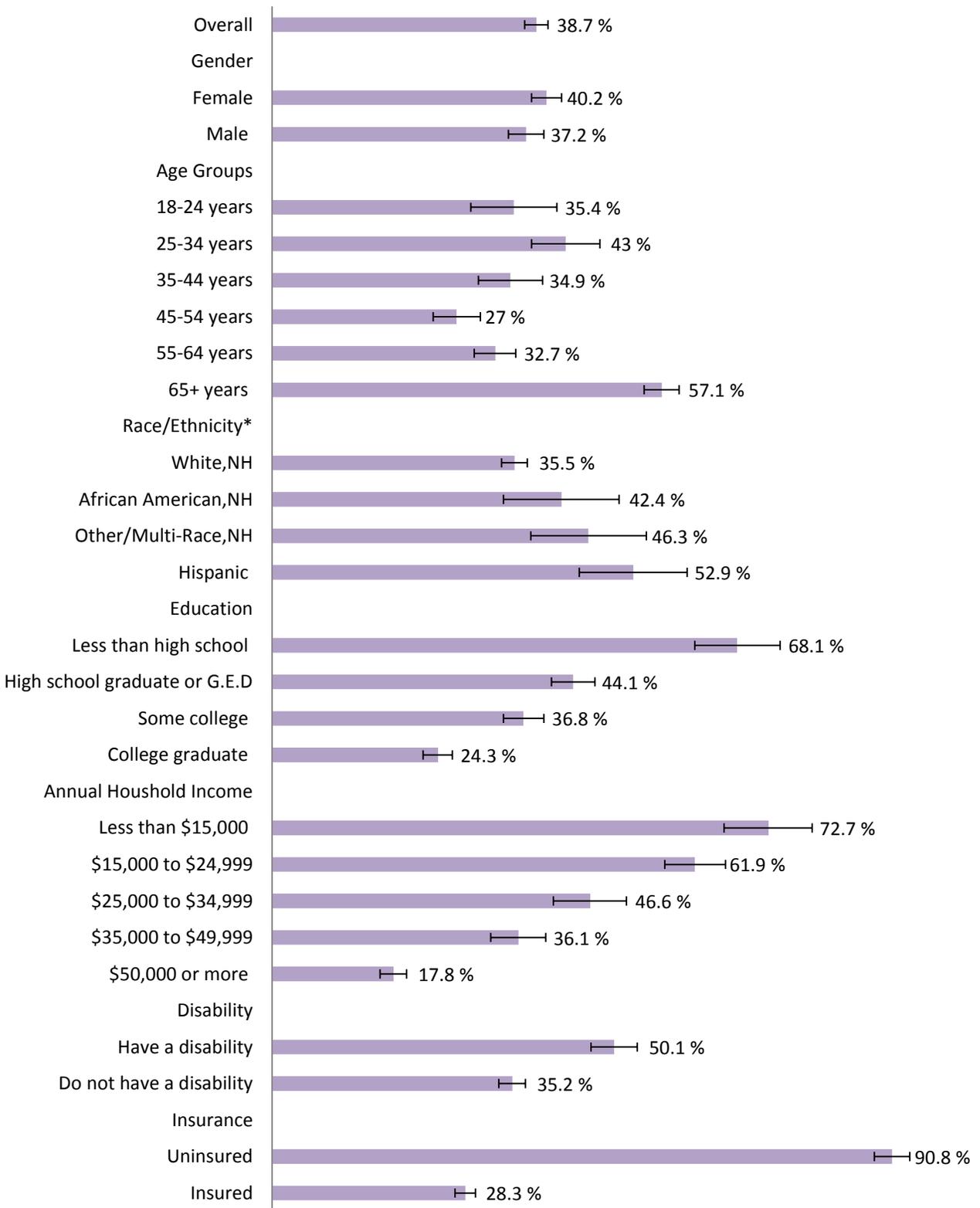
Percentage of Adults Aged 18 Years and Older With No Dental Insurance, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	38.7	37.0-40.4
Gender		
Female	40.2	38.0-42.4
Male	37.2	34.6-39.8
Age Groups		
18-24 years	35.4	29.1-41.7
25-34 years	43	38.0-48.0
35-44 years	34.9	30.2-39.6
45-54 years	27	23.5-30.4
55-64 years	32.7	29.7-35.8
65+ years	57.1	54.6-59.7
Race/Ethnicity*		
White,NH	35.5	33.6-37.4
African American,NH	42.4	34.0-50.9
Other/Multi-Race,NH	46.3	37.8-54.7
Hispanic	52.9	45.0-60.8
Education		
Less than high school	68.1	61.8-74.3
High school graduate or G.E.D	44.1	40.9-47.3
Some college	36.8	33.8-39.7
College graduate	24.3	22.2-26.5
Annual Household Income		
Less than \$15,000	72.7	66.3-79.2
\$15,000 to \$24,999	61.9	57.4-66.3
\$25,000 to \$34,999	46.6	41.3-52.0
\$35,000 to \$49,999	36.1	32.1-40.2
\$50,000 or more	17.8	15.9-19.8
Disability		
Living with a disability	50.1	46.7-53.5
Living without a disability	35.2	33.3-37.2
Insurance		
Uninsured	90.8	88.2-93.4
Insured	28.3	26.8-29.8

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

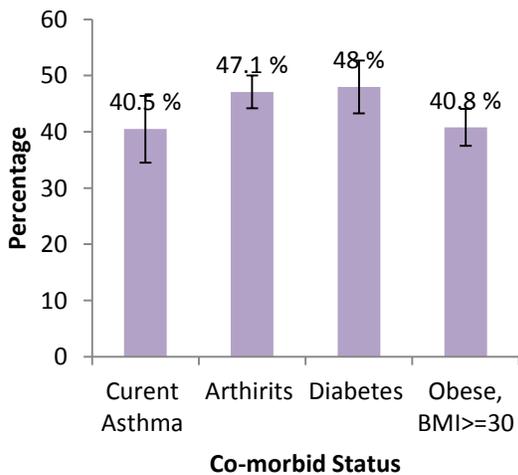


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With No Dental Insurance, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	40.5	34.6-46.5
No	38.5	36.8-40.3
Arthritis Status		
Yes	47.1	44.2-50.0
No	36.1	34.1-38.2
Diabetes Status		
Yes	48	43.3-52.7
No	37.7	35.9-39.5
Weight Category		
Normal or Underweight, BMI<25	36.5	33.6-39.5
Overweight, 25<= BMI<30	38	35.2-40.8
Obese, BMI>=30	40.8	37.5-44.1

Percentage of Adults Aged 18 Years and Older With No Dental Insurance, by Co-morbid Conditions



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

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

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

SUMMARY

Approximately 39 percent of Kansas adults aged 18 years and older did not have dental insurance. In addition, higher percentages of older adults, Hispanics, non-Hispanic other race/multiracial adults, adults with no insurance, adults with lower annual income and education, those with chronic diseases (diabetes and arthritis), and those living with a disability did not have dental insurance.

A developmental Healthy People 2020 goal is to increase the proportion of people with dental insurance. As 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Oral Health: Lost All Permanent Teeth

Loss of all permanent teeth indicates poor oral health. Oral infections that may cause tooth loss such as periodontal (gum) diseases may increase the risk of heart disease, may put pregnant women at greater risk of premature delivery, and may complicate control of blood sugar for people living with diabetes.¹⁸ Thus preventing loss of teeth is the major step in the health of the person. The Healthy People 2020 goal is reduce the proportion of adults aged 65-74 years who have lost all their natural teeth.

In 2012, approximately 1 in 6 Kansas adults aged 65-74 years have lost all their permanent teeth. The percentage of Kansas adults aged 65-74 years who have lost all their permanent teeth was significantly **higher** among:

- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.

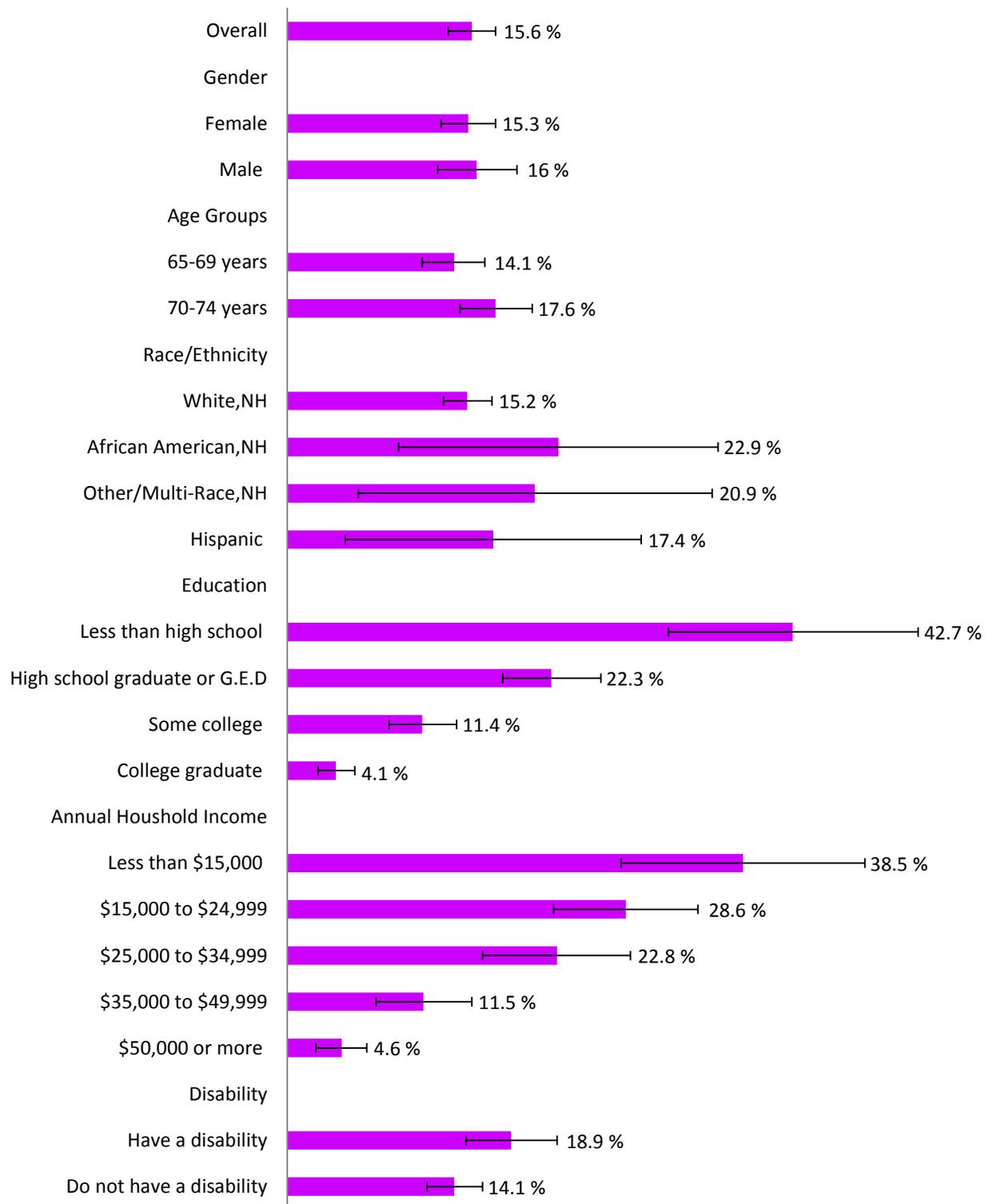
The percentage of Kansas adults aged 65-74 years who have lost all their permanent teeth did not differ significantly by gender groups, age groups, race/ethnicity groups and disability status.

