



Kentucky Behavioral Risk Factor Survey (KyBRFS)

2018 Annual Report

Data Source:: Kentucky Behavior Risk Factor Survey 2016



Kentucky Department for Public Health
Division of Prevention and Quality Improvement
Chronic Disease Prevention & Control Branch
275 East Main Street
Frankfort, KY 40621



Kentucky Public Health
Prevent. Promote. Protect.

Table of Contents	Page
Executive Summary	iv
Introduction	vi
Health Behavior Risk Factors	
Alcohol Consumption	1
Physical Activity	2
Tobacco Use	3
Chronic Diseases	
Arthritis	4
Asthma	5
Chronic Obstructive Pulmonary Disease (COPD)	6
Coronary Heart Disease	7
Depressive Disorder	8
Diabetes	9
Heart Attack	10
Obesity	11
Stroke	12
Health Status Indicators	
General Health	13
Health Care Access/Coverage	14
Clinical Preventive Practices	
Breast Cancer Screening	15
Cervical Cancer Screening	16
Colorectal Cancer Screening	17
HIV/AIDS Screening	18
Prostate Cancer Screening	19
Influenza Immunization	20
Pneumococcal Vaccination	21
Oral Health	22
Prevalence Estimates by Area Development District (ADD)	23

ACKNOWLEDGMENTS

This report was prepared by:

Sarojini Kanotra, PhD, MPH, *KyBRFS Director and Coordinator*
Judes Boulay, MPH, CPH, *KyBRFS Epidemiologist*

The KyBRFS program is grateful for the support provided by:

Jeffrey D. Howard, Jr., M.D., *Commissioner*
Connie Gayle White, MD, MS, FACOG, *Senior Deputy Commissioner*
Devon K McFadden, MPH, *Division Director*
Sue Thomas-Cox, RN, *Branch Manager*
Tracey Sparks, *Administrative Assistant*

Data for the 2016 KyBRFS were collected by:

University of Kentucky Survey Research Center
The KyBRFS program is grateful to Dr. Ron Langley and his staff for conducting the survey.

The Kentucky Department for Public Health is especially grateful to the many citizens of the Commonwealth who gave their time to make this survey successful.

The development of this report was supported in part by funds from Cooperative Agreement Number 6 NU58DP006058-02-00 from the Centers for Disease Control and Prevention (CDC).

Questions concerning this report should be directed to:

KyBRFS Program
Kentucky Department for Public Health
Division of Prevention and Quality Improvement
Chronic Disease Prevention and Control Branch
275 East Main St., HS2WE
Frankfort, Kentucky 40621
(502) 564 -7996 x 4434
<http://chfs.ky.gov/brfss>

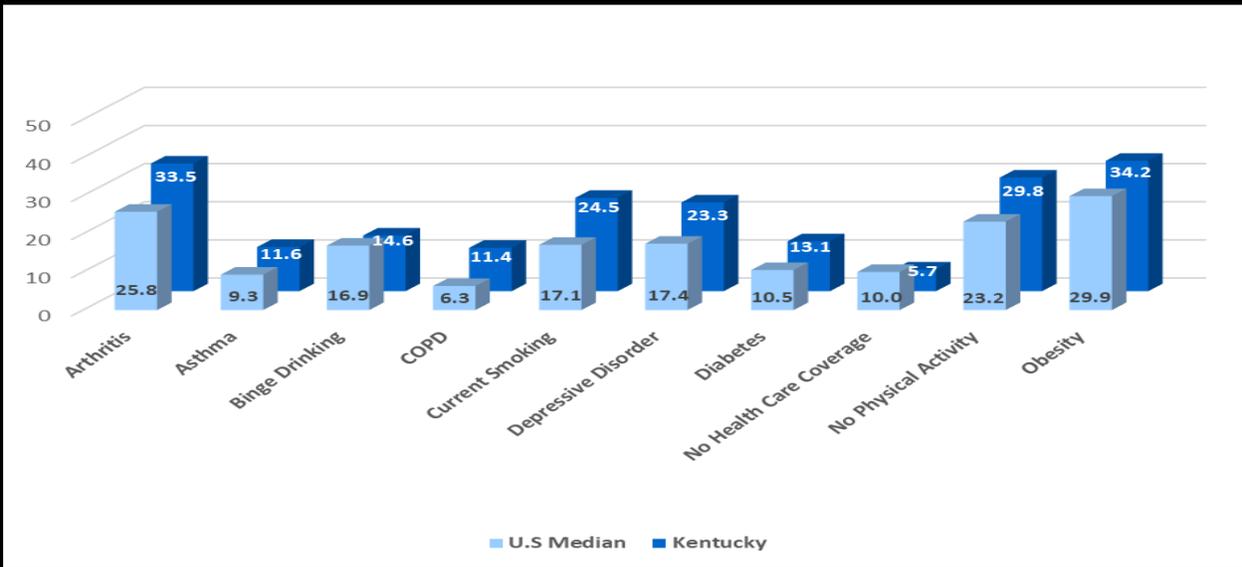
Suggested Citation:

Kentucky Department for Public Health (KDPH) and the Centers for Disease Control and Prevention (CDC). *Kentucky Behavioral Risk Factor Survey (KyBRFS) Data*. Frankfort, Kentucky: Cabinet for Health and Family Services, Kentucky Department for Public Health, [2018].

Executive Summary

The 2018 KyBRFS Annual Data Report provides a snapshot of the health behaviors and health status indicators that place Kentucky adults at risk for chronic diseases, injuries, and preventable infectious diseases. This report is based on a sample of non-institutionalized residents aged 18 years or older from 10,265 households in the Commonwealth of Kentucky. The results are weighted to obtain representative estimates for all adults in the state. Some key findings from the 2016 survey are listed below.

Prevalence of Selected Indicators — KyBRFS U.S. vs Kentucky



Arthritis: About 33.5% of Kentucky adults have been told by a health professional that they have arthritis; this was higher compared to the United States estimate of 25.8%. Arthritis prevalence in Kentucky was significantly higher among women than men (37.7 vs. 29.1%).

Asthma: In 2016, an estimated 11.6% of Kentucky adults reported that they currently have asthma; this was higher than the United States prevalence of 9.3%. Prevalence of current asthma in Kentucky was significantly higher among women compared to men (16.0% vs. 6.9%).

Binge Drinking: About 14.6 % of Kentucky adults reported binge drinking in the past month. This estimate was lower than the national estimate of 16.9%. The prevalence of binge drinking was significantly higher among men (20.4%) compared to women (9.2%).

COPD: In 2016, an estimated 11.4% of Kentucky adults reported they had been diagnosed with COPD. This estimate was much higher than the United States estimate of 6.3%. The prevalence of COPD was higher among women than men (13.3% vs 9.4%).

Executive Summary (continued)

Current Smoking:

An estimated 24.5% of Kentucky adults reported that they currently smoke cigarettes; this estimate was higher than the US prevalence of 17.1%. Prevalence of smoking did not significantly differ by gender. About 38.9% of Kentucky adults with less than a high school education are current smokers compared to 8.9% of those with a college degree.

Depressive Disorder:

In 2016, around 1 in 4 Kentuckians reported ever being told by a health professional that they had a depressive disorder. The US prevalence is 17.4%. Women reported a significantly higher prevalence than men (29.9% vs 16.2%). It was significantly higher among adults aged 35-49 years than those aged 65 and older (29.9% vs 18.5%). The prevalence of depressive disorder increased with decrease in income and education level.

Diabetes:

About 13.1% of adults in Kentucky have been told by a doctor that they have diabetes; this estimate was higher compared to 10.5% in the United States. There were no significant differences in diabetes prevalence between men and women. Prevalence of diabetes was highest among adults aged 65 years or older (25.5%) and adults with less than a high school education (19.5%).

Health Care Access/Coverage:

The estimated proportion of adults in Kentucky without health care coverage or health insurance was 5.7% in 2016; this was lower than the estimate of uninsured adults in the United States (10.0%). Prevalence of uninsured men (7.4%) was higher compared to women (4.1%). A higher proportion of black adults compared to white adults in Kentucky did not have health insurance (8.7% vs. 5.1%).

Physical Activity:

An estimated 29.8% of Kentucky adults did not participate in any leisure-time physical activity or exercise; this is higher compared to 23.1% in the United States. Adults who did not participate in any leisure-time physical activity were generally males, older, and with lower levels of income.

Obesity:

In 2016, an estimated 34.2% of Kentucky adults were classified as being obese based on Body Mass Index (BMI); this was a higher estimate compared to 29.9% in the United States. There were no statistically significant differences in obesity prevalence between men and women. The prevalence of obesity among black adults was significantly higher compared to white adults (40.2% vs. 34.2%).

Cardiovascular Diseases:

About 7.2% of adults in Kentucky have been told by a health care professional that they had a heart attack, 6.7% have coronary heart disease, and 4.5% have been told they had a stroke. These Kentucky estimates are all higher than the national estimates for heart attack (4.4%), coronary heart disease (4.1%), and stroke (3.1%).

General Health Status:

In 2016, an estimated 22.5% of Kentucky adults rated their health as fair or poor. There was no significant difference in the prevalence by gender or race. Adults with less than high school education reported a significantly higher prevalence of fair or poor health than those with a college degree (45.1% vs 8.1%). Fair or poor general health ratings increased significantly with age.

Introduction

What is KyBRFS?

The Kentucky Behavioral Risk Factor Survey (KyBRFS) is a statewide telephone health survey jointly sponsored by the Centers for Disease Control and Prevention (CDC) and the Kentucky Department for Public Health (KDPH). The KyBRFS has been conducted continuously since 1985. KyBRFS data contributes to the CDC Behavioral Risk Factor Surveillance System (BRFSS) that is conducted within every state, the District of Columbia, and within several U.S. territories. The survey is administered to randomly selected non-institutionalized adults who live in a household with a telephone. Participation in the survey is strictly voluntary. Personal identifying information, such as a person's name or address, is not collected.

Methodology Changes in BRFSS Protocol

In 2011, two major changes were made in BRFSS Protocol: (1) The incorporation of cell phone interviews and (2) the adoption of a more advanced weighting method called iterative proportional fitting or raking (raking replaced the post-stratification weighting method used with previous BRFSS data sets). Due to these significant changes, estimates of prevalence from 2011 and subsequent years cannot be directly compared to estimates from previous years. Comparing 2012 BRFSS data with BRFSS data from years prior to 2011 may cause misinterpretation of trend line shifts in prevalence estimates.

The changes in BRFSS protocol are discussed in detail in the June 8, 2012, MMWR Policy Note, "Methodology Changes in the Behavioral Risk Factor Surveillance System in 2011 and Potential Effects on Prevalence Estimates." This note is available online at the CDC Surveillance Resource Center <http://www.cdc.gov/surveillancepractice/reports/brfss/brfss.html>.

How is the survey conducted?

Kentucky currently uses disproportionate stratified sampling to obtain a random sample of Kentucky telephone numbers. Once an interviewer reaches a household, a member of the household aged 18 years or older is randomly selected to be interviewed. Surveyors conduct interviews seven days a week, January through December. The number of completed interviews has increased each year.

How can this report be used?

Data from this report can be used in many of the following ways:

- To document health trends
- To provide information related to the development of policies and legislation
- To plan and measure the progress of health initiatives
- To educate the public about risk behaviors and preventive health practices
- To monitor health goals, such as those stated in *Healthy Kentuckians 2020*

Race

Beginning in 2001, the BRFSS race question allowed reporting of more than one race. Therefore, data users should be cautious when comparing race data from the year 2001 onward to race data from previous years due to the change in race categories. Since Kentucky's population is predominantly white, survey respondents are predominantly white and the low number of non-white populations tend to make data regarding those populations statistically unstable. Race data, therefore, may be excluded from this report due to the small nature of the sample size. *In this report, we are unable to include data on Hispanics and sometimes cannot include data on blacks.*

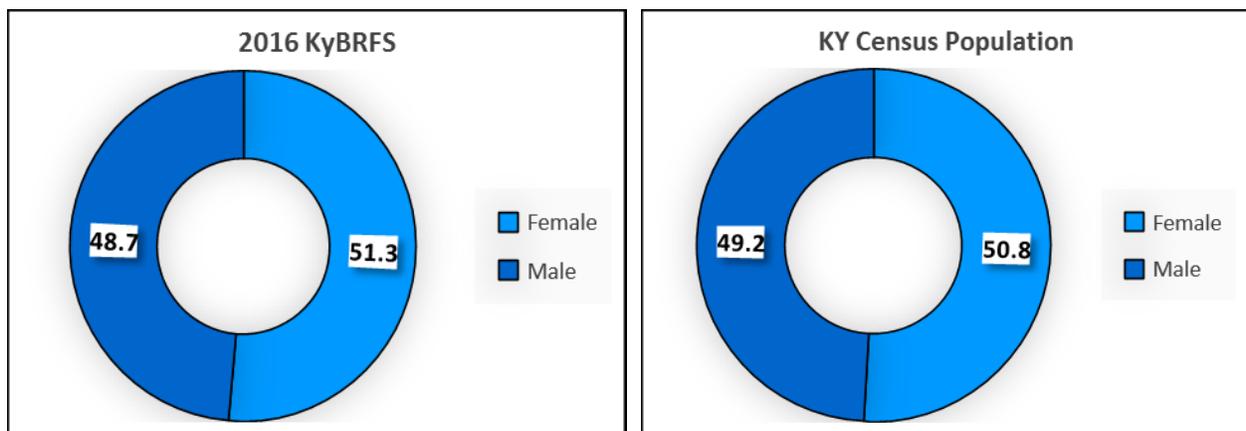
Introduction (continued)

