

Diabetes in Kansas

2013 Kansas Behavioral Risk Factor Surveillance System

Diabetes is the seventh leading cause of death in the U.S.¹ Diabetes is a major cause of heart disease and stroke, and the leading cause of kidney failure, non-traumatic lower limb amputations, and new cases of blindness among adults in the U.S.¹ 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 2013, approximately 1 in 10 Kansas adults 18 years old and older had ever been diagnosed with diabetes. The percentage of Kansas adults 18 years old and older who were ever diagnosed with diabetes was significantly **higher** among:

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

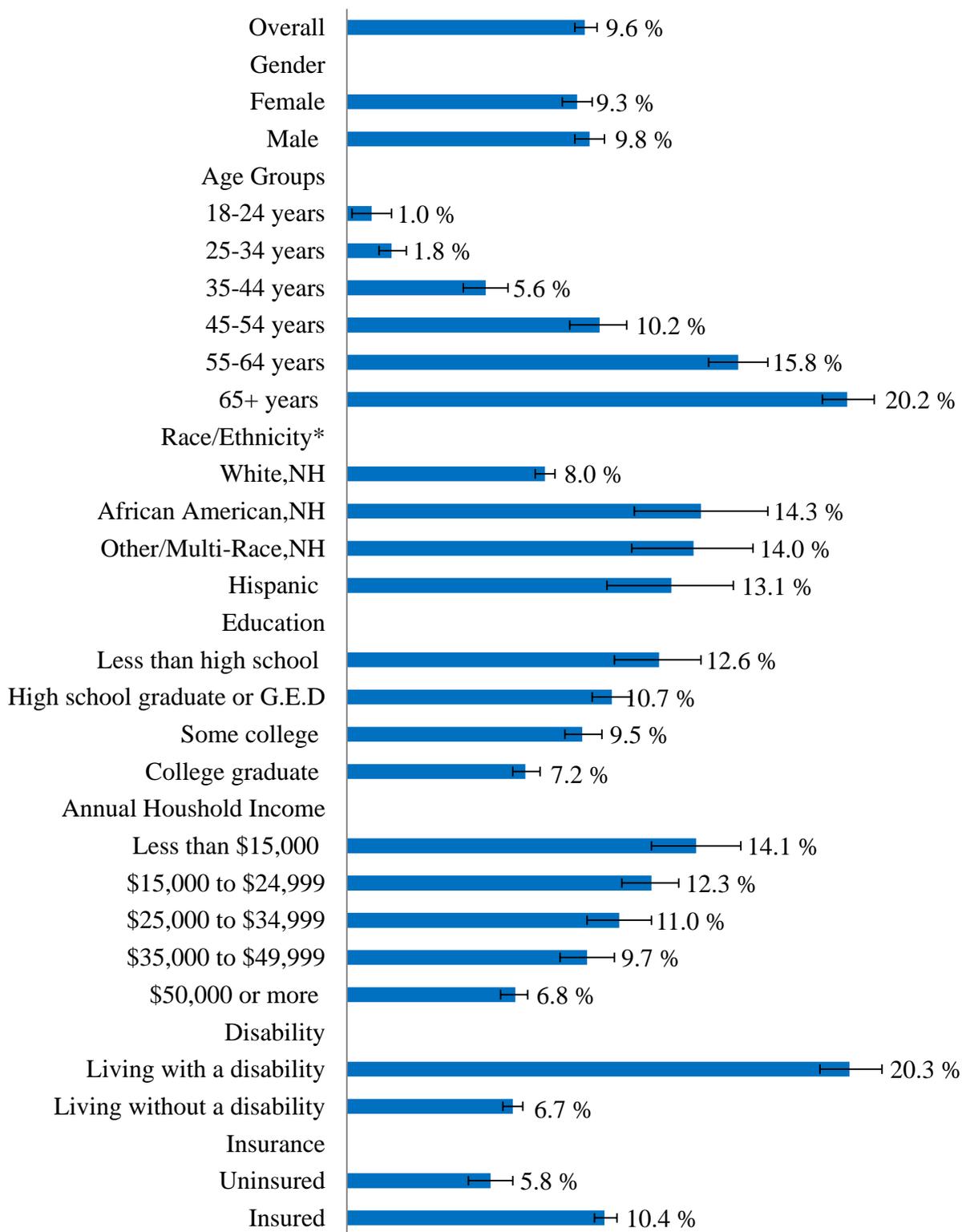
The percentage of Kansas adults 18 years old and older who were ever diagnosed with diabetes did not differ significantly by gender groups.