Percentage of Adults 65-74 Years and Older Who Have Lost All Their Permanent Teeth, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	15.6	13.6-17.6
Gender		
Female	15.3	13.0-17.6
Male	16	12.6-19.3
Age Groups		
65-69 years	14.1	11.5-16.8
70-74 years	17.6	14.5-20.6
Race/Ethnicity		
White,NH	15.2	13.1-17.2
African American,NH	22.9	9.4-36.4
Other/Multi-Race,NH	20.9	5.9-35.8
Hispanic	17.4	4.9-29.9
Education		
Less than high school	42.7	32.1-53.2
High school graduate or G.E.D	22.3	18.1-26.4
Some college	11.4	8.5-14.2
College graduate	4.1	2.5-5.6
Annual Household Income		
Less than \$15,000	38.5	28.2-48.8
\$15,000 to \$24,999	28.6	22.5-34.7
\$25,000 to \$34,999	22.8	16.6-29.1
\$35,000 to \$49,999	11.5	7.4-15.5
\$50,000 or more	4.6	2.5-6.8
Disability		
Living with a disability	18.9	15.0-22.7
Living without a disability	14.1	11.7-16.4

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

Percentage of Adults 65-74 Years and Older Who Have Lost All Their Permanent Teeth

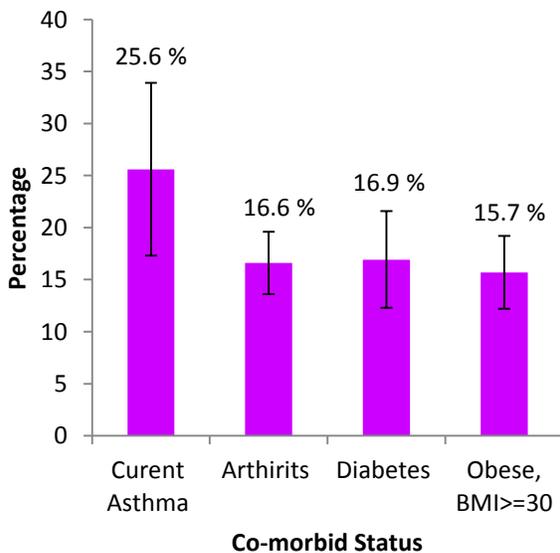


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults 65-74 Years and Older Who Have Lost All Their Permanent Teeth, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	25.6	17.3-33.9
No	14.8	12.7-16.9
Arthritis Status		
Yes	16.6	13.6-19.6
No	14.5	11.8-17.3
Diabetes Status		
Yes	16.9	12.2-21.5
No	15.3	13.1-17.5
Weight Category		
Normal or Underweight, BMI<25	15.8	12.1-19.4
Overweight, 25<= BMI<30	14.6	11.3-17.9
Obese, BMI>=30	15.7	12.2-19.2

Percentage of Adults 65-74 Years and Older Who Have Lost All Their Permanent Teeth, by Co-morbid Conditions



The percentage of Kansas adults aged 65-74 years who have lost all their permanent teeth was significantly **higher** among:

- Adults with current asthma compared to adults without current asthma.

The percentage of Kansas adults aged 65-74 years who have lost all their permanent teeth did not differ significantly by arthritis status, diabetes status and weight status.

SUMMARY

Approximately 16 percent of Kansas adults aged 65-74 years have lost all their permanent teeth. In addition, higher percentages of adults with lower income and education, and those with current asthma have lost all their permanent teeth.

The Healthy People 2020 goal is reduce the proportion of adults aged 65-74 years who have lost all their natural teeth to 21.6 percent. While overall Kansans aged 65-74 years are meeting the Healthy People 2020 goal, further public health efforts are needed to address disparities in population subgroups in Kansas.

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 United States.¹⁹ 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.²⁰ The Healthy People 2020 goal is to reduce the proportion of adults engaging in binge drinking during the past 30 days.

In 2012, approximately 1 in 6 Kansas adults aged 18 years and older were binge drinkers. The prevalence of binge drinking was significantly **higher** among:

- Males compared to females.
- Younger adults compared to adults in older age groups.
- Adults not living with a disability compared to adults living with a disability.

The prevalence of binge drinking did not differ significantly by race/ethnicity groups (age-adjusted prevalence), education groups, income groups, disability status and insurance status.

Percentage of Adults Age 18 Years and Older Who Were Binge Drinkers**, KS BRFSS 2012

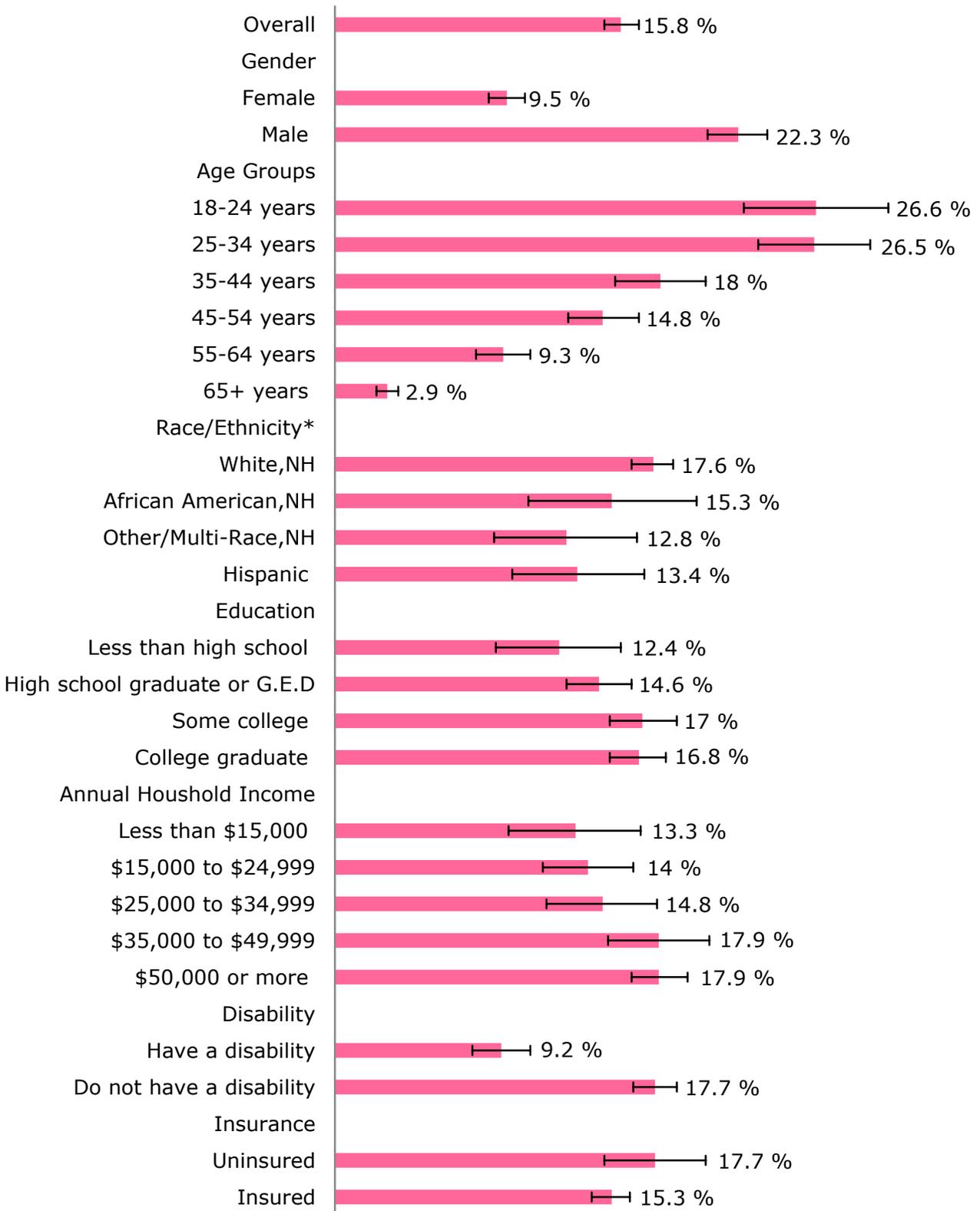
Demographic Characteristics	Weighted Percentage	95% CI
Overall	15.8	14.8-16.7
Gender		
Female	9.5	8.5-10.5
Male	22.3	20.7-24.0
Age Groups		
18-24 years	26.6	22.6-30.6
25-34 years	26.5	23.4-29.6
35-44 years	18	15.5-20.5
45-54 years	14.8	12.8-16.7
55-64 years	9.3	7.8-10.8
65+ years	2.9	2.3-3.5
Race/Ethnicity*		
White,NH	17.6	16.5-18.8
African American,NH	15.3	10.6-19.9
Other/Multi-Race,NH	12.8	8.9-16.8
Hispanic	13.4	9.7-17.0
Education		
Less than high school	12.4	9.0-15.9
High school graduate or G.E.D	14.6	12.8-16.4
Some college	17	15.1-18.8
College graduate	16.8	15.3-18.4
Annual Household Income		
Less than \$15,000	13.3	9.7-17.0
\$15,000 to \$24,999	14	11.5-16.5
\$25,000 to \$34,999	14.8	11.8-17.9
\$35,000 to \$49,999	17.9	15.1-20.7
\$50,000 or more	17.9	16.3-19.4
Disability		
Living with a disability	9.2	7.6-10.8
Living without a disability	17.7	16.5-18.9
Insurance		
Uninsured	17.7	14.9-20.5
Insured	15.3	14.3-16.4

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

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

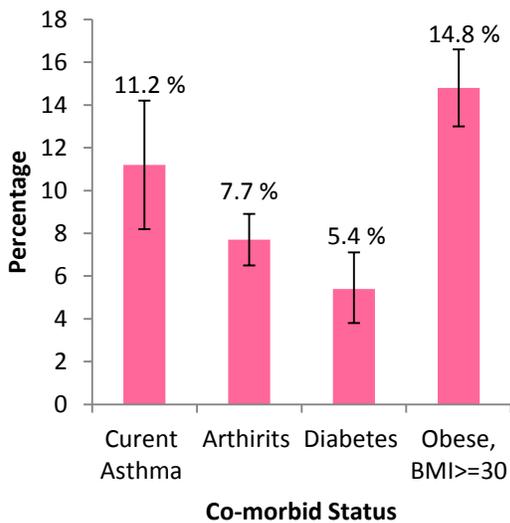


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	11.2	8.2-14.2
No	16	15.0-17.0
Arthritis Status		
Yes	7.7	6.5-8.9
No	18.3	17.1-19.5
Diabetes Status		
Yes	5.4	3.7-7.0
No	16.8	15.8-17.9
Weight Category		
Normal or Underweight, BMI<25	16.9	15.2-18.7
Overweight, 25<= BMI<30	17	15.3-18.7
Obese, BMI>=30	14.8	13.0-16.6

Percentage of Adults Aged 18 Years and Older Who Were Binge Drinkers, by Co-morbid Conditions



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

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

The percentage of Kansas adults who were binge drinkers did not differ significantly by weight status.

SUMMARY

Approximately 16 percent of Kansas adults aged 18 years and older were binge drinkers. In addition, prevalence of binge drinking was higher among males, younger adults, adults without a chronic health condition (current asthma, arthritis, and diabetes) and those living without a disability.

The Healthy People 2020 goal is to reduce the proportion of people engaging in binge drinking to 24.4 percent. While Kansas is meeting the Healthy People 2020 goal, further public health efforts are needed to address disparities in population subgroups in Kansas.

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

Substance Abuse: Drinking and Driving

Whenever a person gets behind the wheel drunk, they put everyone on the road in danger, which resulted in approximately 11,000 preventable deaths nationwide in 2009.²¹ The Healthy People 2020 goal is to decrease the rate of alcohol-impaired driving fatalities. The best way to prevent alcohol-impaired driving fatalities is to prevent alcohol-impaired driving from occurring in the first place.

In 2012, approximately 1 in 25 Kansas adults aged 18 years and older reported drinking and driving in the past 30 days. The percentage of Kansas adults aged 18 years and older who reported drinking and driving in the past 30 days was significantly **higher** among:

- Males compared to females,
- Younger adults compared to adults in older age groups.

The percentage of Kansas adults who reported drinking and driving in the past 30 days did not differ significantly by race/ethnicity groups (age-adjusted prevalence), education groups, income groups, disability status and insurance status.