Demographic Characteristics: Race/Ethnicity and Gender

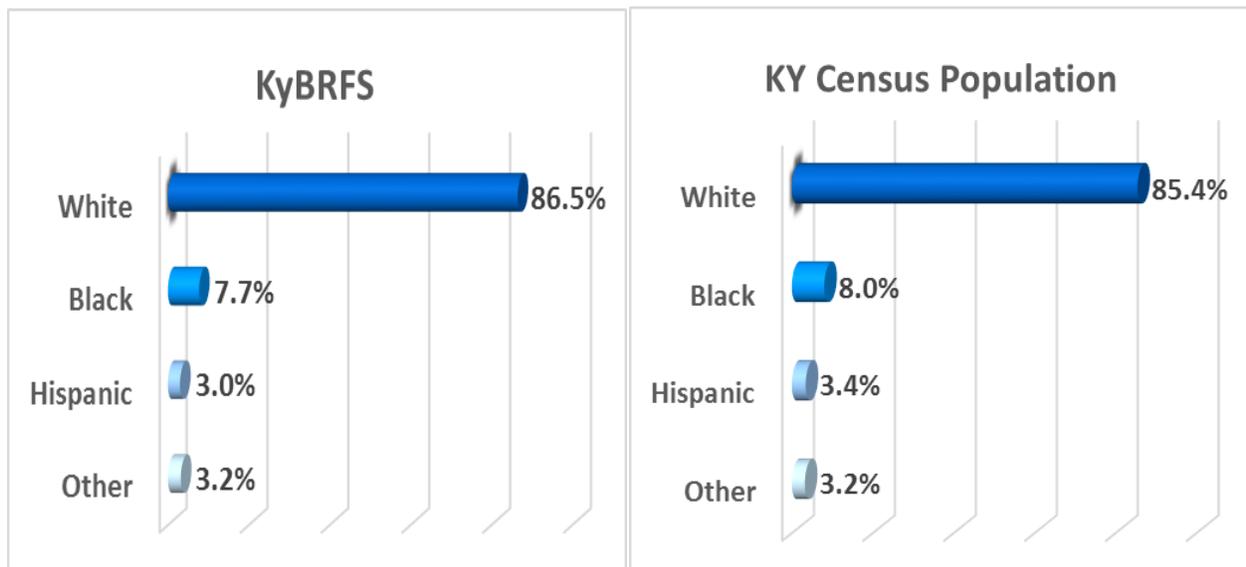
A total of 10,265 residents (18 years or older) participated in the 2016 Kentucky Behavioral Risk Factor Survey. The initial sample of 10,265 residents was used to weight these survey data in order to obtain representative estimates for the state of Kentucky.

The distribution of respondents by race and by gender on the 2016 KyBRFS was similar to the 2016 Kentucky census population (as indicated in the charts below). The race/ethnicity categories used for this comparison are: Non-Hispanic White, Non-Hispanic Black, Hispanic, and Other/Non-Hispanic.

Distribution of KyBRFS Adult Population vs. KY Census Population, by Gender



Distribution of KyBRFS Adult Population vs. KY Census Population, by Race/Ethnicity



***Note:** KY Census Population includes all age groups.

KY Census Population estimates obtained from Kentucky State Data Center website: <http://ksdc.louisville.edu/>.

Introduction (continued)

How is the data analyzed?

Data is analyzed using the following statistical analysis software: SAS 9.3, SAS Callable SUDAAN, and SPSS Complex Samples. A pre-calculated weighting variable provided by the CDC is used to weight the data. Weighting adjusts for over-sampling or under-sampling of certain subgroups and allows the survey data to be representative of the Kentucky population. Factors in weighting include the number of telephone numbers per household, the number of adults per household, and the demographic distribution of the sample. BRFSS raking includes categories of age by gender, detailed race and ethnicity groups, education levels, marital status, regions within states, gender by race and ethnicity, telephone source, renter/owner status, and age groups by race and ethnicity.

The data are not age-adjusted. Data that is reported comes from a total sample of 50 or more observations in the denominator and 5 or more observations in the numerator with a relative standard error <30%. Data estimates for fewer than 50 respondents are considered statistically unreliable by the CDC and are not included in this report. Respondents who answered that they did not know or refused to answer a question were excluded from the calculation of prevalence estimates related to that question. Therefore, the sample sizes used to calculate the estimates in this report vary.

What are the limitations to the data?

There are two main limitations to BRFSS data: non-coverage bias and self-report bias. These limitations should not hinder the use of BRFSS data, but should be considered.

Non-coverage bias: Since the BRFSS is a telephone survey, adults who live in households without a telephone are not included in the sample. The BRFSS only surveys adults living in households. Therefore, individuals living in a group setting, such as a nursing home, the military, or prison are not surveyed.

Self-report bias: The BRFSS survey relies on self-reporting, which means that the prevalence estimates are strictly based on the respondents answers to the survey questions. The tendency to report a healthier lifestyle may occur.

Small sample size for subgroups

Producing accurate prevalence estimates for different subgroups (men, women, whites, blacks, women aged 40 years or older, etc.) requires a minimum number of 50 respondents per question. In some cases, the KyBRFS does not reach enough people in certain categories to produce statistically reliable estimates. Small sample sizes produce large variances (i.e. a deviation from the mean), resulting in a large confidence interval (CI). The same problem of small numbers of responses occurs at the county level. In order to provide locally relevant estimates, KyBRFS data are reported by Area Development District (ADD).

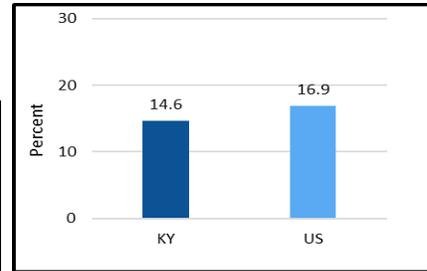
In this report, if the un-weighted sample size for the denominator is < 50, the data are not reported. Additionally, CDC BRFSS recommends using Relative Standard Error (RSE) as a criterion for estimates that meet standards of statistical reliability; if RSE is > 0.3, the estimate is not reported on the CDC BRFSS website. These standards have also been adopted by KyBRFS.

ALCOHOL CONSUMPTION: BINGE DRINKING

Question: Considering all types of alcoholic beverages, how many times during the past month did you have four or more drinks on one occasion?

At Risk: Adult men who reported having five or more drinks on one occasion and adult females who reported having four or more drinks on one occasion (in the past month) are considered at risk.

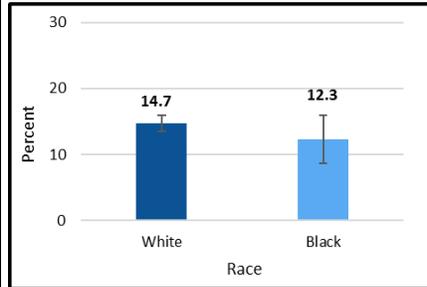
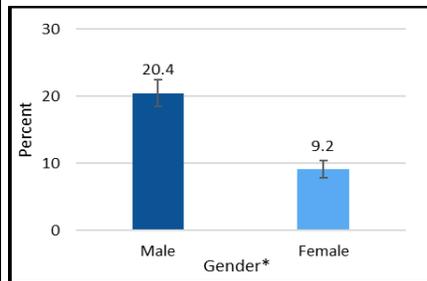
Percent of Adults Classified as Binge Drinkers: Kentucky vs. Nationwide (States and DC) - 2016



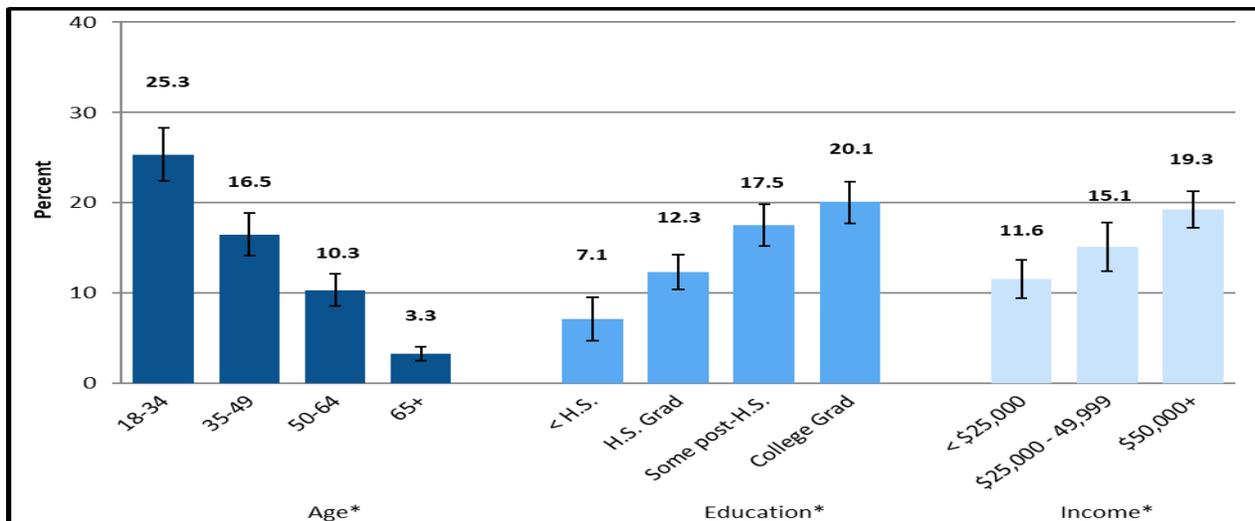
Who is at risk in Kentucky?

- ◆ In 2016, about 14.6% of Kentucky adults reported binge drinking. This estimate was lower compared to 16.9% in the United States.
- ◆ Prevalence of binge drinking was significantly higher among men compared to women (20.4% vs 9.2%).
- ◆ There were no statistically significant differences in reporting binge drinking by race.
- ◆ Prevalence of binge drinking was significantly higher among adults aged 18-34 years (25.3%) than other age group.
- ◆ When compared by education, binge drinking was higher among adults with a college degree (20.1%), than among those with less than high school (7.1%).
- ◆ Binge drinking was significantly higher among adults with an annual household incomes of \$50,000 or more than among those who earn less than \$25,000 a year (19.3% vs 11.6%).

Percent of Kentucky Adults Classified as Binge Drinkers, by Gender*, and by Race - 2016



Percent of Kentucky Adults Classified as Binge Drinkers, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

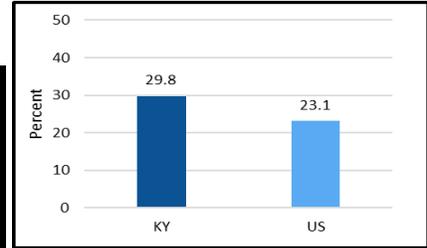
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

PHYSICAL ACTIVITY

Question: During the past 30 days, other than your regular job, did you participate in any physical activity or exercise such as running, calisthenics, golf, gardening, or walking for exercise?

At Risk: Adults who did not participate in any physical activity or exercise during the last 30 days are considered at risk.

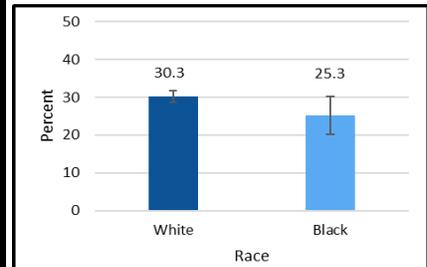
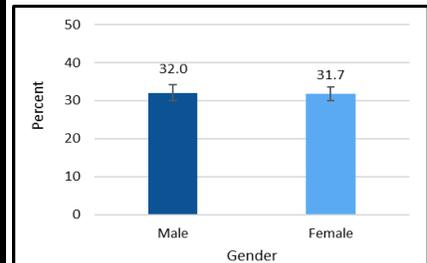
Percent of Adults who did not Participate in any Physical Activity in the Past 30 days: Kentucky vs. Nationwide (States and DC) - 2016



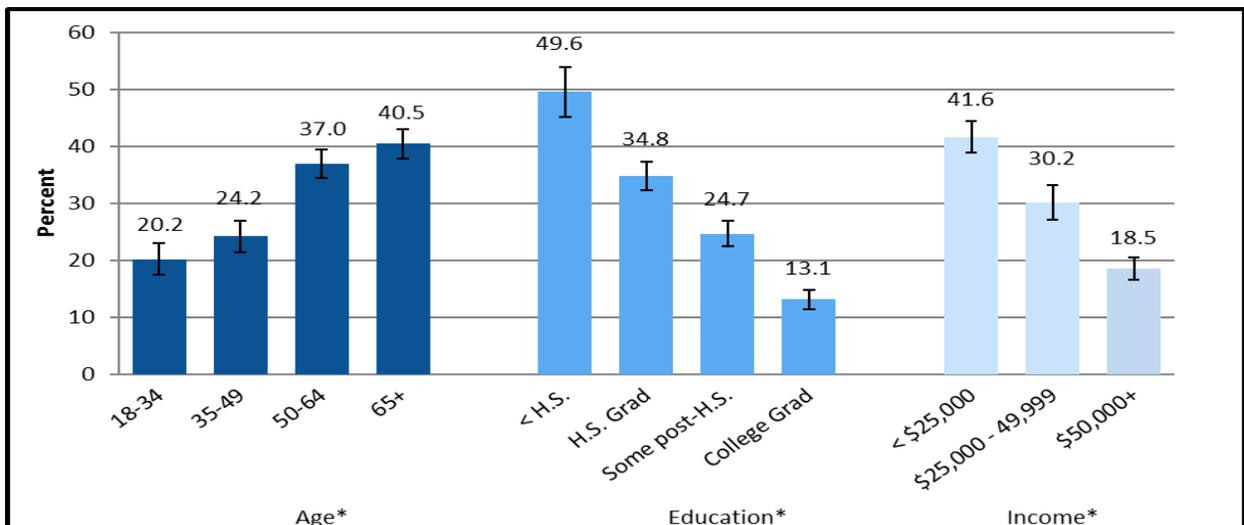
Who is at risk in Kentucky?