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

Percentage of Adults 18 Years Old and Older With Diagnosed Diabetes, KS BRFSS 2013

Demographic Characteristics	Weighted Percentage	95% CI
Overall	9.6	9.1-10.0
Gender		
Female	9.3	8.7-9.9
Male	9.8	9.2-10.4
Age Groups		
18-24 years	1.0	0.2-1.8
25-34 years	1.8	1.2-2.3
35-44 years	5.6	4.7-6.5
45-54 years	10.2	9.1-11.4
55-64 years	15.8	14.6-17
65+ years	20.2	19.1-21.2
Race/Ethnicity*		
White, NH	8.0	7.6-8.4
African-American, NH	14.3	11.6-17
Other/Multi-Race, NH	14.0	11.6-16.5
Hispanic	13.1	10.6-15.7
Education		
Less than high school	12.6	10.9-14.4
High school graduate or G.E.D	10.7	9.9-11.5
Some college	9.5	8.7-10.2
College graduate	7.2	6.6-7.7
Annual Household Income		
Less than \$15,000	14.1	12.3-15.9
\$15,000 to \$24,999	12.3	11.2-13.5
\$25,000 to \$34,999	11.0	9.7-12.3
\$35,000 to \$49,999	9.7	8.6-10.8
\$50,000 or more	6.8	6.3-7.4
Disability		
Living with a disability	20.3	19-21.5
Living without a disability	6.7	6.3-7.1
Insurance		
Uninsured	5.8	4.9-6.7
Insured	10.4	9.9-10.8

Percentage of Adults 18 Years Old and Older with Diagnosed Diabetes, KS BRFSS 2013

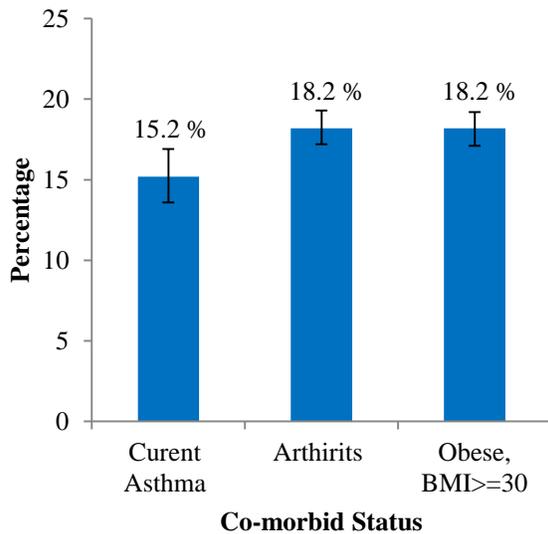


*Prevalence estimates for race and ethnicity were age-adjusted to the U.S. 2000 standard population

Percentage of Adults 18 Years Old and Older With Diagnosed Diabetes by Co-morbid Conditions, KS BRFSS 2013

Co-Morbid Conditions	Weighted Percentage	95% CI
Current Asthma Status		
Yes	15.2	13.5-16.8
No	9	8.6-9.5
Arthritis Status		
Yes	18.2	17.1-19.2
No	6.8	6.4-7.2
Weight Category		
Normal or Underweight, BMI<25	3.7	3.2-4.2
Overweight, 25<= BMI<30	8.3	7.6-9
Obese, BMI>=30	18.2	17.2-19.3

Percentage of Adults 18 Years Old and Older with Diagnosed Diabetes by Co-morbid Conditions, KS BRFSS 2013



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

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

SUMMARY

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

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

References:

1. 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.

Technical Notes

The Behavioral Risk Factor Surveillance System (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 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.

For the 2013 Kansas BRFSS survey, the target total (combined landline and cell phone sample) sample size was 20,000 complete interviews with a target of 14,000 complete interviews for the landline telephone survey component (70% of total sample) and 6,000 complete interviews for the cellular telephone survey component (30% of total sample).

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

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

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

Age-adjustment

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