Percentage of Adults Aged 18 Years and Older Who Reported Drinking and Driving in the Past 30 Days, KS BRFSS 2012

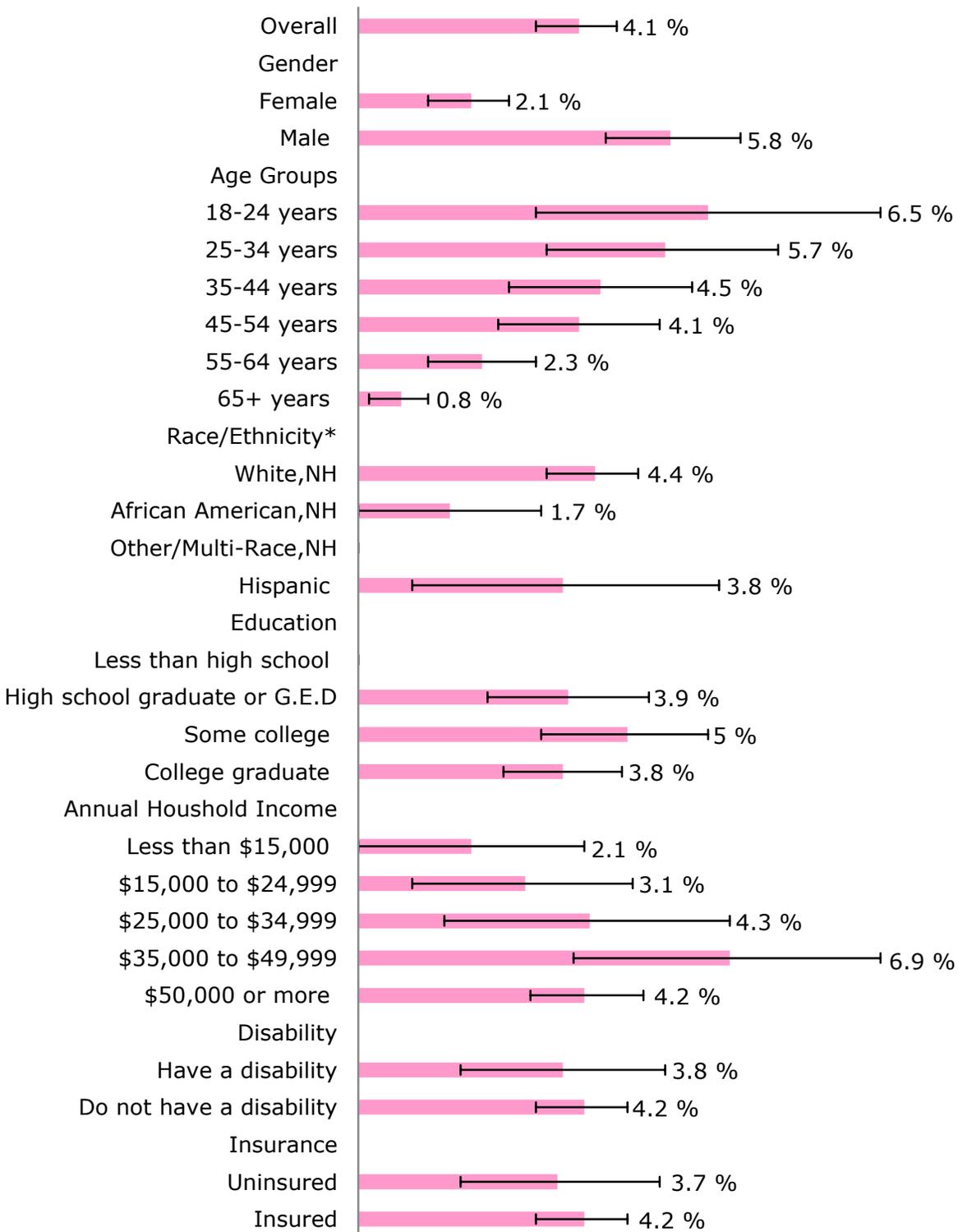
Demographic Characteristics	Weighted Percentage	95% CI
Overall	4.1	3.4-4.9
Gender		
Female	2.1	1.4-2.9
Male	5.8	4.5-7.0
Age Groups		
18-24 years	6.5	3.3-9.7
25-34 years	5.7	3.6-7.9
35-44 years	4.5	2.8-6.2
45-54 years	4.1	2.6-5.6
55-64 years	2.3	1.3-3.3
65+ years	0.8	0.3-1.4
Race/Ethnicity*		
White,NH	4.4	3.6-5.3
African American,NH	1.7	0.02-3.4
Other/Multi-Race,NH	**	**
Hispanic	3.8	0.9-6.6
Education		
Less than high school	**	**
High school graduate or G.E.D	3.9	2.4-5.4
Some college	5	3.5-6.6
College graduate	3.8	2.7-4.9
Annual Household Income		
Less than \$15,000	2.1	0-4.5
\$15,000 to \$24,999	3.1	1.1-5.2
\$25,000 to \$34,999	4.3	1.7-7.0
\$35,000 to \$49,999	6.9	4.1-9.8
\$50,000 or more	4.2	3.1-5.2
Disability		
Living with a disability	3.8	1.9-5.7
Living without a disability	4.2	3.4-5.1
Insurance		
Uninsured	3.7	1.8-5.5
Insured	4.2	3.4-5.1

*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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Reported Drinking and Driving in the Past 30 Days



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

Percentage of Adults Aged 18 Years and Older Who Reported Drinking and Driving in the Past 30 Days, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	2	0.0-4.0
No	4.4	3.5-5.2
Arthritis Status		
Yes	2.4	1.2-3.5
No	4.6	3.7-5.5
Diabetes Status		
Yes	2	0.0-4.1
No	4.3	3.4-5.1
Weight Category		
Normal or Underweight, BMI<25	4.9	3.4-6.4
Overweight, 25<= BMI<30	3	2.0-4.0
Obese, BMI>=30	4.9	3.3-6.6

The percentage of Kansas adults aged 18 years and older who reported drinking and driving in the past 30 days was significantly **higher** among:

- Adults without arthritis compared to adults with arthritis.

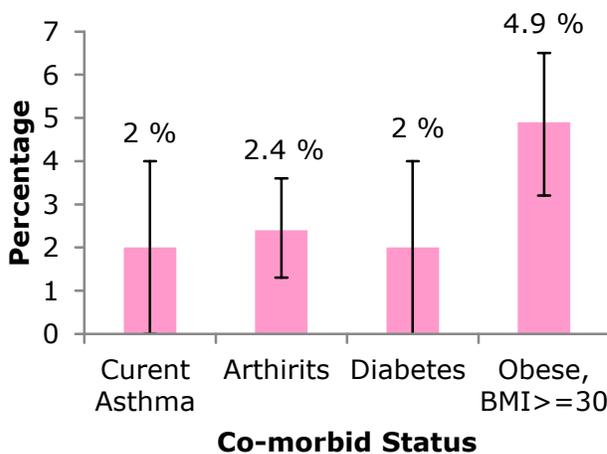
The percentage of Kansas adults who reported drinking and driving in the past 30 days did not differ significantly by current asthma status, diabetes status and weight status.

SUMMARY

Approximately 4 percent of Kansas adults reported drinking and driving in the past 30 days. In addition, higher percentages of males, younger adults and those without arthritis reported drinking and driving in the past 30 days.

The Healthy People 2020 goal is to decrease the rate of alcohol-impaired driving fatalities. Further public health efforts are needed to reduce drinking and driving in the overall population and its subgroups in Kansas.

Percentage of Adults Aged 18 Years and Older Who Reported Drinking and Driving in the Past 30 Days, by Co-morbid Conditions



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

Mental Health: Serious Psychological Distress

Mental health is essential to personal well-being, family and interpersonal relationships, and contribution to community or society.²²

The burden of mental illness on health and productivity in the U.S. is underestimated.²³

Healthy People 2020 included mental health as a leading health indicator.

In 2012, approximately 3 percent of Kansans aged 18 years and older were ever diagnosed with SPD. SPD is a nonspecific measure of psychological distress that has been psychometrically validated and shown to be able to distinguish community Diagnostic and Statistical Manual of Mental Disorders -IV cases from noncases.²⁴ The percentage of Kansas adults who were ever diagnosed with SPD was significantly **higher** among:

- Adults aged 45-54 years compared to those aged 65 plus years.
- Adults with less than a high school education compared to those in who were college graduates.
- Adults with annual household income of less than \$15,000 compared to adults in all other higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with insurance compared to adults with no insurance.

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

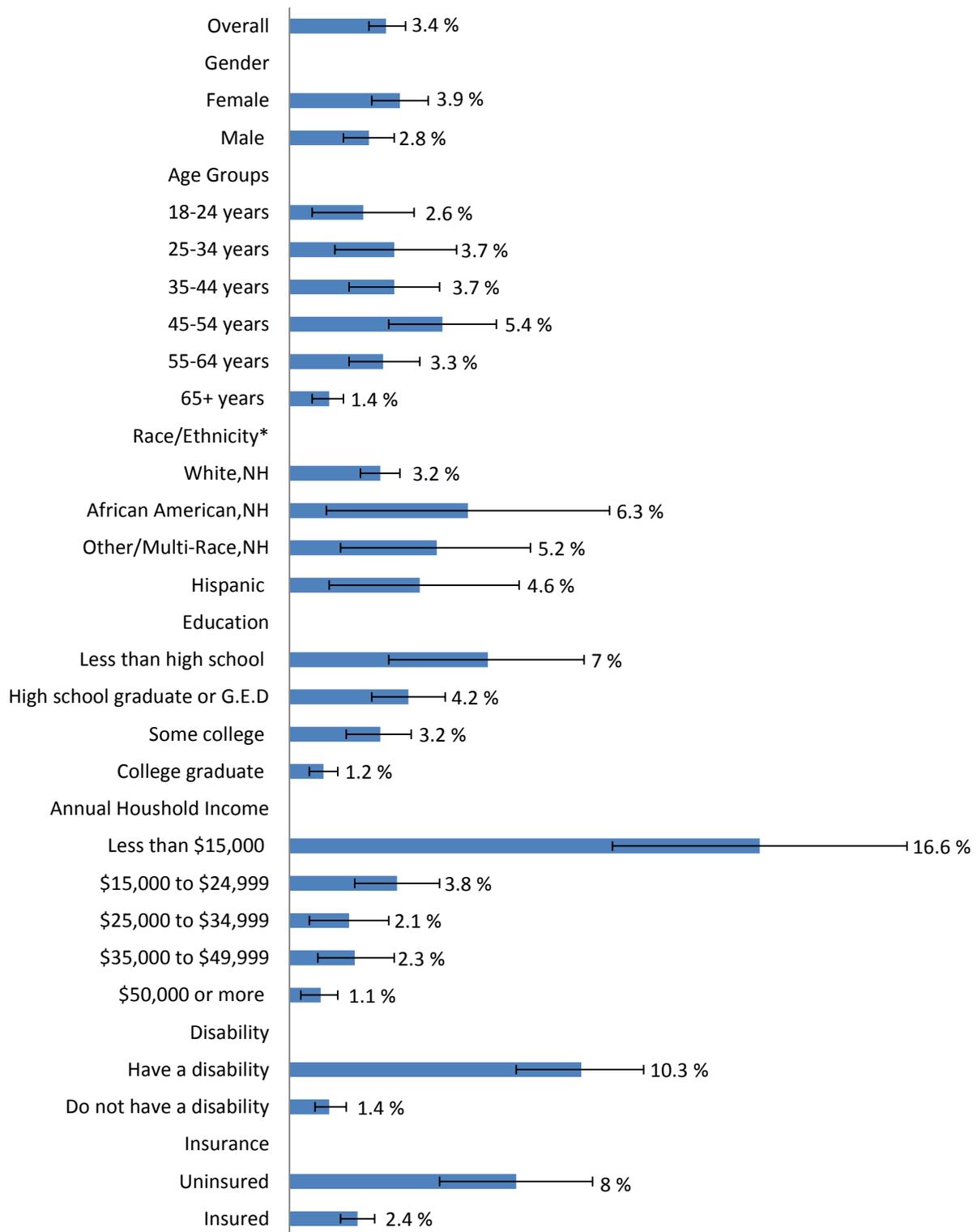
Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Serious Psychological Distress, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	3.4	2.7-4.0
Gender		
Female	3.9	2.9-4.9
Male	2.8	1.9-3.7
Age Groups		
18-24 years	2.6	0.8-4.4
25-34 years	3.7	1.5-5.8
35-44 years	3.7	2.1-5.3
45-54 years	5.4	3.5-7.3
55-64 years	3.3	2.0-4.5
65+ years	1.4	0.9-2.0
Race/Ethnicity*		
White,NH	3.2	2.5-3.9
African American,NH	6.3	1.3-11.3
Other/Multi-Race,NH	5.2	1.9-8.6
Hispanic	4.6	1.1-7.8
Education		
Less than high school	7	3.6-10.5
High school graduate or G.E.D	4.2	2.9-5.5
Some college	3.2	2.1-4.4
College graduate	1.2	0.7-1.7
Annual Household Income		
Less than \$15,000	16.6	11.4-21.8
\$15,000 to \$24,999	3.8	2.3-5.3
\$25,000 to \$34,999	2.1	0.7-3.5
\$35,000 to \$49,999	2.3	0.9-3.6
\$50,000 or more	1.1	0.5-1.8
Disability		
Living with a disability	10.3	8.1-12.6
Living without a disability	1.4	0.8-1.9
Insurance		
Uninsured	8	5.3-10.7
Insured	2.4	1.8-3.0

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 Serious Psychological Distress

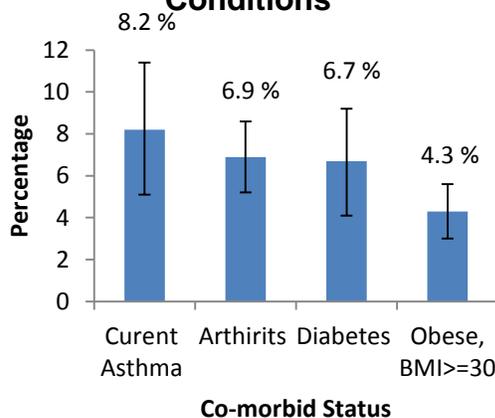


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Serious Psychological Distress, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	8.2	5.0-11.3
No	2.9	2.2-3.6
Arthritis Status		
Yes	6.9	5.2-8.6
No	2.3	1.6-2.9
Diabetes Status		
Yes	6.7	4.2-9.3
No	3	2.3-3.7
Weight Category		
Normal or Underweight, BMI<25	2.2	1.4-3.1
Overweight, 25<= BMI<30	3.5	2.3-4.7
Obese, BMI>=30	4.3	3.0-5.6

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Serious Psychological Distress, by Co-morbid Conditions



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

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

The percentage of Kansas adults who were ever diagnosed with SPD did not differ significantly by weight status.