- ◆ An estimated 29.8% of Kentucky adults reported not participating in any physical activity during the past month compared to 23.1% in the United States.
- ◆ There were no statistically significant differences between women and men adults who reported not participating in any physical activity.
- ◆ White adults (30.3%) reported a higher percentage of not participating in any physical activity during the past month than black adults (25.3%).
- ◆ Lack of physical activity significantly increased with age, with the highest proportion being reported among adults aged 65 years and older (40.5%).
- ◆ A significantly higher proportion (49.6%) of adults with less than a high school education reported a lack of physical activity in the past month, compared to adults with other levels of educational attainment.
- ◆ The prevalence of lack of physical activity significantly decreased as household income increase.

Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days, by Gender, and by Race - 2016



Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

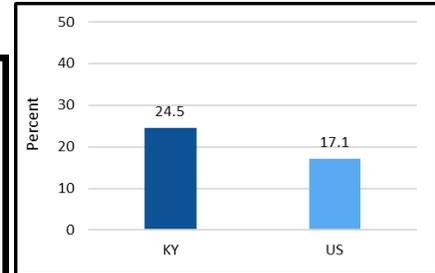
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

TOBACCO USE

Question: If you have smoked at least 100 cigarettes in your entire life, are you now smoking every day, some days or not at all?

At Risk: Adults who are “Current Smokers” (i.e., smoke “everyday” or “some days”) are considered at risk.

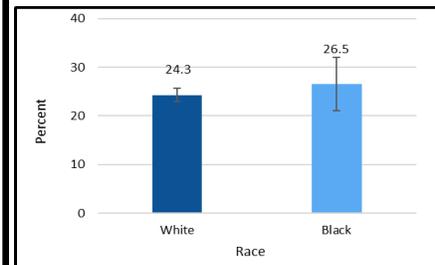
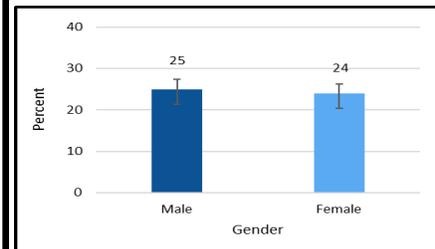
Percent of Adults who are Current Smokers: Kentucky vs. Nationwide (States and DC) - 2016



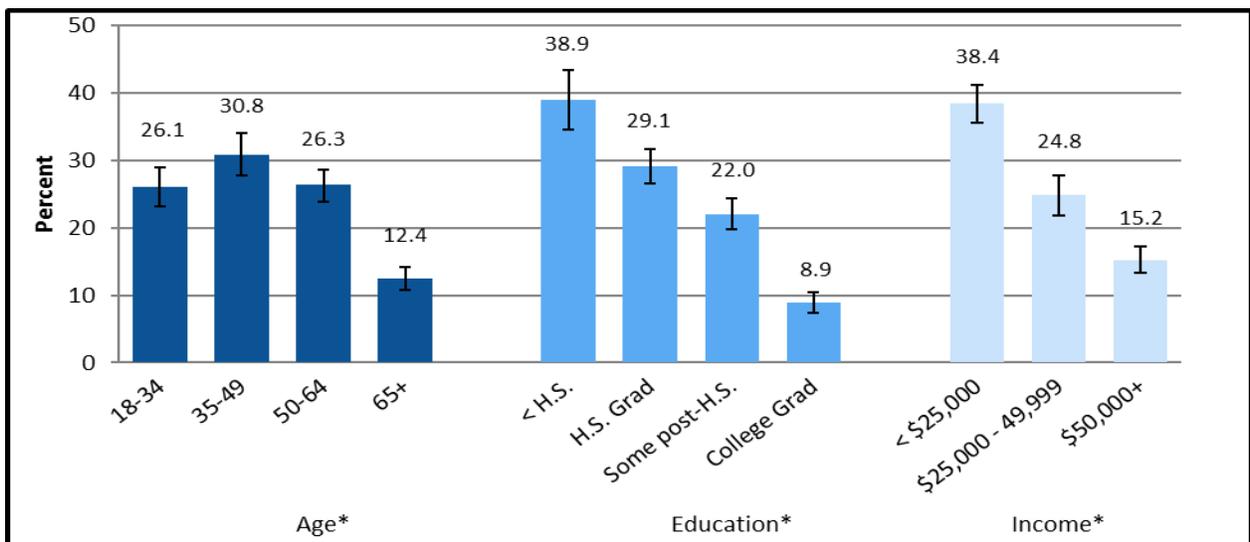
Who is at risk in Kentucky?

- ◆ About 24.5% of Kentucky adults reported that they currently smoke cigarettes everyday or some days. This was a higher estimate compared to 17.1% in the United States.
- ◆ Prevalence of cigarette smoking did not significantly differ by gender.
- ◆ Prevalence of cigarette smoking did not significantly differ by race.
- ◆ Prevalence of smoking was significantly lower among adults aged 65 and older (12.4%) compared with other age groups.
- ◆ Prevalence of smoking decreased significantly as education level increased. About 38.9% of adults with less than a high school education reported that they are current smokers, compared to just 8.9% of those with a college degree.
- ◆ Smoking is significantly more common among those with an annual household income of less than \$25,000 than among those with a higher annual household income.

Percent of Kentucky Adults who are Current Smokers, by Gender, and by Race - 2016



Percent of Kentucky Adults who are Current Smokers, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

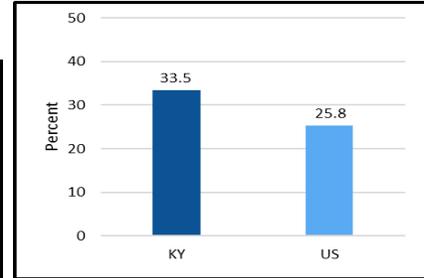
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

ARTHRITIS

Question: Have you ever been told by a doctor or other health professional that you have some form of arthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia?

At Risk: Adults who answered “Yes” are considered at risk.

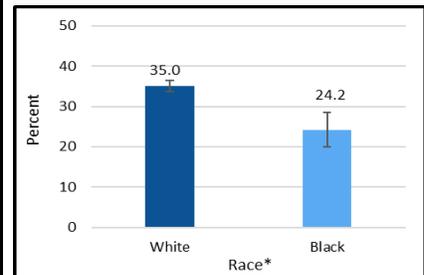
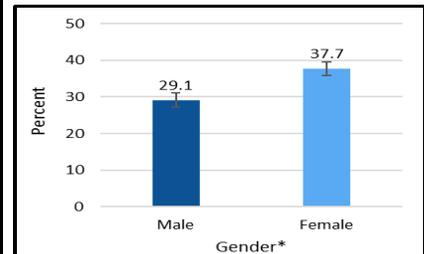
Percent of Adults who have Arthritis: Kentucky vs. Nationwide (States and DC) - 2016



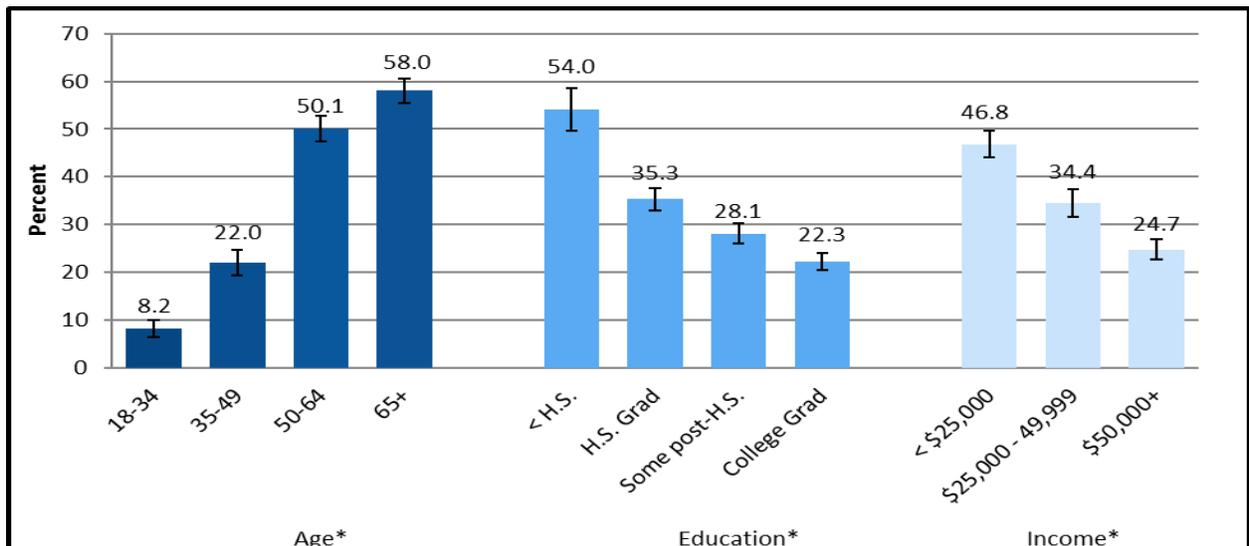
Who is at risk in Kentucky?

- ◆ An estimated 33.5% of Kentucky adults have been told by a health professional that they have arthritis. This was a higher estimate compared to 25.8% in the United States.
- ◆ Prevalence of arthritis was significantly higher among women than men (37.7% vs 29.1%).
- ◆ About 35.0% of white adults have been told by a health professional that they have arthritis; This estimate was significantly higher compared to black adults (24.2%).
- ◆ Prevalence of arthritis increased significantly with age. The highest prevalence was among adults aged 65 years or older (58.0%).
- ◆ Prevalence of arthritis was significantly higher among adults with less than high school than among those with a college degree (54.0% vs 22.3%).
- ◆ As household incomes increased, the prevalence of arthritis decreased significantly.

Percent of Kentucky Adults who have Arthritis, by Gender*, and by Race* - 2016



Percent of Kentucky Adults who have Arthritis, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

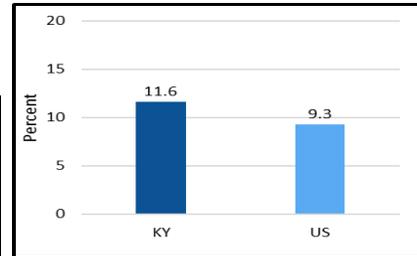
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

ASTHMA

Question: 1. Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (lifetime)
 2. Do you still have asthma? (current)

At Risk: Adults who answered “Yes” to both questions (i.e., currently have asthma) are considered at risk.

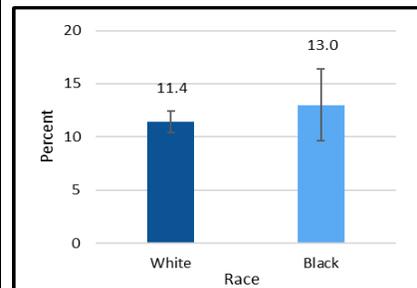
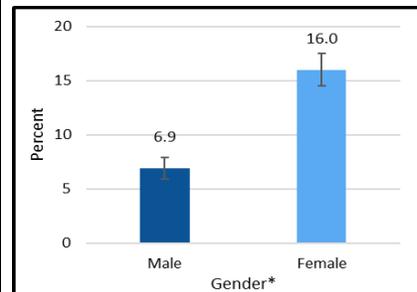
Percent of Adults who have Current Asthma: Kentucky vs. Nationwide (States and DC) - 2016



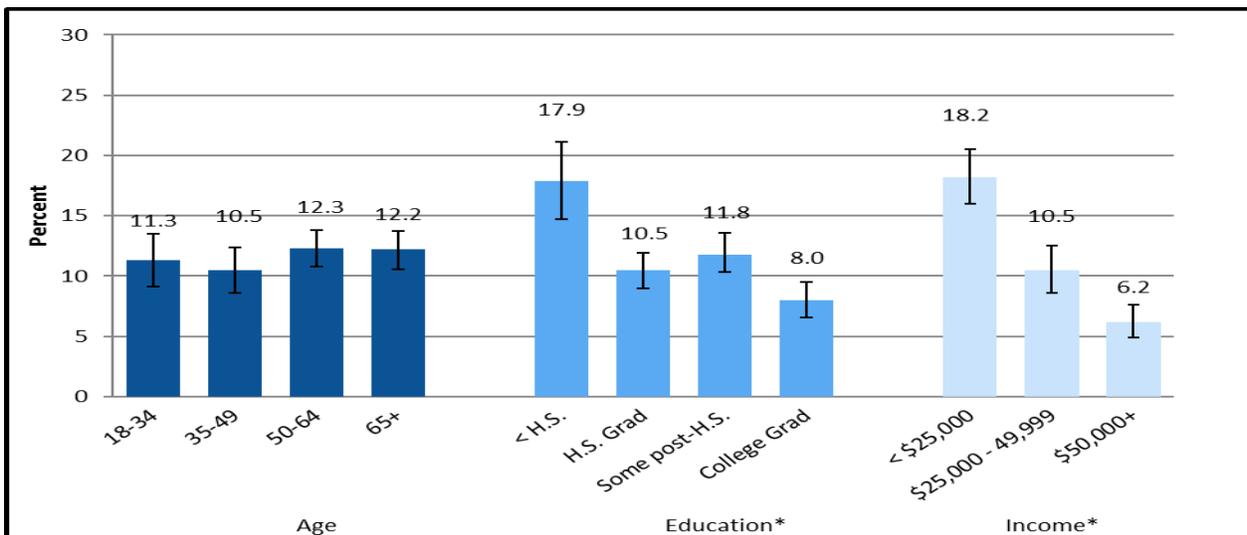
Who is at risk in Kentucky?

- ◆ About 11.6% of Kentucky adults reported that they currently have asthma. This was higher compared to 9.3% in the United States.
- ◆ Prevalence of current asthma was significantly higher among women than among men (16.0% vs 6.9%).
- ◆ There were no statistically significant differences in the prevalence of current asthma between white and black adults.
- ◆ Prevalence of current asthma did not significantly differ across age groups.
- ◆ Prevalence of current asthma was significantly higher among adults with less than a high school education compared to those with a college education (17.9% vs. 8.0%).
- ◆ Prevalence of current asthma significantly decreased with increasing household income level.

Percent of Kentucky Adults who have Current Asthma, by Gender*, and by Race - 2016



Percent of Kentucky Adults who have Current Asthma, by Age, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

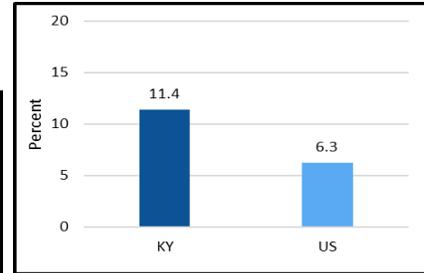
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Chronic Obstructive Pulmonary Disease (COPD)

Question: Have you ever been told by a doctor, nurse, or other health professional that you that you have Chronic Obstructive Pulmonary Disease or COPD, emphysema, or chronic bronchitis?

At Risk: Adults who answered “Yes” are considered at risk.

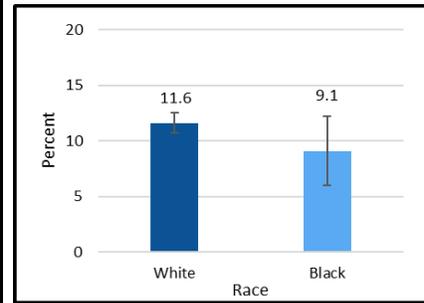
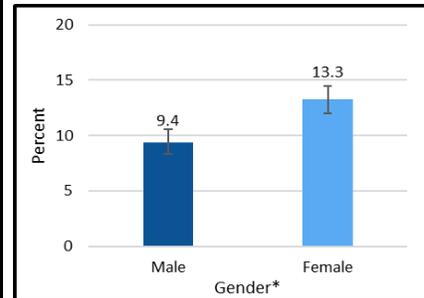
Percent of Adults who have COPD: Kentucky vs. Nationwide (States and DC) - 2016



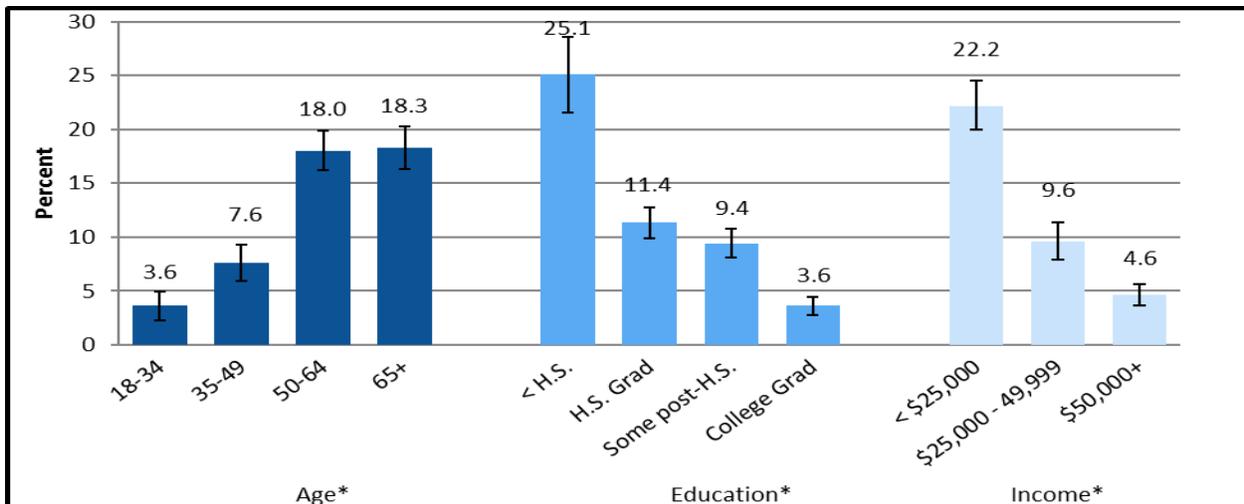
Who is at risk in Kentucky?

- ◆ About 11.4% of Kentucky adults reported that they have been told by a doctor that they have COPD compared to 6.3% in the United States.
- ◆ Prevalence of COPD was significantly higher among women (13.3%) compared to men (9.4%).
- ◆ There were no statistically significant differences in prevalence of COPD between white and black adults.
- ◆ Prevalence of COPD increased significantly with age; adults 65 years or older had the highest prevalence of COPD (18.3%).
- ◆ Prevalence of COPD was significantly higher among adults with less than a high school education (25.1%) compared to adults with a college degree (3.6%).
- ◆ Adults with an annual household income of less than \$25,000 had a significantly higher prevalence of COPD compared to adults with household income of \$50,000 or more a year (22.2% vs. 4.6%).

Percent of Kentucky Adults who have COPD by Gender*, and by Race - 2016



Percent of Kentucky Adults who have COPD, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

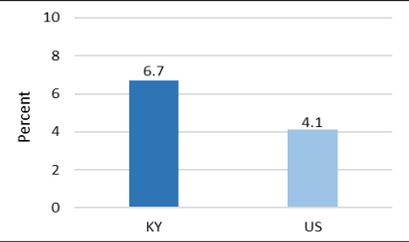
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

CORONARY HEART DISEASE

Question: Have you ever been told by a doctor, nurse, or other health professional that you had angina or coronary heart disease?

At Risk: Adults who answered “Yes” are considered at risk.

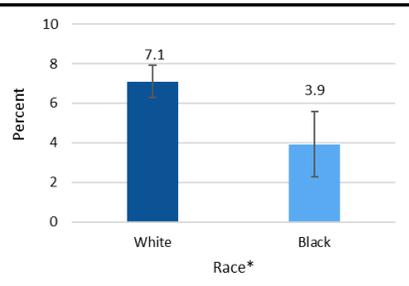
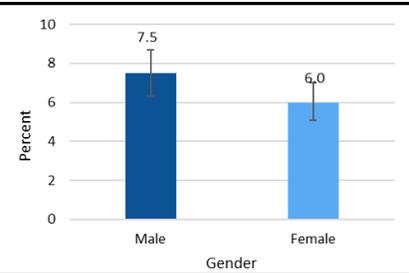
Percent of Adults who have Coronary Heart Disease: Kentucky vs. Nationwide (States and DC) - 2016



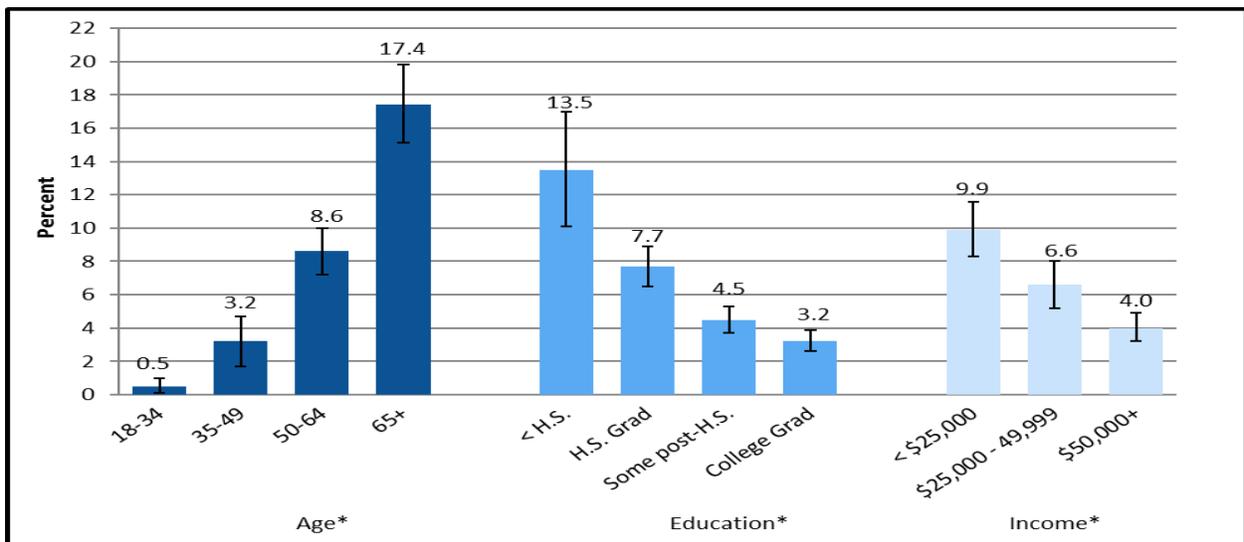
Who is at risk in Kentucky?

- ◆ About 6.7% of adults in Kentucky have been told by a health professional that they have coronary heart disease or angina. This was a higher estimate compared to 4.1% in the United States.
- ◆ There were no statistically significant differences in the prevalence of coronary heart disease by gender.
- ◆ Prevalence of coronary heart disease was significantly higher among white adults (7.1%) compared to black adults (3.9%).
- ◆ Prevalence of coronary heart disease increased significantly with age: adults aged 65 years or older had the highest prevalence (17.4%) compared to other age groups.
- ◆ Adults with less than a high school education reported a significantly higher prevalence of coronary heart disease compared to those with a college degree (13.5% vs. 3.2%).
- ◆ Prevalence of coronary heart disease was significantly higher among adults with an annual household income of less than \$25,000 compared to adults with higher income levels. with a annual household income of \$50,000 or more (4.6%).

Percent of Kentucky Adults who have Coronary Heart Disease by Gender, and by Race* - 2016



Percent of Kentucky Adults who have Coronary Heart Disease, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

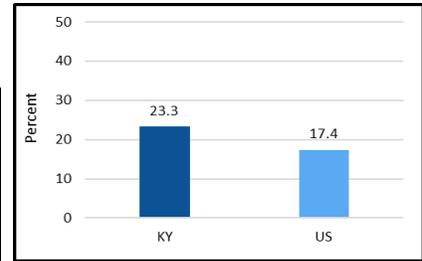
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

DEPRESSIVE DISORDER

Question: Have you ever been told by a doctor, nurse, or other health professional that you have a depressive disorder, including depression, major depression, dysthymia, or minor depression?

At Risk: Adults who answered “Yes” are considered at risk.

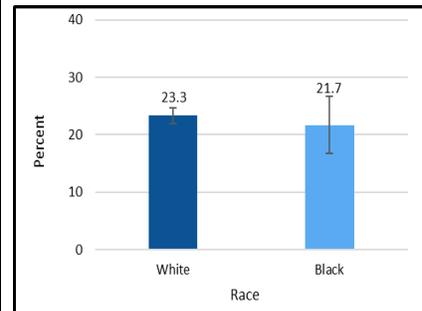
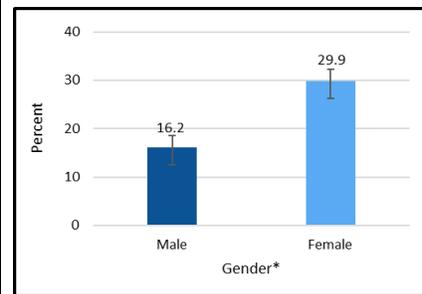
Percent of Adults who have Depressive Disorder: Kentucky vs. Nationwide (States and DC) - 2016



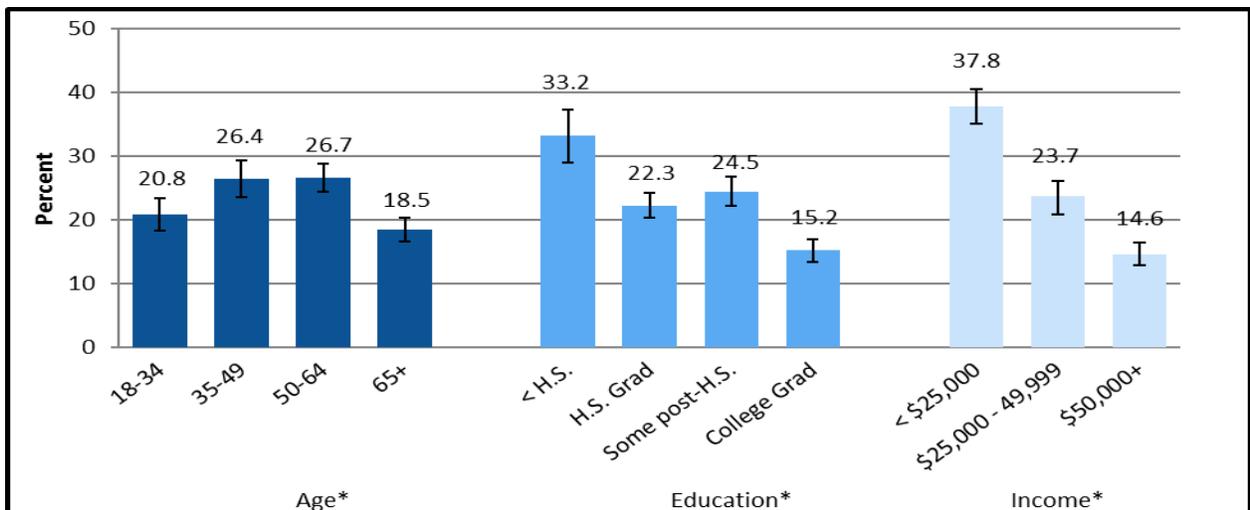
Who is at risk in Kentucky?