SUMMARY

Approximately 3 percent of Kansas adults aged 18 years and older were ever diagnosed with SPD. In addition, higher percentages of adults' aged 45-54 years, those with lower education and annual household income, those who had insurance, those with chronic conditions (current asthma, arthritis, and diabetes) and those living with a disability were ever diagnosed with SPD.

To address associated disparities with SPD, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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.²⁵ Healthy People 2020 included mental health as a leading health indicator and an objective to reduce the proportion of adults aged 18 years and older who experience major depressive episodes.

In 2012, approximately 1 in 6 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 to males.
- Adults aged 64 years and younger compared to those aged 65 years and older.
- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with no insurance compared to adults with insurance.

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

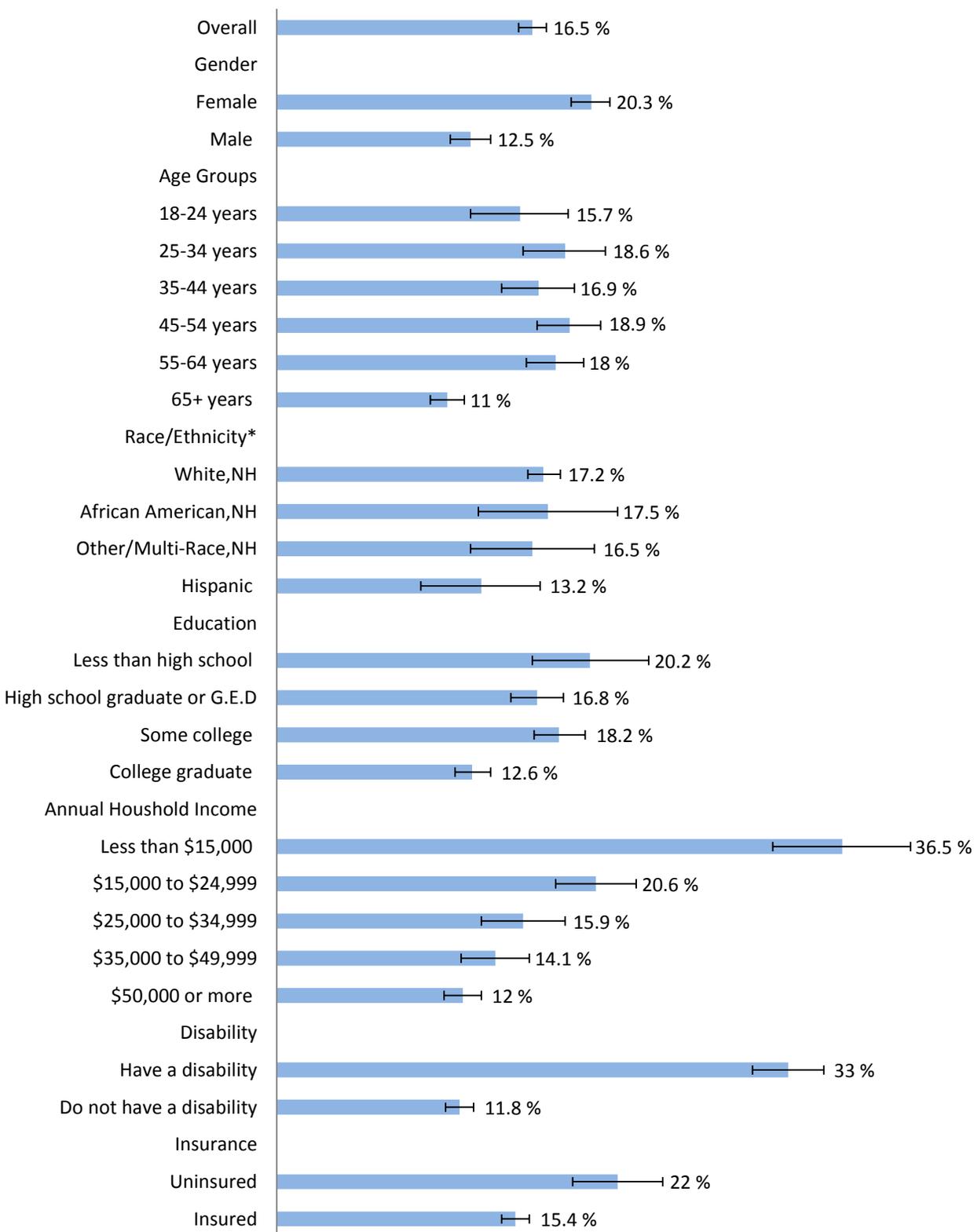
Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	16.5	15.6-17.4
Gender		
Female	20.3	19.1-21.6
Male	12.5	11.2-13.8
Age Groups		
18-24 years	15.7	12.6-18.9
25-34 years	18.6	16.0-21.3
35-44 years	16.9	14.6-19.3
45-54 years	18.9	16.9-21.0
55-64 years	18	16.2-19.9
65+ years	11	9.9-12.1
Race/Ethnicity*		
White,NH	17.2	16.1-18.2
African American,NH	17.5	13.0-22.0
Other/Multi-Race,NH	16.5	12.5-20.5
Hispanic	13.2	9.4-17.1
Education		
Less than high school	20.2	16.4-23.9
High school graduate or G.E.D	16.8	15.1-18.5
Some college	18.2	16.5-19.8
College graduate	12.6	11.4-13.7
Annual Household Income		
Less than \$15,000	36.5	32.1-41.0
\$15,000 to \$24,999	20.6	18.0-23.2
\$25,000 to \$34,999	15.9	13.2-18.6
\$35,000 to \$49,999	14.1	11.9-16.3
\$50,000 or more	12	10.8-13.2
Disability		
Living with a disability	33	30.7-35.3
Living without a disability	11.8	10.9-12.7
Insurance		
Uninsured	22	19.1-24.9
Insured	15.4	14.5-16.3

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

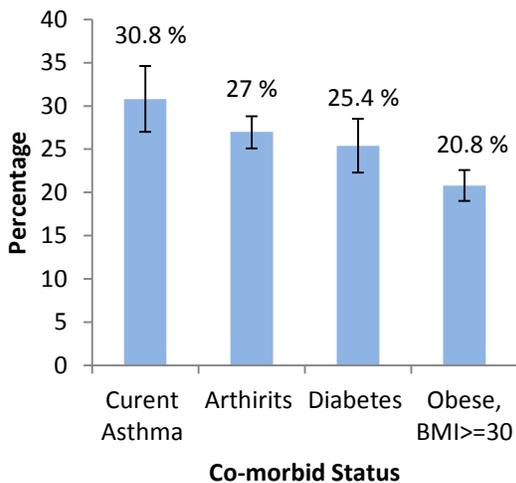


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	30.8	27.0-34.6
No	15.2	14.3-16.1
Arthritis Status		
Yes	27	25.2-28.9
No	13.1	12.1-14.1
Diabetes Status		
Yes	25.4	22.3-28.5
No	15.6	14.6-16.5
Weight Category		
Normal or Underweight, BMI<25	14.2	12.7-15.7
Overweight, 25<= BMI<30	15.2	13.7-16.7
Obese, BMI>=30	20.8	19.0-22.6

Percentage of Adults Aged 18 Years and Older Who Were Ever Diagnosed With Depression, by Co-morbid Conditions



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

SUMMARY

Approximately 17 percent of Kansas adults aged 18 years and older have ever been diagnosed with depression. In addition, higher percentages of females, adults aged 64 years and younger [should that be older?], those with lower education and annual household income, those with no insurance, those with chronic health conditions (current asthma, arthritis, diabetes and obesity) and those living with a disability have ever been diagnosed with depression.

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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Reproductive & Sexual Health: HIV

CDC recommends that health care providers test everyone between the ages of 13 and 64 years at least once as part of routine health care.²⁶ In the United States, 1 out of 6 people with HIV do not know they are infected.²⁶ HIV continues to be a major public health issue. Approximately 1.1 million Americans are living with HIV.²⁷ A Leading Healthy People 2020 objective is to increase the proportion of persons who have been tested for HIV in the past 12 months.

In 2012, approximately 2 in 5 Kansas adults aged 18 - 64 years had been tested for HIV in the past year. The percentage of Kansas adults aged 18 - 64 years who had been tested for HIV in the past year was significantly **higher** among:

- Adults aged 18-24 years compared to adults in the older age groups.
- Hispanics compared to non-Hispanic whites (age-adjusted prevalence); non-Hispanic African Americans compared to non-Hispanics whites and non-Hispanic other/multi-race adults (age-adjusted prevalence).
- Adults with a high school degree or GED and some college education compared to those who were college graduates.
- Adults with an annual household income of less than \$15,000 and \$15,000-\$24,999 compared to adults with annual household income of \$50,000 or more.

The percentage of Kansas adults aged 18-64 years who have been tested for HIV in the past year did not differ significantly by gender groups, disability status and insurance status.

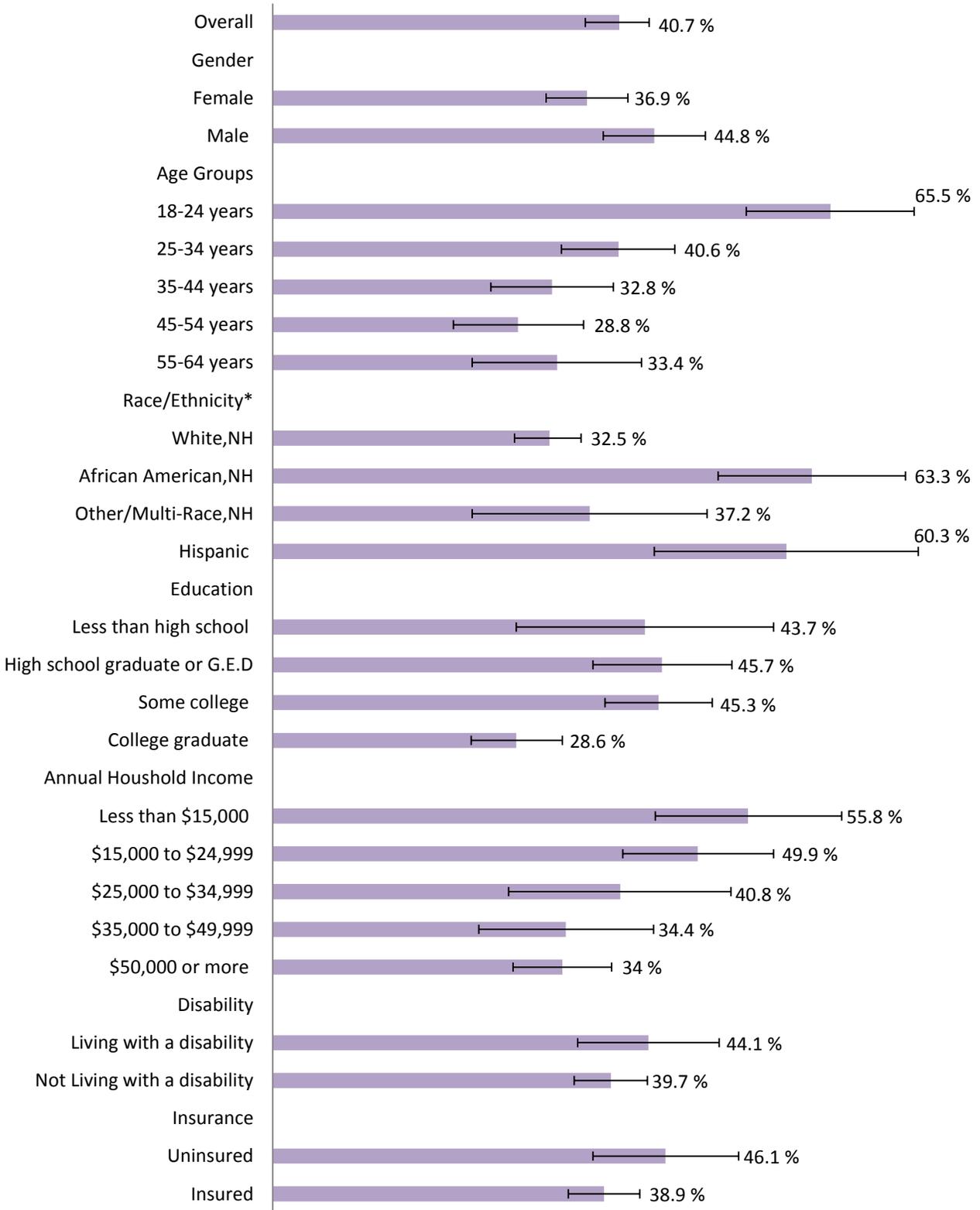
Percentage of Adults Aged 18-64 Years Who Have Been Tested For HIV In The Past Year, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	40.7	36.9-44.6
Gender		
Female	36.9	32.1-41.7
Male	44.8	38.8-50.8
Age Groups		
18-24 years	65.5	55.7-75.4
25-34 years	40.6	34.0-47.3
35-44 years	32.8	25.6-40.0
45-54 years	28.8	21.1-36.4
55-64 years	33.4	23.5-43.4
Race/Ethnicity*		
White,NH	32.5	28.8-36.3
African American,NH	63.3	52.3-74.3
Other/Multi-Race,NH	37.2	23.4-51.0
Hispanic	60.3	44.8-75.8
Education		
Less than high school	43.7	28.6-58.8
High school graduate or G.E.D	45.7	37.5-53.8
Some college	45.3	39.0-51.6
College graduate	28.6	23.2-33.9
Annual Household Income		
Less than \$15,000	55.8	44.8-66.7
\$15,000 to \$24,999	49.9	41.0-58.7
\$25,000 to \$34,999	40.8	27.8-53.9
\$35,000 to \$49,999	34.4	24.1-44.6
\$50,000 or more	34	28.2-39.8
Disability		
Living with a disability	44.1	35.8-52.4
Not Living with a disability	39.7	35.4-44.0
Insurance		
Uninsured	46.1	37.5-54.6
Insured	38.9	34.7-43.1

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

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

Percentage of Adults Aged 18-64 Years Who Have Been Tested For HIV In The Past Year

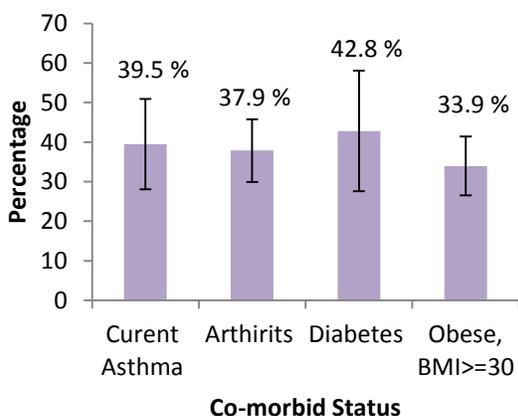


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18-64 Years Who Have Been Tested For HIV In The Past Year, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	39.5	28.1-50.9
No	40.7	36.6-44.8
Arthritis Status		
Yes	37.9	30.0-45.9
No	41.4	37.1-45.7
Diabetes Status		
Yes	42.8	27.5-58.0
No	40.6	36.7-44.6
Weight Category		
Normal or Underweight, BMI<25	40.8	33.9-47.6
Overweight, 25<= BMI<30	41.6	35.2-48.1
Obese, BMI>=30	33.9	26.4-41.3

Percentage of Adults Aged 18-64 Years Who Have Been Tested For HIV In the Past Year, by Co-morbid Conditions



The percentage of Kansas adults aged 18 years and older who have been tested for HIV in the past year did not differ significantly by current asthma status, arthritis status, diabetes status and weight status.

SUMMARY

Approximately 42 percent of Kansas adults aged 18 – 64 years have been tested for HIV in the past year. In addition higher percentages of adults aged 18-24 years, Hispanics, non-Hispanic African-Americans, those with high school degree or some college education were tested for HIV in the past year.

To address lower percentages of HIV testing among adults 18-64 years in population subgroups, further public health efforts are needed in Kansas.

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 United States.²⁸ 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 United States.²⁸ 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 2012, approximately 1 in 10 Kansas adults aged 18 years and older had ever been diagnosed with diabetes. The percentage of Kansas adults who were ever diagnosed with diabetes was significantly **higher** among:

- Older adults compared to younger adults.
- Hispanics and non-Hispanic African Americans compared to non-Hispanics Whites (age-adjusted prevalence).
- Adults with lower education compared to adults in higher education groups.
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with insurance compared to adults with no insurance.

The percentage of Kansas adults who were ever diagnosed with diabetes did not differ significantly by gender groups.

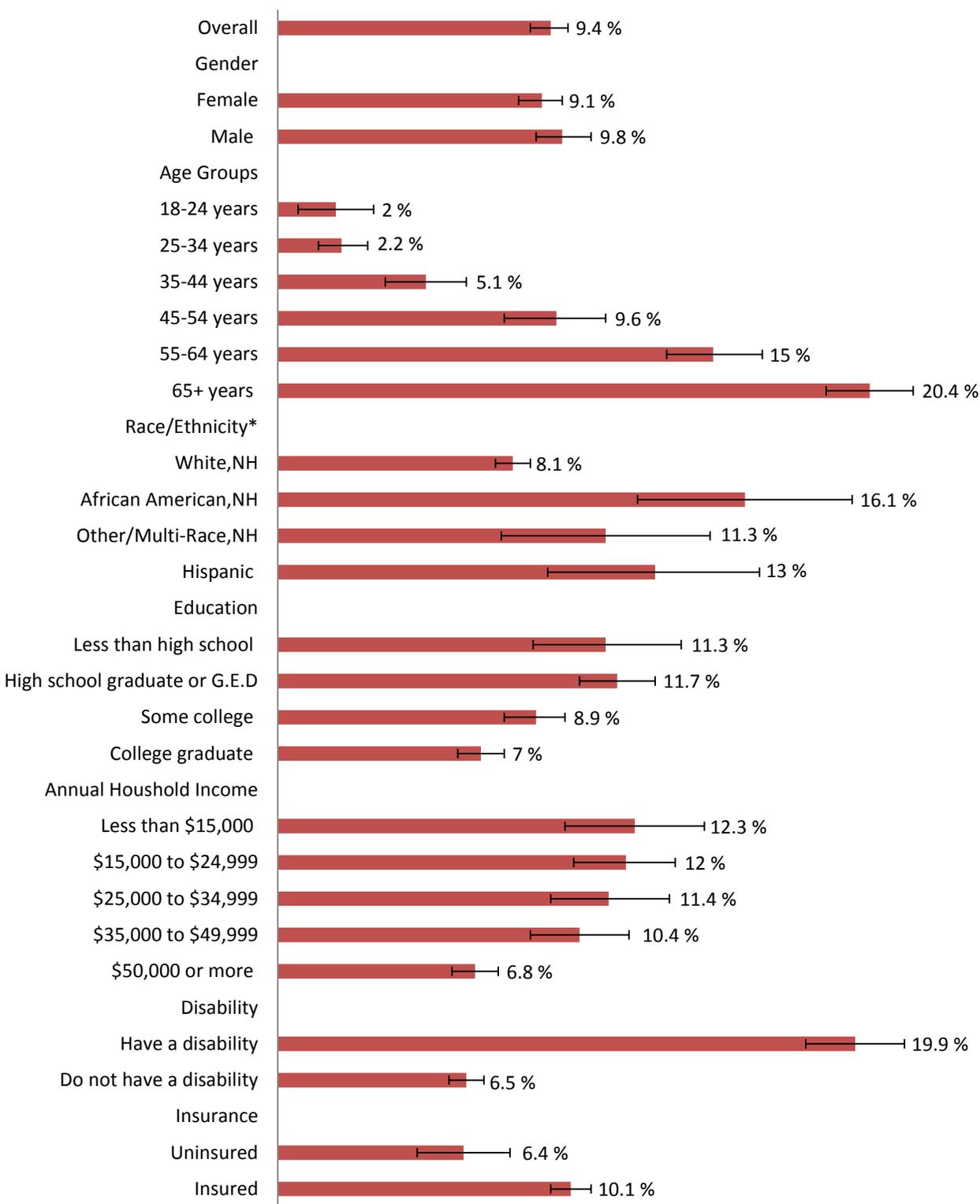
Percentage of Adults Aged 18 Years and Older With Diagnosed Diabetes, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	9.4	8.8-10.1
Gender		
Female	9.1	8.4-9.9
Male	9.8	8.8-10.7
Age Groups		
18-24 years	2	0.7-3.3.
25-34 years	2.2	1.3-3.0
35-44 years	5.1	3.7-6.5
45-54 years	9.6	7.9-11.4
55-64 years	15	13.3-16.6
65+ years	20.4	18.9-21.9
Race/Ethnicity*		
White,NH	8.1	7.5-8.7
African American,NH	16.1	12.4-19.8
Other/Multi-Race,NH	11.3	7.7-14.9
Hispanic	13	9.4-16.7
Education		
Less than high school	11.3	8.7-13.8
High school graduate or G.E.D	11.7	10.4-13.0
Some college	8.9	7.9-10.0
College graduate	7	6.2-7.8
Annual Household Income		
Less than \$15,000	12.3	9.9-14.7
\$15,000 to \$24,999	12	10.3-13.8
\$25,000 to \$34,999	11.4	9.3-13.4
\$35,000 to \$49,999	10.4	8.7-12.1
\$50,000 or more	6.8	6.0-7.6
Disability		
Living with a disability	19.9	18.2-21.6
Living without a disability	6.5	5.9-7.1
Insurance		
Uninsured	6.4	4.8-8.0
Insured	10.1	9.4-10.8

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

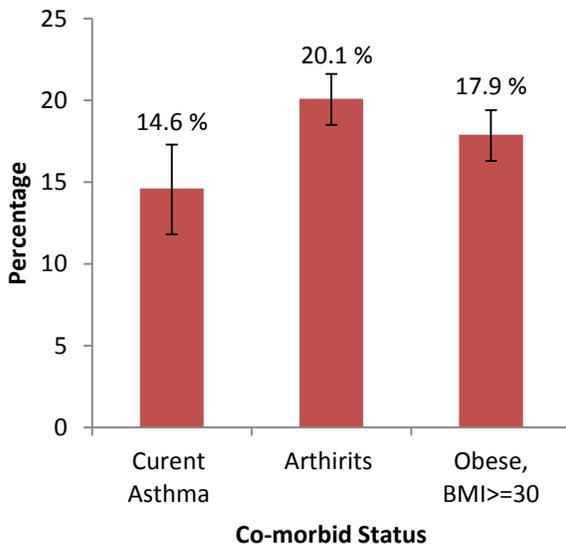


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With Diagnosed Diabetes, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	14.6	11.9-17.4
No	9	8.4-9.6
Arthritis Status		
Yes	20.1	18.6-21.7
No	6	5.4-6.6
Weight Category		
Normal or Underweight, BMI<25	3.9	3.2-4.6
Overweight, 25<= BMI<30	7.8	6.9-8.8
Obese, BMI>=30	17.9	16.4-19.5

Percentage of Adults Aged 18 Years and Older With Diagnosed Diabetes, by Co-morbid Conditions



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

SUMMARY

Approximately 9 percent of Kansas adults aged 18 years and older have ever been diagnosed with diabetes. In addition, higher percentages of older adults, non-Hispanic African Americans, Hispanics, those with lower education and annual household income, those with insurance, and those with chronic health conditions (current asthma, arthritis, and obesity) and living with a disability have ever been diagnosed with diabetes.

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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Pre-Diabetes

A person with pre-diabetes is at a higher risk for developing type 2 diabetes or other serious health problems.²⁹ It is estimated that 15 to 30 percent of people with pre-diabetes will develop type 2 diabetes without any lifestyle changes within five years.²⁹ 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 at risk for diabetes mellitus.¹³

In 2012, approximately 1 in 15 Kansas adults aged 18 years and older had ever been diagnosed with pre-diabetes. The percentage of Kansas adults who were ever diagnosed with pre-diabetes was significantly **higher** among:

- Older adults compared to younger adults.
- Adults living with a disability compared to adults living without a disability.