- ◆ Approximately 23.3% of Kentucky adults reported ever being told by a health professional that they had a depressive disorder. This was higher compared to 17.4% in the United States.
- ◆ Women reported a significantly higher prevalence of depression than men (29.9% vs 16.2%).
- ◆ Prevalence of depression did not significantly differ by race.
- ◆ Prevalence of depression was significantly higher among adults aged 35-49 years than those aged 65 years and older (26.4% vs 18.5%).
- ◆ Adults with less than high school education (33.2%) were more likely to report that they have depression compared to adults with higher levels of education attainment.
- ◆ Prevalence of depression decreased with increasing income level. The lowest prevalence was among adults with an annual household income of \$50,000 or more (14.6%).

Percent of Kentucky Adults who have Depressive Disorder, by Gender*, and by Race - 2016



Percent of Kentucky Adults who have Depressive Disorder by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

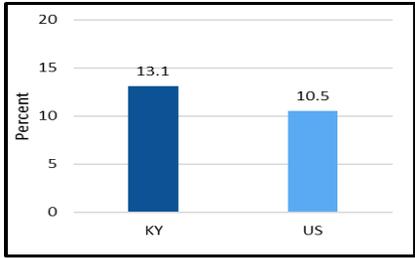
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

DIABETES

Question: Have you ever been told by a doctor, nurse, or other health professional that you have diabetes?

At Risk: Adults who answered “Yes” are considered at risk. Those with responses for gestational diabetes, pre-diabetes or borderline diabetes are excluded.

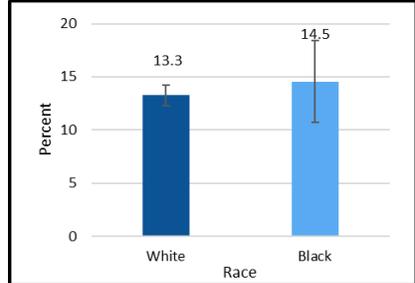
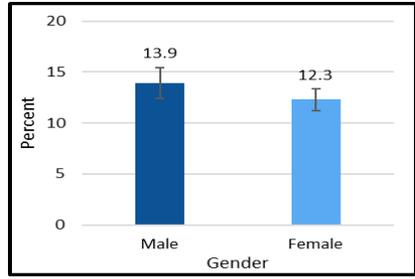
Percent of Adults who have Diabetes: Kentucky vs. Nationwide (States and DC) - 2016



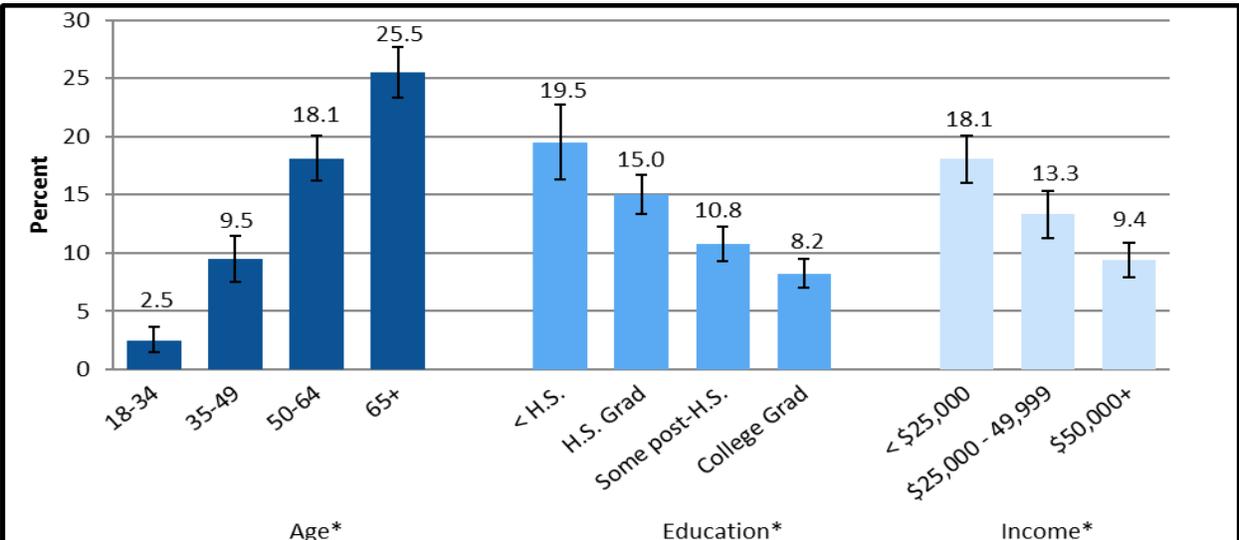
Who is at risk in Kentucky?

- ◆ About 13.1% of Kentucky adults reported that they have been told by a doctor that they have diabetes. This was higher compared to 10.5% in the United States.
- ◆ Men (13.9%) reported higher prevalence of diabetes than women (12.3%); however, these differences were not statistically significant.
- ◆ There were no statistically significant differences in diabetes prevalence between white and black adults.
- ◆ The prevalence of diabetes increased significantly with age; adults aged 65 years or older had the highest prevalence of diabetes (25.5%).
- ◆ The prevalence of diabetes was significantly higher among adults with less than a high school education (19.5%) compared to adults with a college degree (8.2%).
- ◆ Adults with an annual household income of less than \$25,000 reported a significantly higher prevalence of diabetes compared to those with annual household income of \$50,000 or more (18.1% vs 9.4%).

Percent of Kentucky Adults who have Diabetes by Gender, and by Race—2016



Percent of Kentucky Adults who have Diabetes, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

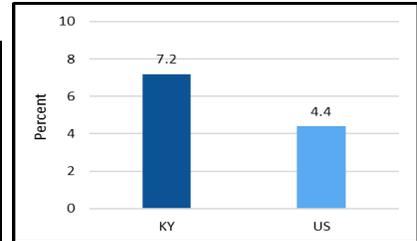
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

HEART ATTACK

Question: Have you ever been told by a doctor, nurse, or other health professional that you had a heart attack, also called a myocardial infarction?

At Risk: Adults who answered “Yes” are considered at risk.

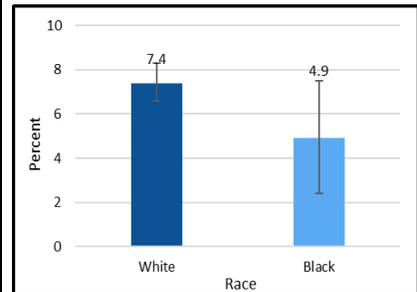
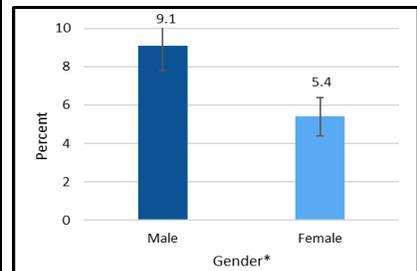
Percent of Adults who have ever been told that they had a Heart Attack: Kentucky vs. Nationwide (States and DC) - 2016



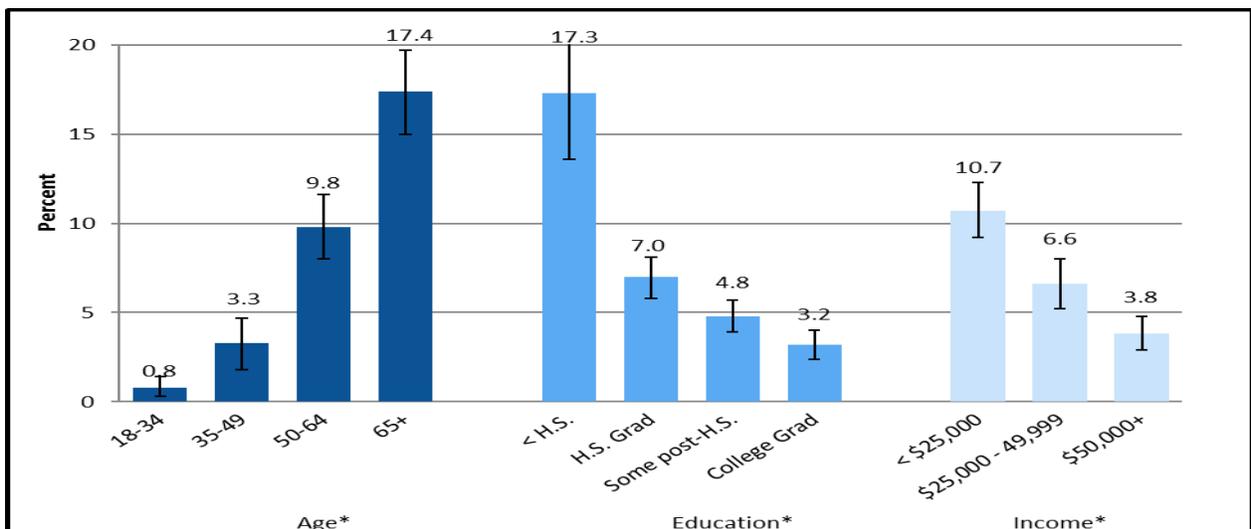
Who is at risk in Kentucky?

- ◆ About 7.2% of adults in Kentucky have been told by a health professional that they had a heart attack. This was higher than the 4.4% estimate in the United States.
- ◆ Prevalence of heart attack was significantly higher among men compared to women (9.1% vs. 5.4%).
- ◆ There were no statistically significant differences in the prevalence of heart attack between white and black adults.
- ◆ The prevalence of heart attack significantly increased with age. The highest prevalence was among adults aged 65 years or older (17.4%).
- ◆ Prevalence of heart attack was significantly higher among adults with less than a high school education (17.3%) compared to adults with other levels of educational attainment.
- ◆ The prevalence of heart attack was significantly higher among adults with an annual household income of less than \$25,000 (10.7%) compared to those with household income of \$50,000 or more (3.8%).

Percent of Kentucky Adults who have ever been told they had a Heart Attack, by Gender*, and by Race - 2016



Percent of Kentucky Adults who have ever been told that they had a Heart Attack, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

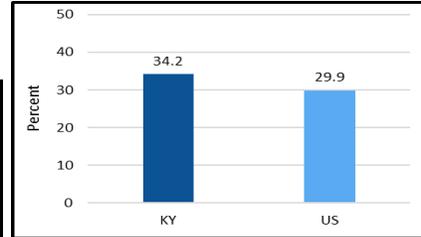
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

OBESITY

Question: Body Mass Index (BMI) was calculated based on data collected from:
 1) How much do you weigh without shoes?
 2) How tall are you without shoes?

At Risk: Adults with BMI scores greater or equal to 30.0 are considered obese.

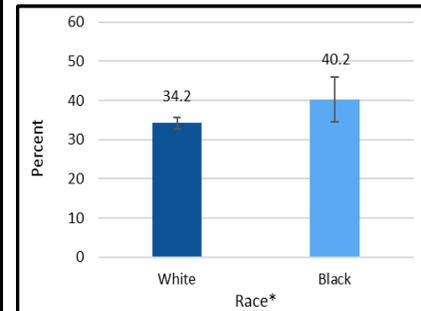
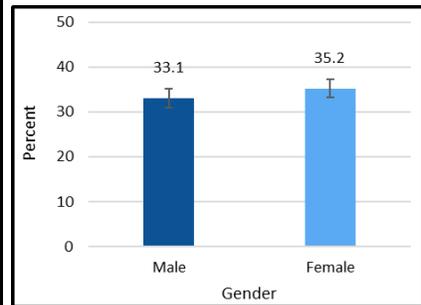
Percent of Adults who are Obese: Kentucky vs. Nationwide (States and DC) - 2016



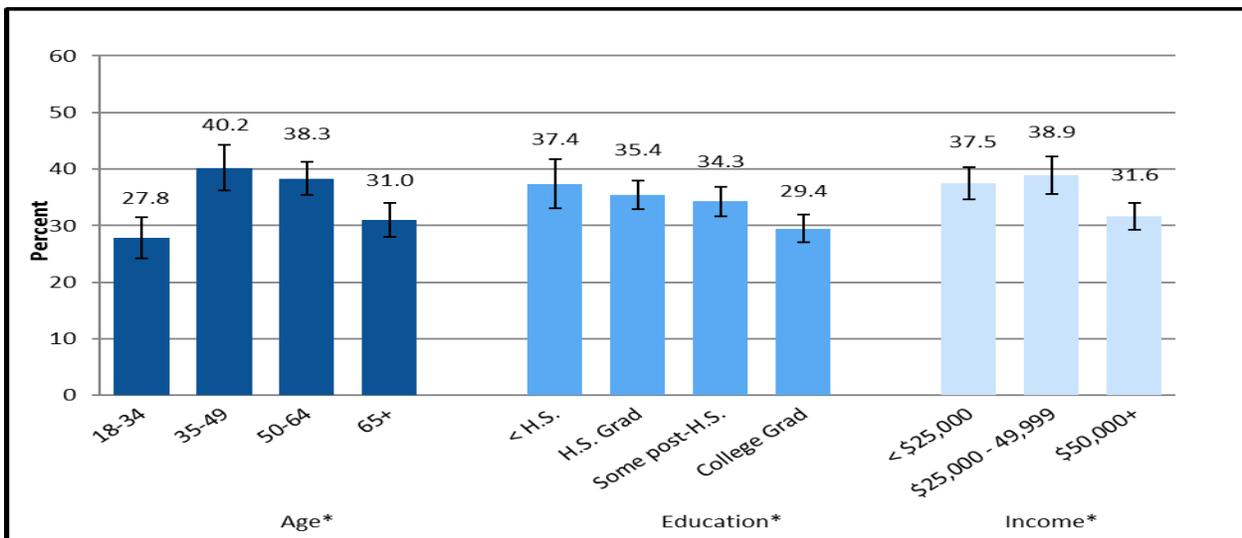
Who is at risk in Kentucky?