The percentage of Kansas adults aged 18 years and older who were ever diagnosed with pre-diabetes did not differ significantly by race/ethnicity groups (age-adjusted prevalence), education groups, annual household income groups and insurance status.

Percentage of Adults Age 18 Years and Older with Diagnosed Pre-Diabetes or Borderline Diabetes, KS BRFSS 2012

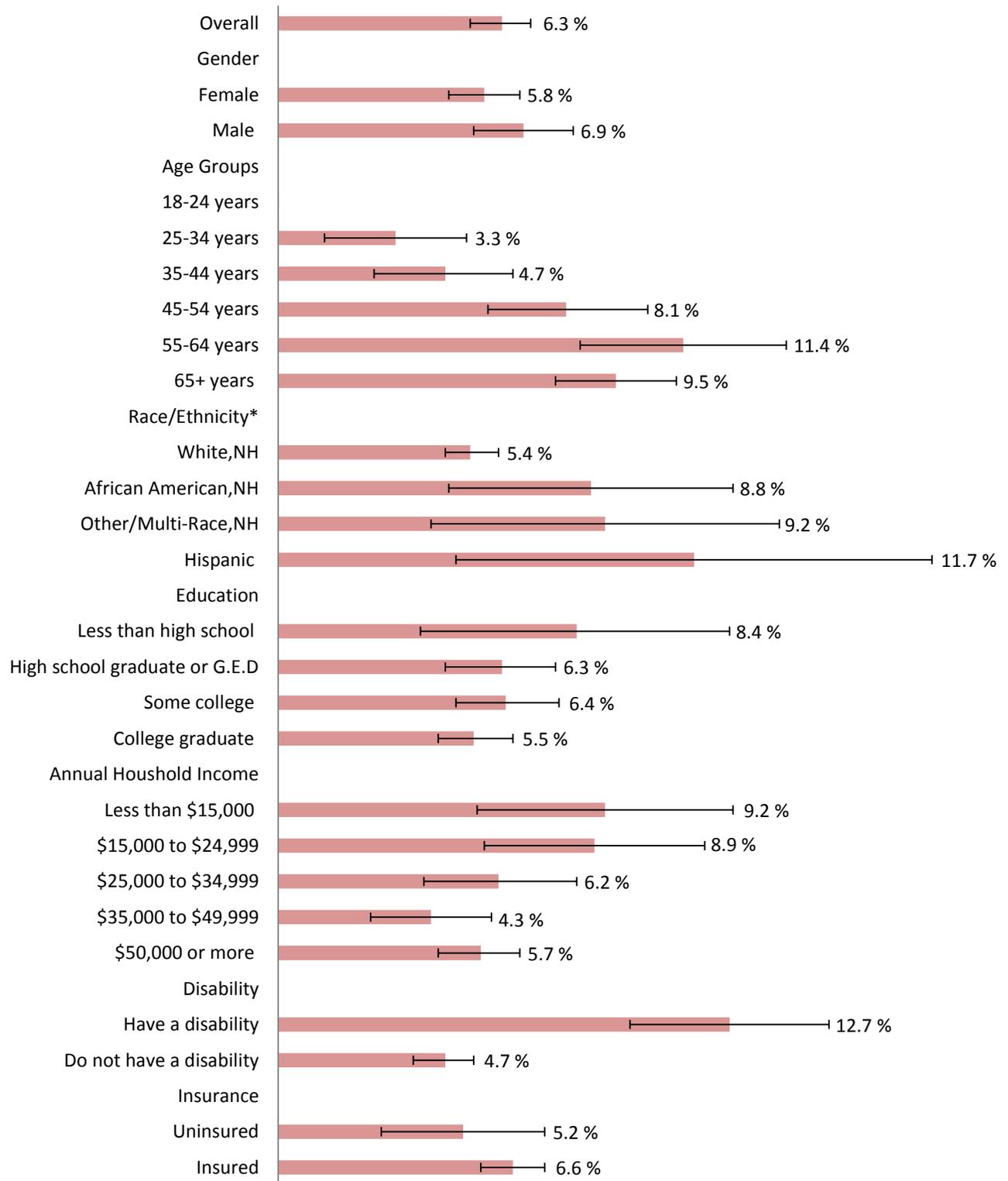
Demographic Characteristics	Weighted Percentage	95% CI
Overall	6.3	5.5-7.2
Gender		
Female	5.8	4.8-6.8
Male	6.9	5.5-8.3
Age Groups		
18-24 years	**	**
25-34 years	3.3	1.3-5.3
35-44 years	4.7	2.8-6.7
45-54 years	8.1	5.8-10.3
55-64 years	11.4	8.5-14.3
65+ years	9.5	7.8-11.2
Race/Ethnicity*		
White,NH	5.4	4.6-6.1
African American,NH	8.8	4.8-12.8
Other/Multi-Race,NH	9.2	4.3-14.1
Hispanic	11.7	5.0-18.4
Education		
Less than high school	8.4	4.1-12.8
High school graduate or G.E.D	6.3	4.8-7.9
Some college	6.4	4.9-7.8
College graduate	5.5	4.4-6.5
Annual Household Income		
Less than \$15,000	9.2	5.6-12.8
\$15,000 to \$24,999	8.9	5.8-12.0
\$25,000 to \$34,999	6.2	4.0-8.3
\$35,000 to \$49,999	4.3	2.6-6.0
\$50,000 or more	5.7	4.6-6.9
Disability		
Living with a disability	12.7	9.9-15.5
Living without a disability	4.7	3.9-5.6
Insurance		
Uninsured	5.2	2.9-7.5
Insured	6.6	5.7-7.5

*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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older with Diagnosed Pre-Diabetes or Borderline Diabetes



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

Percentage of Adults Aged 18 Years and Older with Diagnosed Pre-Diabetes or Borderline Diabetes, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	9	5.6-12.3
No	6.1	5.2-7.0
Arthritis Status		
Yes	11.5	9.0-14.0
No	4.9	4.0-5.7
Weight Category		
Normal or Underweight, BMI<25	2.5	1.7-3.4
Overweight, 25<= BMI<30	6.2	4.7-7.7
Obese, BMI>=30	11.4	9.2-13.7

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

- Adults with arthritis compared to those without arthritis.
- Adults who were obese compared to those who were normal or underweight.

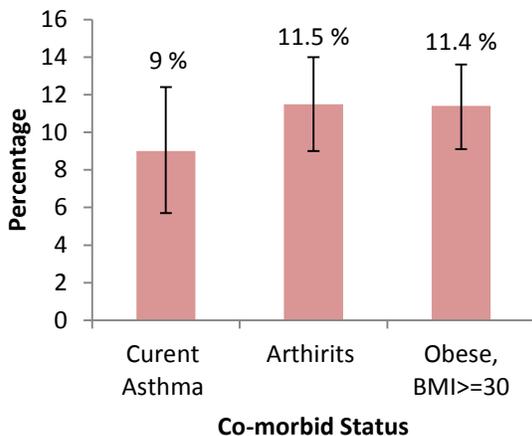
The percentage of Kansas adults who were ever diagnosed with pre-diabetes did not differ significantly by current asthma status.

SUMMARY

Approximately 6 percent of Kansas adults have ever been diagnosed with pre-diabetes. In addition, higher percentages of older adults, those with chronic health conditions (arthritis and obesity) and those living with a disability have ever been diagnosed with pre-diabetes.

To address associated disparities with pre-diabetes, further public health efforts are needed in Kansas.

Percentage of Adults Aged 18 Years and Older with Diagnosed Pre-Diabetes or Borderline Diabetes, by Co-morbid Conditions



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

Chronic Health Conditions: Hypertension

One of the leading modifiable risk factors for heart disease and stroke is hypertension.³⁰ Adults with hypertension are at higher risk for heart disease, stroke, congestive heart failure and end-stage renal disease.³⁰ The Healthy People 2020 goal is to reduce the proportion of adults with hypertension.

In 2012, about 1 in 3 Kansas adults aged 18 years and older had ever been diagnosed with hypertension. The percentage of Kansas adults who were ever diagnosed with hypertension was significantly **higher** among:

- Older adults compared to younger adults.
- Non-Hispanic African Americans compared to non-Hispanic whites and non-Hispanic other/multi-races (age-adjusted prevalence).
- Adults with lower annual household income compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with insurance compared to adults with no insurance.

The percentage of Kansas adults who were ever diagnosed with hypertension did not differ significantly by gender groups and education groups.

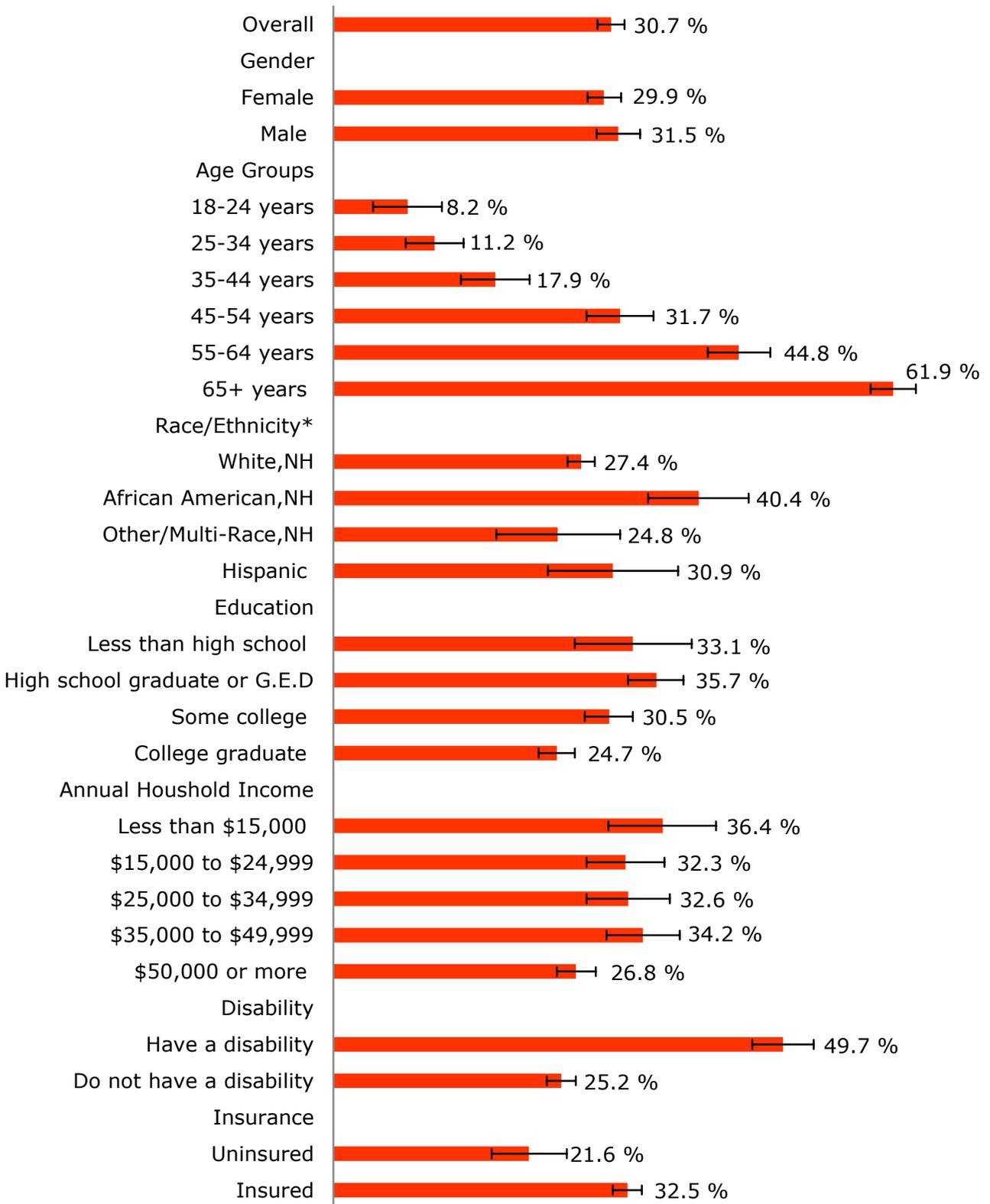
Percentage of Adults Aged 18 Years and Older with Diagnosed Hypertension, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	30.7	29.2-32.2
Gender		
Female	29.9	28.0-31.7
Male	31.5	29.1-33.9
Age Groups		
18-24 years	8.2	4.4-12.0
25-34 years	11.2	8.0-14.4
35-44 years	17.9	14.1-21.7
45-54 years	31.7	28.0-35.4
55-64 years	44.8	41.3-48.2
65+ years	61.9	59.4-64.4
Race/Ethnicity*		
White,NH	27.4	25.9-28.9
African American,NH	40.4	34.9-46.0
Other/Multi-Race,NH	24.8	17.9-31.6
Hispanic	30.9	23.7-38.1
Education		
Less than high school	33.1	26.6-39.5
High school graduate or G.E.D	35.7	32.7-38.8
Some college	30.5	37.9-33.2
College graduate	24.7	22.7-26.7
Annual Household Income		
Less than \$15,000	36.4	30.5-42.4
\$15,000 to \$24,999	32.3	28.0-36.6
\$25,000 to \$34,999	32.6	28.0-37.2
\$35,000 to \$49,999	34.2	30.1-38.2
\$50,000 or more	26.8	24.6-28.9
Disability		
Living with a disability	49.7	46.3-53.1
Living without a disability	25.2	23.6-26.8
Insurance		
Uninsured	21.6	17.4-25.7
Insured	32.5	30.9-34.1

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

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

Percentage of Adults Aged 18 Years and Older With Diagnosed Hypertension

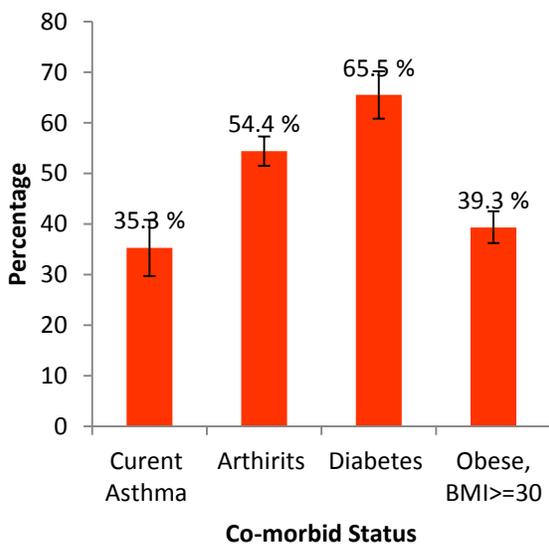


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older With Diagnosed Hypertension, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	35.3	29.8-40.9
No	30.1	28.5-31.7
Arthritis Status		
Yes	54.4	51.5-57.3
No	22.6	21.0-24.2
Diabetes Status		
Yes	65.5	60.8-70.2
No	27.2	25.6-28.7
Weight Category		
Normal or Underweight, BMI<25	19.6	17.4-21.8
Overweight, 25<= BMI<30	33.2	30.5-36.0
Obese, BMI>=30	39.3	36.1-42.4

Percentage of Adults Aged 18 Years and Older With Diagnosed Hypertension, by Co-morbid Conditions



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

- Adults with arthritis compared to those without arthritis.
- Adults with diabetes compared to those without diabetes.
- Adults who were obese compared to those who were normal or underweight.

The percentage of Kansas adults who were ever diagnosed with hypertension did not differ significantly by current asthma status.

SUMMARY

Approximately 31 percent of Kansas adults aged 18 years and older have ever been diagnosed with hypertension. In addition, higher percentages of older adults, African American non-Hispanic, those with lower annual household income, those with no insurance, those with chronic health conditions (arthritis, diabetes, and obesity) and those living with a disability have ever been diagnosed with hypertension.

The Healthy People 2020 objective is to reduce the proportion of adults with hypertension to 26.9 percent. 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 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Chronic Health Conditions: Asthma

Asthma is a huge public health burden. It affects not only the individual but also their families, schools, neighborhoods, cities and states. The cost of asthma also affects society since the annual health care expenditures for asthma are estimated at \$20.7 billion.³¹ 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 2012, approximately 1 in 25 Kansas adults aged 18 years and older had been diagnosed with current asthma. The percentage of Kansas adults who were diagnosed with current asthma was significantly **higher** among:

- Females compared to males.
- Adults with annual household incomes was less than \$15,000 compared to adults in all higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.

The percentage of Kansas adults who were diagnosed with current asthma did not differ significantly by age, race/ethnicity (age-adjusted prevalence), education groups and insurance groups.

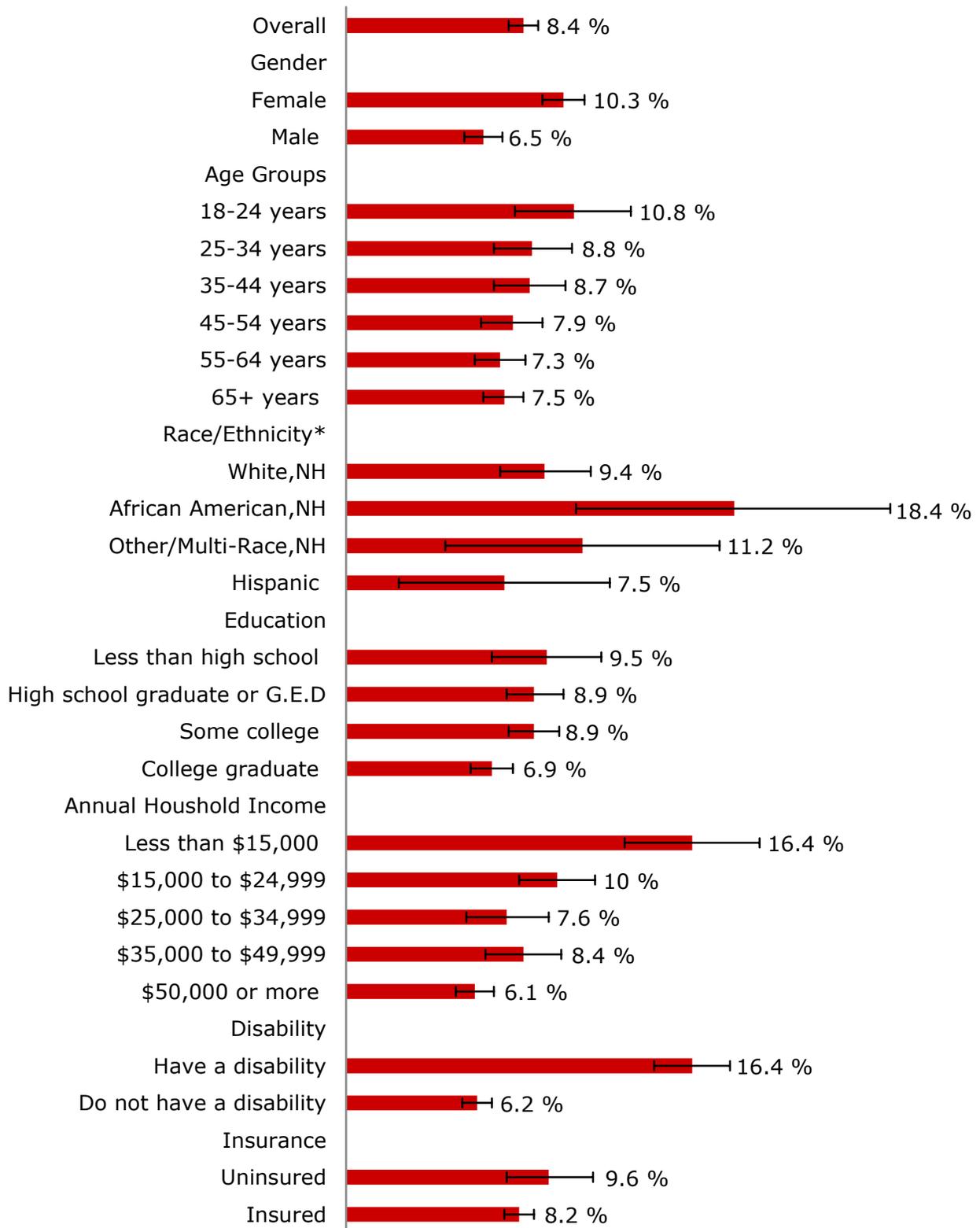
Percentage of Adults Aged 18 Years and Older With Current Asthma, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	8.4	7.7-9.1
Gender		
Female	10.3	9.3-11.3
Male	6.5	5.6-7.4
Age Groups		
18-24 years	10.8	8.1-13.6
25-34 years	8.8	6.9-10.6
35-44 years	8.7	7.0-10.4
45-54 years	7.9	6.5-9.4
55-64 years	7.3	6.1-8.5
65+ years	7.5	6.6-8.5
Race/Ethnicity*		
White,NH	9.4	7.2-11.5
African American,NH	18.4	11.0-25.9
Other/Multi-Race,NH	11.2	4.7-17.7
Hispanic	7.5	2.5-12.5
Education		
Less than high school	9.5	6.9-12.1
High school graduate or G.E.D	8.9	7.5-10.2
Some college	8.9	7.7-10.7
College graduate	6.9	5.9-7.9
Annual Household Income		
Less than \$15,000	16.4	13.2-19.6
\$15,000 to \$24,999	10	8.2-11.8
\$25,000 to \$34,999	7.6	5.6-9.5
\$35,000 to \$49,999	8.4	6.6-10.2
\$50,000 or more	6.1	5.2-7.0
Disability		
Living with a disability	16.4	14.6-18.2
Living without a disability	6.2	5.5-6.9
Insurance		
Uninsured	9.6	7.5-11.6
Insured	8.2	7.5-8.9

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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



Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Arthritis Status		
Yes	13.1	11.7-14.6
No	7	6.2-7.7
Diabetes Status		
Yes	13	10.6-15.4
No	8	7.2-8.7
Weight Category		
Normal or Underweight, BMI<25	7.5	6.3-8.8
Overweight, 25<= BMI<30	7.4	6.3-8.5
Obese, BMI>=30	10.6	9.3-11.9

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

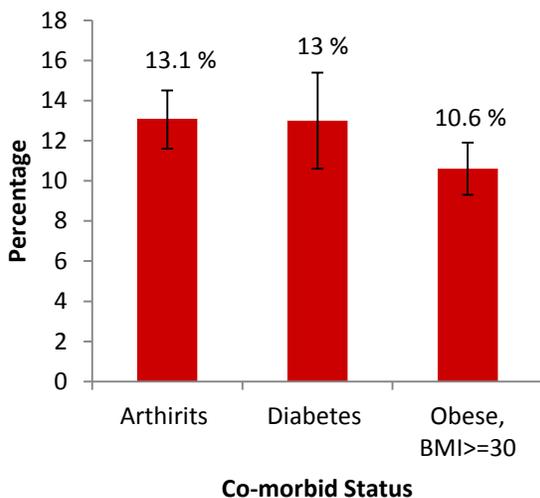
- Adults with arthritis compared to those without arthritis.
- Adults with diabetes compared to those without diabetes.
- Adults who were obese compared to those who were overweight, normal or underweight.

SUMMARY

Approximately 8 percent of Kansas adults aged 18 years and older have been diagnosed with current asthma. In addition, higher percentages of females, those with a lower annual household income, those with chronic health conditions (arthritis, diabetes, and obesity) and those living with a disability have been diagnosed with current asthma.

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

Percentage of Adults Aged 18 Years and Older With Current Asthma, by Co-morbid Conditions



Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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.³² In the United States the total attribute cost to arthritis and other rheumatic conditions was about \$128 billion (\$80.8 as direct cost that is medical expenditures and \$47.1 billion were indirect cost that is loss of earnings).³³ 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 2012, approximately 1 in 4 Kansas adults aged 18 years and older had diagnosed arthritis. The percentage of Kansas adults who were diagnosed with arthritis was significantly **higher** among:

- Females compared to males.
- Older adults compared to younger adults.
- Non-Hispanic African Americans compared to Hispanics (age-adjusted prevalence).
- Adults with lower education compared to adults in who are college graduates.
- Adults with lower annual household incomes compared to adults in higher annual household income groups.
- Adults living with a disability compared to adults living without a disability.
- Adults with insurance compared to adults with no insurance.