- ◆ About 34.2% of Kentucky adults were classified as obese (i.e. Body Mass Index greater or equal to 30). This was a higher estimate compared to 29.9% in the United States.
- ◆ There were no statistically significant differences in obesity prevalence between men and women.
- ◆ The prevalence of obesity among black adults was significantly higher compared to white adults (40.2% vs. 34.2%).
- ◆ Among the different age groups used in this report, prevalence of obesity was highest among adults aged 35-49 years old (40.2%).
- ◆ Prevalence of obesity was significantly higher among adults with less than a high school education compared to adults who graduated from college (37.4% vs. 29.4%).
- ◆ Prevalence of obesity was significantly higher among adults with annual household income of less than \$25,000 a year, compared to those with annual household income of \$50,000 or more a year (37.5% vs. 31.6%).

Percent of Kentucky Adults who are Obese, by Gender, and by Race* - 2016



Percent of Kentucky Adults who are Obese, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

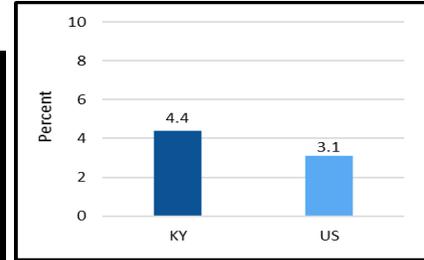
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

STROKE

Question: Have you ever been told by a doctor, nurse, or other health professional that you had a stroke?

At Risk: Adults who answered “Yes” are considered at risk.

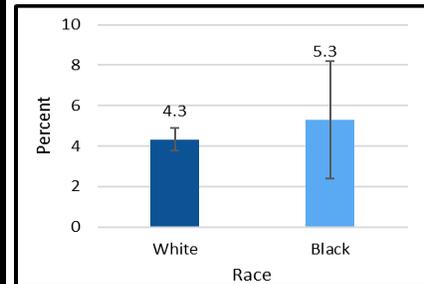
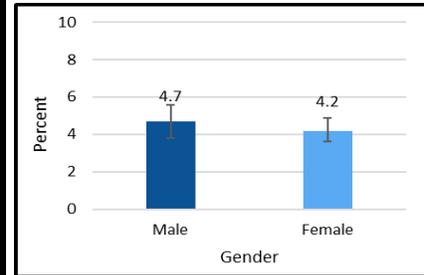
Percent of Adults who have ever been told that they had a Stroke: Kentucky vs. Nationwide (States and DC) - 2016



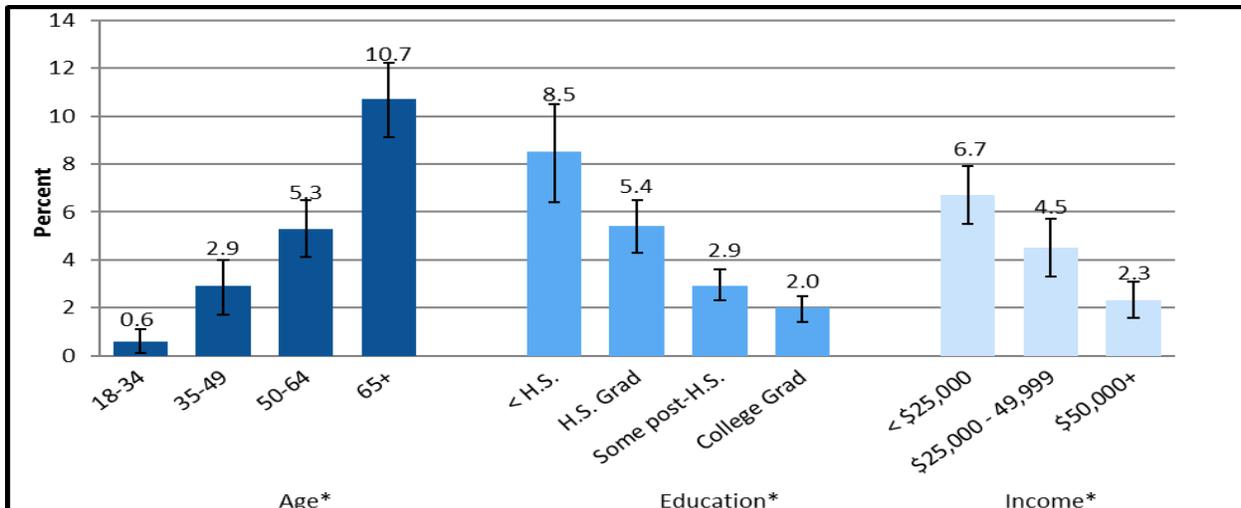
Who is at risk in Kentucky?

- ◆ About 4.4% of adults in Kentucky have been told by a health professional that they had a stroke. This was a higher estimate than 3.1% for the United States.
- ◆ Prevalence of stroke did not differ significantly between men and women.
- ◆ There were no statistically significant differences in the prevalence of stroke between white and black adults.
- ◆ Prevalence of stroke significantly increased with age. The highest prevalence of stroke was among adults aged 65 years or older (10.7%).
- ◆ Adults with less than a high school education reported a significantly higher prevalence of stroke compared to adults who graduated from college (8.5% vs. 2.0%).
- ◆ Prevalence of stroke was significantly higher among adults with household income under \$25,000 a year, compared to adults with household income of \$50,000 or more a year (6.7% vs. 2.3%).

Percent of Kentucky Adults who have ever been told they had a Stroke, by Gender, and by Race—2016



Percent of Kentucky Adults who have ever been told they had a Stroke, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

GENERAL HEALTH

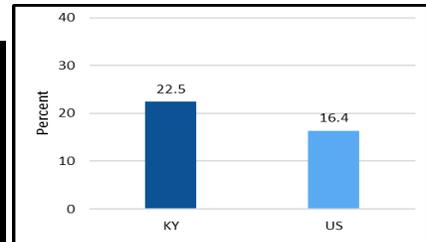
Question: Would you say that your general health is “Excellent”, “Very good”, “Good”, “Fair”, or “Poor”?

Percent of Adults who reported their General Health as Fair or Poor: Kentucky vs. Nationwide (States and DC) - 2016

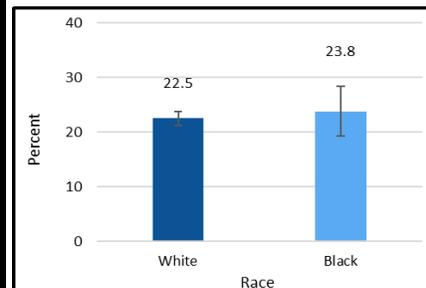
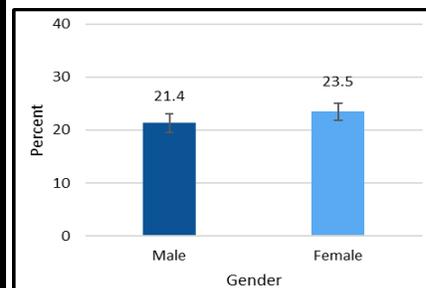
At Risk: Adults who answered “Fair” or “Poor” are considered at risk.

Who is at risk in Kentucky?

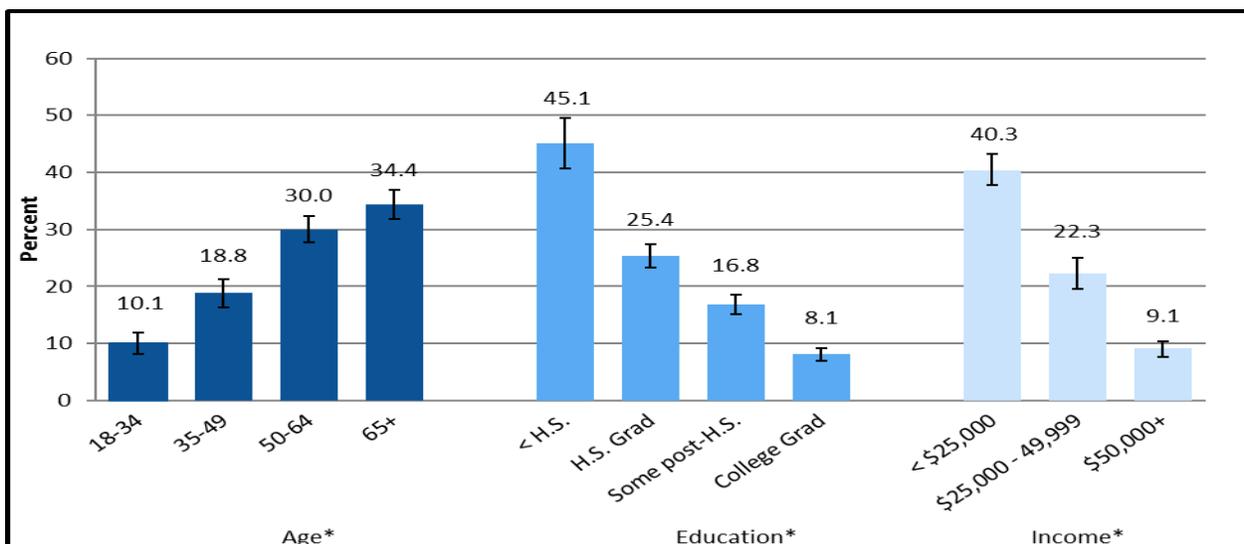
- ◆ An estimated 22.5% of Kentucky adults rated their general health as fair or poor. This was a higher estimate compared to 16.4% in the United States.
- ◆ There were no statistically significant differences between men and women who rated their general health as fair or poor.
- ◆ There were no statistically significant differences between white and black adults who rated their general health as fair or poor.
- ◆ Fair or poor general health ratings increased significantly with age. The highest prevalence was among adults aged 65 years or older (34.4%).
- ◆ Adults with less than high school education reported a significantly higher prevalence of fair or poor health than those with a college degree (45.1% vs 8.1%).
- ◆ About 40.3% of adults with household income under \$25,000 a year rated their general health as fair or poor, compared to only 9.1% of adults with annual household income of \$50,000 or more.



Percent of Kentucky Adults who reported their General Health as Fair or Poor, by Gender, and by Race - 2016



Percent of Kentucky Adults who reported their General Health as Fair or Poor, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

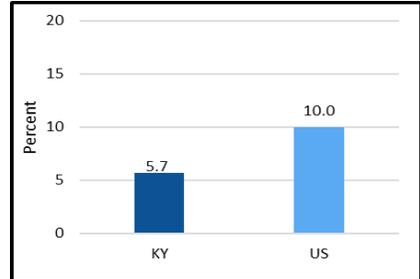
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

HEALTHCARE ACCESS/COVERAGE

Question: Do you have any kind of health care coverage, including health insurance, pre-paid plans such as HMOs or governmental plans such as Medicare?

At Risk: Adults who answered “No” are considered at risk.

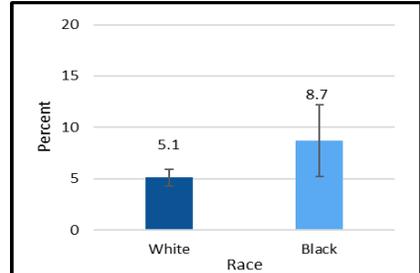
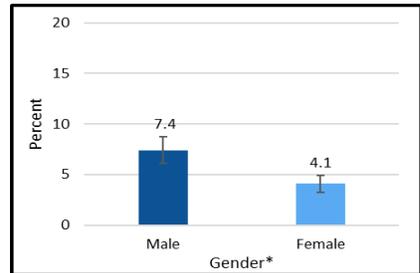
Percent of Adults with No Health Insurance: Kentucky vs. Nationwide (States and DC) - 2016



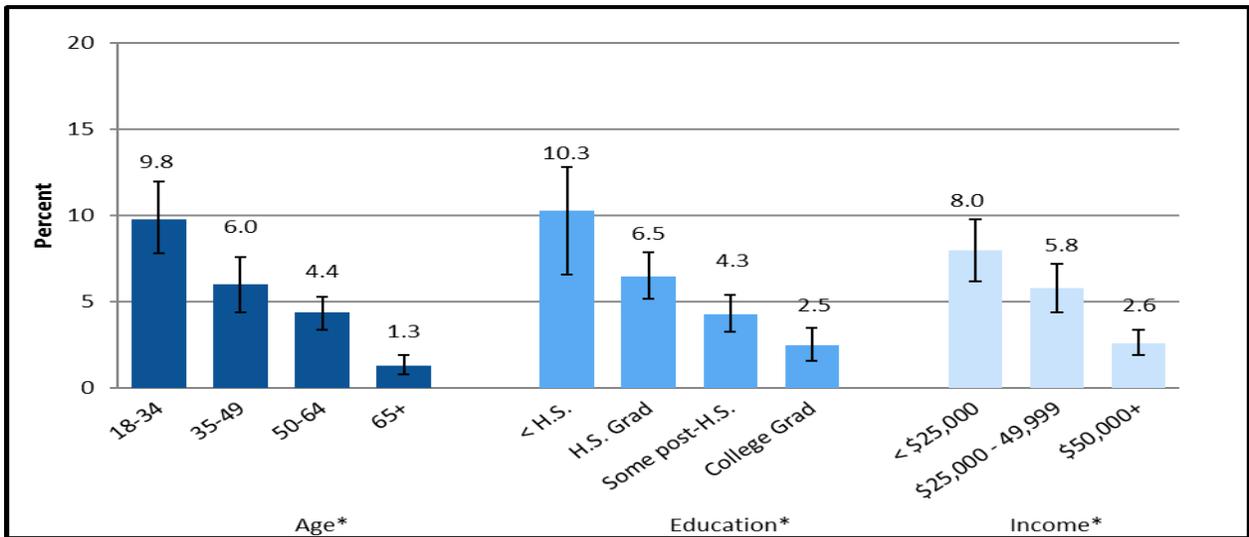
Who is at risk in Kentucky?

- ◆ About 5.7% of Kentucky adults did not have any form of health insurance in 2016. This was a lower estimate compared to 10.0% in the United States.
- ◆ The percentage of men who did not have health insurance (7.4%) was significantly higher compared to the percentage of women who did not have health insurance (4.1%).
- ◆ The percentage of adults who did not have health insurance did not significantly differ by race.
- ◆ About 9.8% of adults aged 18-34 years did not have health insurance; lack of health insurance decreased significantly with age.
- ◆ Adults with less than high school education reported a significantly higher percentage of no health insurance than those with a college degree (10.3% vs 2.5%).
- ◆ About 8.0% of adults with household income under \$25,000 a year did not have health insurance; this was a significantly higher estimate compared to only 2.6% of adults with household income of \$50,000 or more.

Percent of Kentucky Adults with No Health Insurance, by Gender*, and by Race—2016



Percent of Kentucky Adults with No Health Insurance, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.
 In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.
 Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

BREAST CANCER SCREENING (Age 40+)

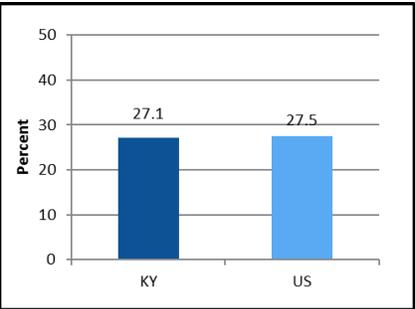
Question: A mammogram is an X-Ray of each breast to look for breast cancer. Have you ever had a mammogram? How long has it been since you have had your last mammogram ?

At Risk: Women aged 40 years or older who report that they have not had a mammogram within the past two years are considered at risk.

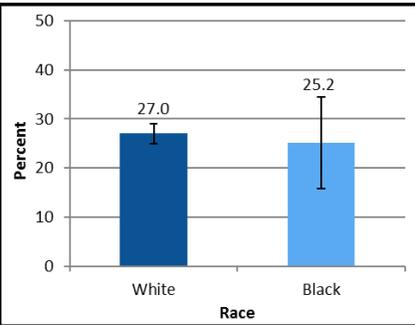
Who is at risk in Kentucky?

- ◆ An estimated 27.1% of Kentucky women aged 40 years or older reported that they have not had a mammogram in the past two years. This estimate was slightly lower compared to 27.5% in the United States.
- ◆ No significant differences by race in the prevalence of women (aged 40+) who did not have a mammogram in the past two years were observed.
- ◆ About 35.0% of women aged 40 - 49 years did not have a mammogram in the past two years; this estimate was significantly higher compared to women aged 50 years or older.
- ◆ A significantly higher percentage of women (aged 40+) with less than a high school education did not have a mammogram in the past two years, compared to women (aged 40+) who graduated from college (32.2% vs. 21.0%).
- ◆ About a third of women (aged 40+) with an annual household income of less than \$25,000 did not have a mammogram in the past two years (31.3%); this was significantly higher compared to women (aged 40+) with an annual household income of \$50,000 or more (22.1%).

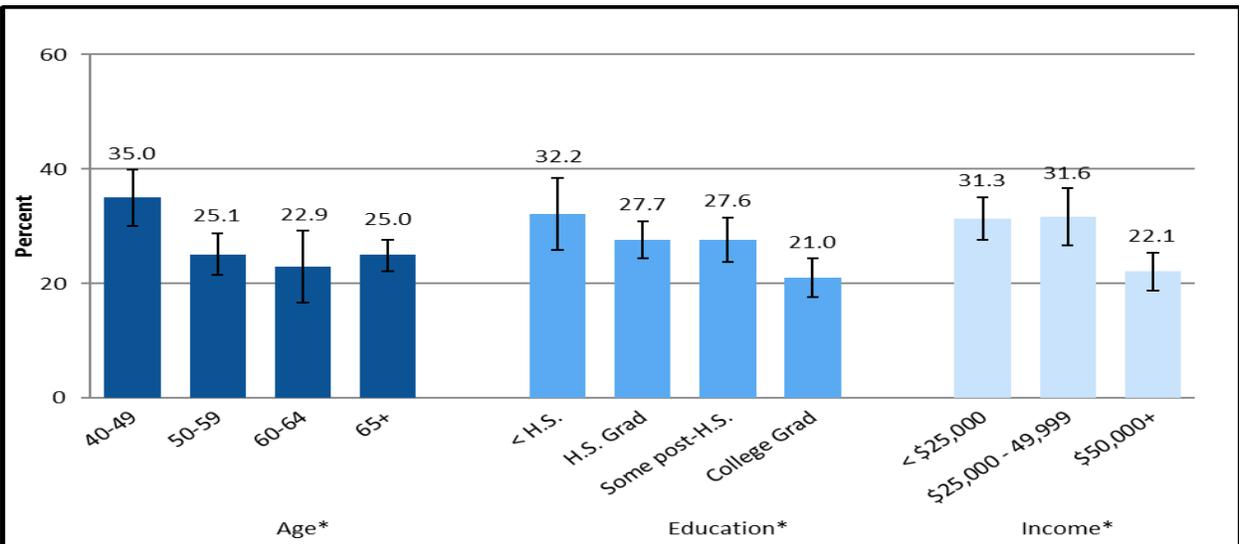
Percent of Women (aged 40+) who did not have a Mammogram in the Past Two Years: Kentucky vs. Nationwide (States and DC) - 2016



Percent of Kentucky Women (aged 40+) who did not have a Mammogram in the Past Two Years, by Race—2016



Percent of Kentucky Women aged 40+ who did not have a Mammogram in the Past Two Years, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

CERVICAL CANCER SCREENING (Age 21-65)

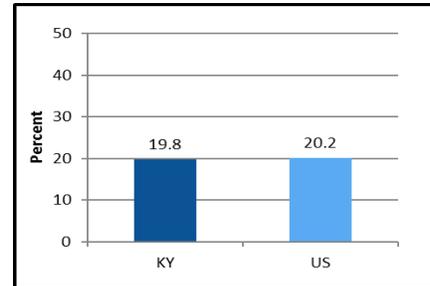
Question: A Pap Smear is a test for cancer of the cervix. How long has it been since you had your last Pap Smear test?

At Risk: Women who reported that they did not have a Pap Smear Test within the last three years are considered at risk.

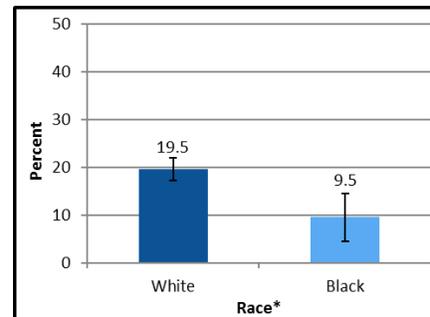
Who is at risk in Kentucky?

- ◆ An estimated 19.8% of Kentucky women (aged 21-65) reported that they have not had a Pap Smear test within the past three years compared to 20.2% in the United States.
- ◆ About 19.5% of white women did not have a Pap Smear test in the past three years; this was a significantly higher estimate compared to black women (9.5%).
- ◆ The prevalence of women (aged 21-65) who did not have a Pap Smear test in the past three years did not significantly differ by age group.
- ◆ About 30.0% of women (aged 21-65) with less than a high school education did not have a Pap Smear test in the past three years; this estimate was significantly higher compared to women who graduated from college (11.4%).
- ◆ A significantly higher percentage of women (aged 21-65) with an annual household income of less than \$25,000 did not have a Pap Smear test in the past three years, compared to those with an annual household income of \$50,000 or more (27.7% vs.14.7%).

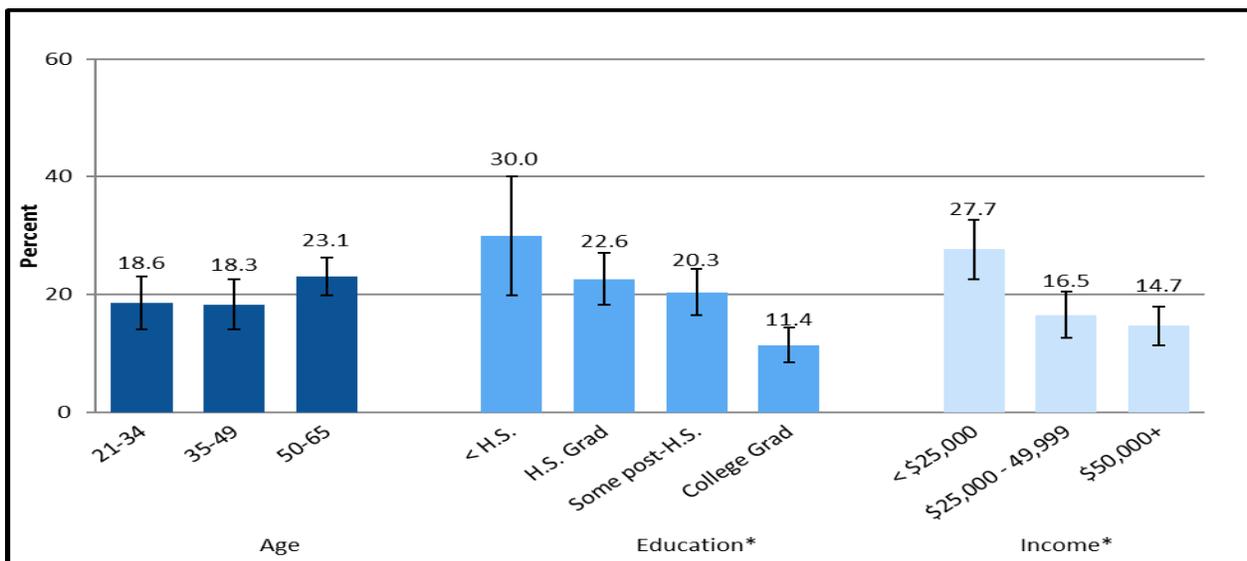
Percent of women aged 21-65 who did not have a Pap Smear Test in the Past Three Years: Kentucky vs. Nationwide (States and DC) - 2016



Percent of Kentucky women aged 21-65 who did not have a Pap Smear Test in the Past Three Years, by Race* - 2016



Percent of Kentucky women aged 21-65 who did not have a Pap Smear Test in the Past Three Years, by Age Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

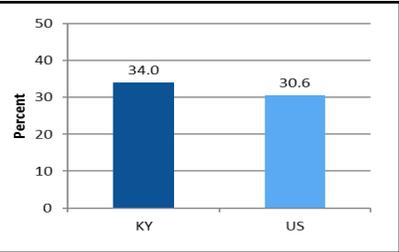
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

COLORECTAL CANCER SCREENING (Age 50-75)

Question: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of the exams?

At Risk: Adults (Age 50 -75) who have never had a sigmoidoscopy or colonoscopy are considered at risk.