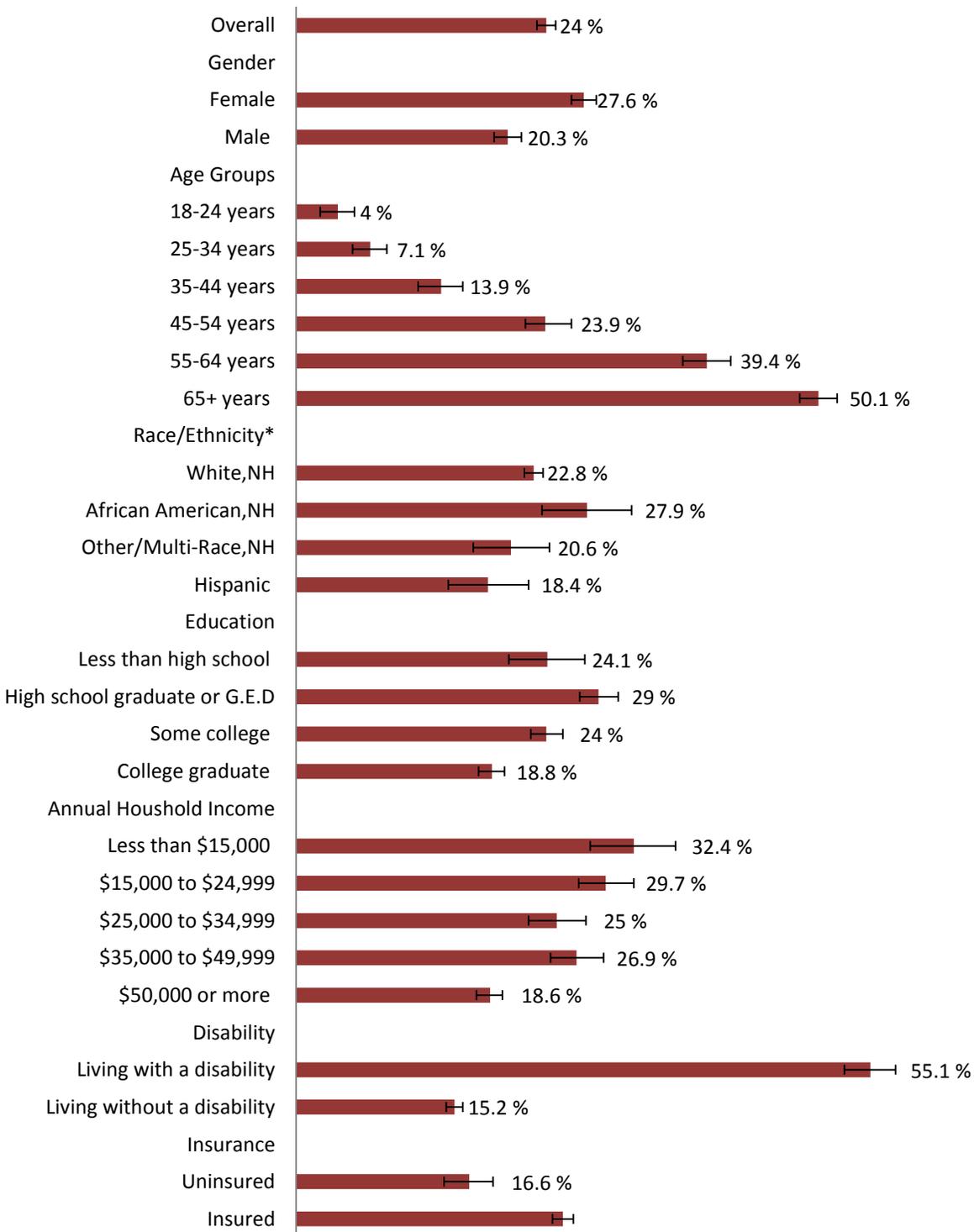
Percentage of Adults Aged 18 Years and Older Diagnosed With Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus, or Fibromyalgia, KS BRFSS 2012

Demographic Characteristics	Weighted Percentage	95% CI
Overall	24	23.1-24.9
Gender		
Female	27.6	26.4-28.8
Male	20.3	19.0-21.6
Age Groups		
18-24 years	4	2.4-5.7
25-34 years	7.1	5.5-8.8
35-44 years	13.9	11.8-16.1
45-54 years	23.9	21.4-25.8
55-64 years	39.4	37.1-41.7
65+ years	50.1	48.3-51.9
Race/Ethnicity*		
White,NH	22.8	21.9-23.7
African American,NH	27.9	23.6-32.2
Other/Multi-Race,NH	20.6	16.9-24.2
Hispanic	18.4	14.5-22.2
Education		
Less than high school	24.1	20.5-27.8
High school graduate or G.E.D	29	27.1-30.8
Some college	24	22.4-25.5
College graduate	18.8	17.6-20.1
Annual Household Income		
Less than \$15,000	32.4	28.4-36.6
\$15,000 to \$24,999	29.7	27.0-32.3
\$25,000 to \$34,999	25	22.2-27.7
\$35,000 to \$49,999	26.9	24.3-29.4
\$50,000 or more	18.6	17.4-19.9
Disability		
Living with a disability	55.1	52.7-57.6
Living without a disability	15.2	14.4-16.0
Insurance		
Uninsured	16.6	14.3-19.0
Insured	25.6	24.6-26.6

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

Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to 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

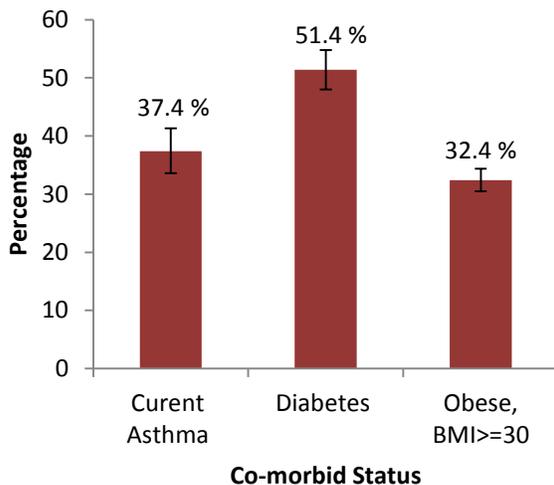


Due to changes in BRFSS survey methodology, 2011 and 2012 BRFSS estimates cannot be compared to estimates from previous years. See Technical Notes for more information about BRFSS survey methodology.

Percentage of Adults Aged 18 Years and Older Diagnosed With Some Form of Arthritis, Rheumatoid Arthritis, Gout, Lupus, or Fibromyalgia, KS BRFSS 2012

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma		
Yes	37.4	33.5-41.2
No	22.8	21.8-23.7
Diabetes Status		
Yes	51.4	48.0-54.8
No	21.2	20.3-22.1
Weight Category		
Normal or Underweight, BMI<25	17.9	16.6-19.3
Overweight, 25<= BMI<30	23.4	21.9-25.0
Obese, BMI>=30	32.4	30.4-34.3

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



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

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

SUMMARY

Approximately 24 percent of Kansas adults aged 18 years and older have been diagnosed with arthritis. In addition, higher percentages of females, older adults, those with lower education, those with a lower annual household income, non-Hispanic African Americans, those without insurance, those with chronic health conditions (current asthma, diabetes, and obesity) and those living with a disability have diagnosed arthritis.

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 and 2012 BRFSS estimates cannot be compared to 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 territories in the United States. 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 Kansas 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 2012 Kansas BRFSS was conducted among non-institutionalized adults 18 years and older living in private residences and college housing with landline and/or cell phone service.

For the 2012 Kansas BRFSS survey, the target total (combined landline and cell phone sample) sample size was 10,000 complete interviews with a target of 8,000 complete interviews for the landline telephone survey component and 2,000 complete interviews for the cellular telephone survey component.

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 18 years and older in Kansas. In addition 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 2012 Kansas BRFSS are representative of non-institutionalized adult's aged 18 years and older living in private residences and college housing with landline and/or cell phone service.
- BRFSS estimates do not apply to individuals who live in private residences or college housing and do not have any type of telephone service (landline or cell phone service) those who reside on military bases or within institutions.
- BRFSS prevalence estimates are self-reported and are subject to bias due to respondents' inability or unwillingness to provide accurate information about their own behaviors or characteristics.
- 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 and 2012.

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

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

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 to unadjusted prevalence estimates.

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.

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

References:

1. Health Services, Coverage, and Access. Institute of Medicine.
<http://www.iom.edu/Global/Topics/Health-Services-Coverage-Access.aspx> Accessed on December 10, 2012.
2. Hoffman C, Paradise J. 2008. *Health Insurance and Care in the United States*. Ann N Y Acad Sci 1136:149-160.
3. Starfield B, Leiyu S, Macinko J. 2005. *Contribution of Primary Care to Health Systems and Health*. The Milbank Quarterly 83(3):457-502.
4. Injury and Violence Prevention. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at
[\[http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=24#one\]](http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=24#one). Accessed on December 10, 2012.
5. Seat Belt Fact Sheet. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services <http://www.cdc.gov/motorvehiclesafety/seatbelts/facts.html>. Accessed on December 10, 2012.
6. Falls Among Older Adults: An Overview. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services
<http://www.cdc.gov/HomeandRecreationalSafety/Falls/adultfalls.html> Accessed on February 1, 2014.
7. Immunization and Infectious Diseases. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at
<http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicId=23>. Accessed on February 18, 2014.
8. Key Facts About Seasonal Flu Vaccine. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/flu/protect/keyfacts.htm>. Accessed on February 1, 2014.
9. Cervical Cancer Statistics. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/cancer/cervical/statistics/>. Accessed on February 1, 2014.
10. Breast Cancer. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/cancer/breast/>. Accessed on February 1, 2014.
11. Colorectal (Colon) Cancer Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/cancer/colorectal/>. Accessed on February 1, 2014.
12. Overweight and Obesity. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/obesity/data/adult.html>. Accessed on February 1, 2014.

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

13. Physical Activity. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services.
<http://www.cdc.gov/physicalactivity/everyone/health/index.html#StrengthenBonesMuscles>. Accessed on February 1, 2014.
14. Costas A Christophi et al. *Prevalence and social environment of cigarette smoking in Cyprus youth*. BMC Public Health 2008, 8:190
15. Centers for Disease Control and Prevention. *Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Productivity Losses—United States, 2000–2004*. Morbidity and Mortality Weekly Report 2008; 57(45):1226–1228. Accessed on December 10, 2012.
16. Mokdad AH, Marks JS, Stroup DF, Gerberding JL. *Actual Causes of Death in the United States*. JAMA: Journal of the American Medical Association 2004; 291(10):1238–1245 [cited 2010 July 26].
17. Smoking and Tobacco Use. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services.
http://www.cdc.gov/tobacco/data_statistics/fact_sheets/smokeless/betel_quid/index.htm. Accessed on February 1, 2014.
18. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/OralHealth/publications/library/burdenbook/> Accessed on December 10, 2012.
19. Kelly E. Courtney and John Polich. *Binge Drinking in Young Adults: Data, Definitions, and Determinants*. Psychological Bulletin. 2009 January; 135(1): 142–156.
20. Naimi T. et al. *Binge Drinking Among U.S. Adults*. JAMA 2003; 289:70–5.
21. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/vitalsigns/DrinkingAndDriving/> Accessed on February 1, 2014.
22. Mental Health: A Report of the Surgeon General.
<http://www.surgeongeneral.gov/library/mentalhealth/summary.html> accessed on September , 2010.
23. Statistics. National Institute of Mental Health.
<http://www.nimh.nih.gov/health/topics/statistics/index.shtml> accessed on October 22, 2010
24. Shih M, Hootman JM, Strine TW, Chapman DP, Brady TJ. Serious Psychological Distress in U.S. Adults with Arthritis. Journal of General Internal Medicine 2006; 21:1160–1166.
25. CDC Features. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/features/dsdepression/>. Accessed on February 1, 2014.
26. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. <http://www.cdc.gov/hiv/basics/testing.html>. Accessed on March 3, 2014.
27. Centers for Disease Control and Prevention. HIV prevalence estimates—United States, 2006. MMWR. 2008;57(39):1073-76.
28. Centers for Disease Control and Prevention. *National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2011.

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

29. Heart Disease and Stroke. U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at [\[http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21\]](http://healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=21). Accessed on December 10, 2012.
30. High Blood Pressure-High Blood Pressure Facts. Centers for Disease Control and Prevention. <http://www.cdc.gov/bloodpressure/facts.htm>. Accessed on December 10, 2012.
31. National Institutes of Health, National Heart, Lung, and Blood Institute (NHLBI). Morbidity and mortality: 2009 chart book on cardiovascular, lung and blood diseases. Bethesda, MD: NHLBI; 2009 Oct [cited 2010 Mar 29]. Available from: <http://www.nhlbi.nih.gov/resources/docs/cht-book.htm>
32. Brault MW, Hootman J, Helmick CG, et al. Prevalence and most common causes of disability among adults, United States, 2005. MMWR. 2009;58(16):421-26.
33. Arthritis. Centers for Disease Control and Prevention. U.S. Department of Health and Human Services. http://www.cdc.gov/arthritis/data_statistics/cost.htm. Accessed on March 7, 2014

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