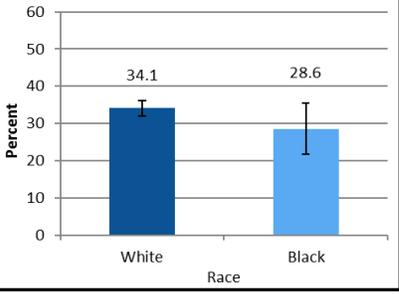
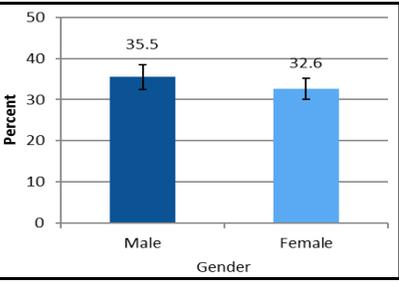
Percent of Adults (aged 50-75) who have never had a Sigmoidoscopy or Colonoscopy: Kentucky vs. Nationwide (States and DC) - 2016



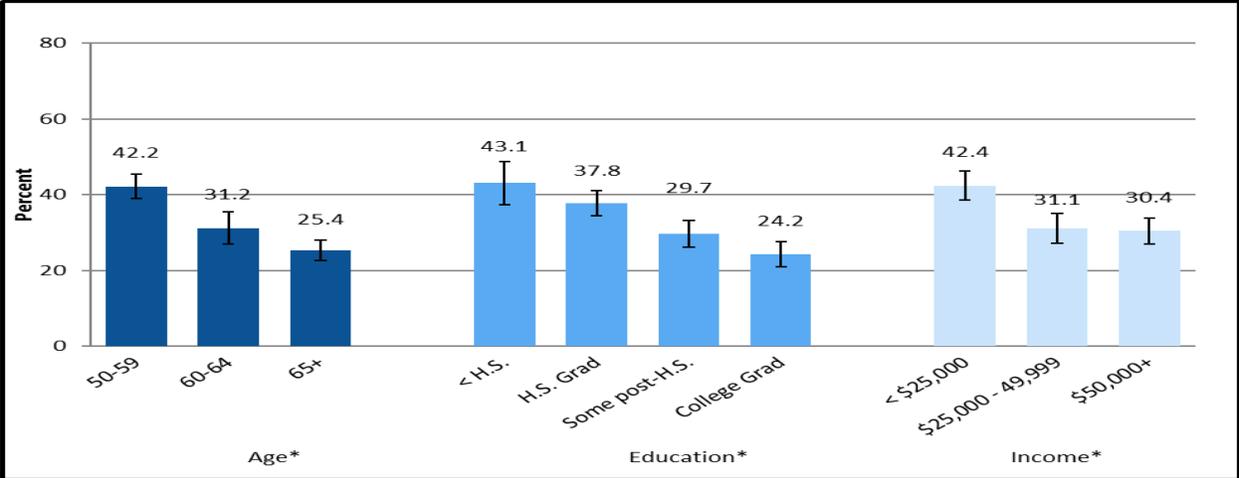
Who is at risk in Kentucky?

- ◆ About 34.0% of Kentucky adults aged 50-75 years reported that they have never had a sigmoidoscopy or colonoscopy compared to 30.6% in the United States.
- ◆ There were no statistically significant differences between men and women aged 50-75 years who have never had a sigmoidoscopy or colonoscopy.
- ◆ There were no statistically significant differences between white and black adults aged 50-75 years who have never had a sigmoidoscopy or colonoscopy.
- ◆ About 42.2% of adults aged 50 to 59 years have never had a sigmoidoscopy or colonoscopy; this was a significantly higher estimate compared to older age groups.
- ◆ An estimated 43.1% of adults (Aged 50 -75) with less than a high school education have never had a sigmoidoscopy or colonoscopy; this was a significantly higher estimate compared to adults with college education (24.2%).
- ◆ About 42.4% of adults (aged 50-75) with household income of less than \$25,000 a year, have never had a sigmoidoscopy or colonoscopy; this was a significantly higher estimate compared to adults with higher levels of annual household income.

Percent of Kentucky Adults aged (aged 50-75) years who have never had a Sigmoidoscopy or Colonoscopy, by Gender, and Race—2016



Percent of Kentucky Adults aged (aged 50 -75) years who have never had a Sigmoidoscopy or Colonoscopy, by Age*, Education*, and Income* - 2016



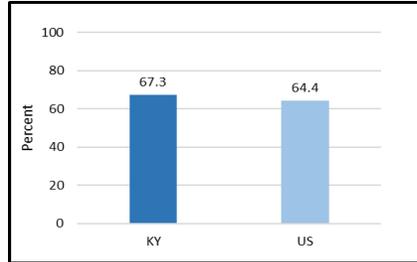
* Denotes a statistically significant difference among the values. In this report, the term 'significant' only refers to statistically significant differences in prevalence. Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

HIV/AIDS SCREENING

Question: Have you ever been tested for HIV?

At Risk: Adults who answered “No” are considered at risk.

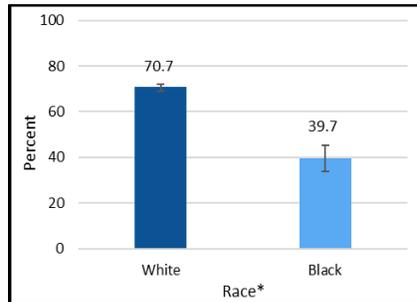
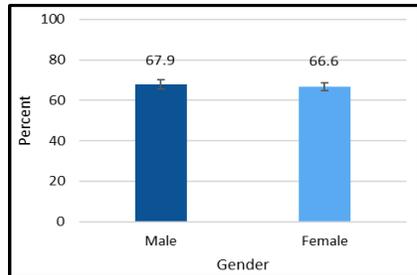
Percent of Adults who have never been tested for HIV: Kentucky vs. Nationwide (States and DC) - 2016



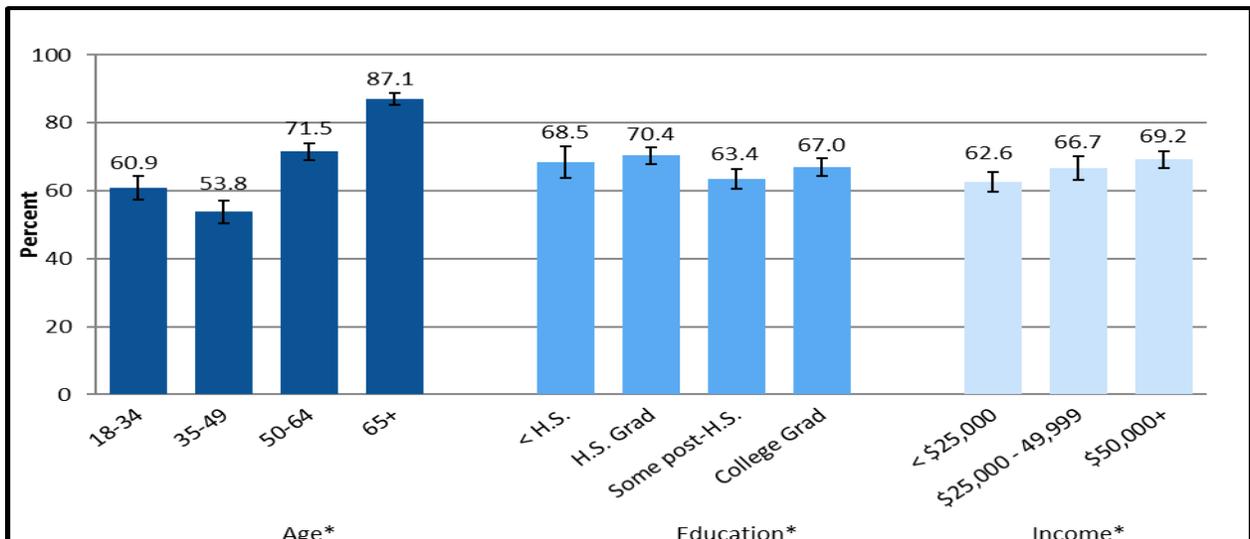
Who is at risk in Kentucky?

- ◆ An estimated 67.3% of adults in Kentucky have never been tested for HIV. This was a higher estimate compared to 64.4% in the United States.
- ◆ There were no statistically significant differences between men and women who have never been tested for HIV.
- ◆ The percentage of white adults who have never been tested for HIV was significantly higher compared to black adults (70.7% vs. 39.7%).
- ◆ About 87.1% of adults aged 65+ years have never been tested for HIV; this was a significantly higher estimate compared to other age groups.
- ◆ An estimated 70.4% of adults with high school education reported that they have never been tested for HIV; this was a significantly higher estimate compared to adults with some post-high school education (63.4%).
- ◆ A significantly higher proportion of adults with annual household income of \$50,000 or more (69.2%) have never been tested for HIV, compared to adults with household income of less than \$25,000 per year (62.6%).

Percent of Kentucky Adults who have never been tested for HIV, by Gender, and by Race* - 2016



Percent of Kentucky Adults who have never been tested for HIV, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

PROSTATE CANCER SCREENING (Age 40+)

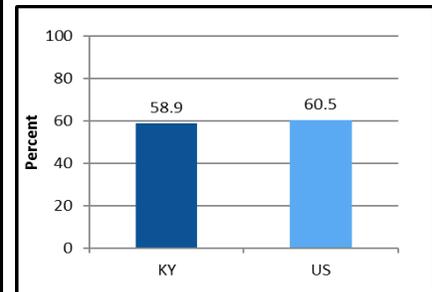
Question: Have you ever had a Prostate-Specific Antigen test, also called a PSA test? How long has it been since you had your last PSA test?

At Risk: Adult men aged 40 years or older who did not have a PSA test within the past two years are considered at risk.

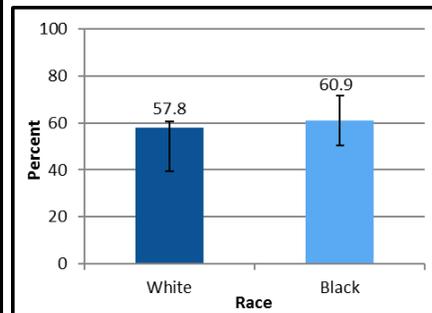
Who is at risk in Kentucky?

- ◆ About 58.9% of Kentucky men aged 40 years or older reported that they did not have a PSA test in the past two years. This was a lower estimate compared to 60.5% in the United States.
- ◆ About 57.8% of white men (aged 40+) did not have a PSA test in the past two years compared to 60.9% of black men (aged 40+), however these estimates were not statistically significant.
- ◆ A significantly higher percentage of men aged 40 to 49 years (82.5%) reported that they did not have a PSA test in the past two years compared with men aged 50 years or older.
- ◆ More than two thirds (70.3%) of men (aged 40+) with less than a high school education did not have a PSA test in the past two years; this was a significantly higher estimate compared to men (aged 40+) with a college degree (48.8%).
- ◆ A significantly higher proportion of men (aged 40+) with an annual household income of less than \$25,000 did not have a PSA test in the past two years, compared to men (aged 40+) with an annual household income of \$50,000 or more (69.7% vs. 46.7%).

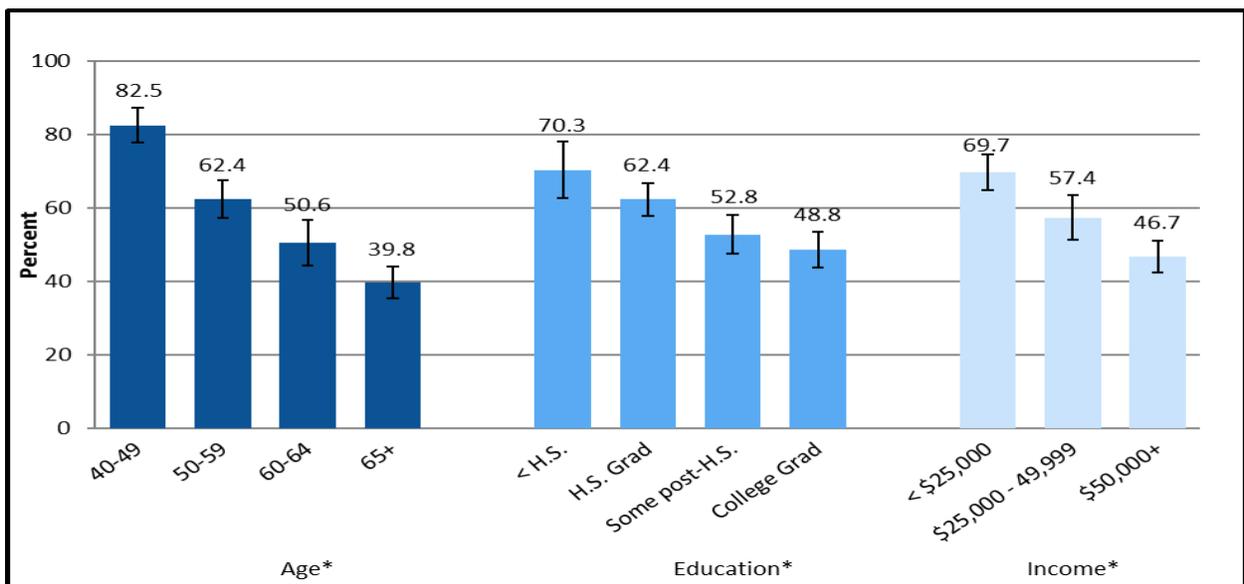
Percent of Men (aged 40+) who did not have a PSA Test in the Past Two Years: Kentucky vs. Nationwide (States and DC) - 2016



Percent of Kentucky Men (aged 40+) who did not have a PSA Test in the Past Two Years, by Race—2016



Percent of Kentucky Men (aged 40+) who did not have a PSA Test in the Past Two Years, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

INFLUENZA IMMUNIZATION (Age 65+)

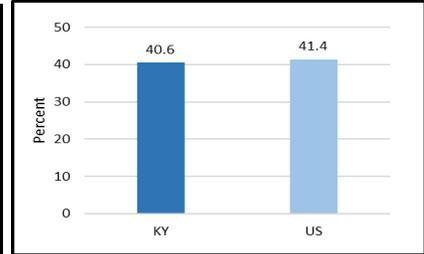
Question: In the past twelve months, have you had a flu shot?

At Risk: Adults aged 65+ years who did not get a flu shot in the past twelve months are considered at risk.

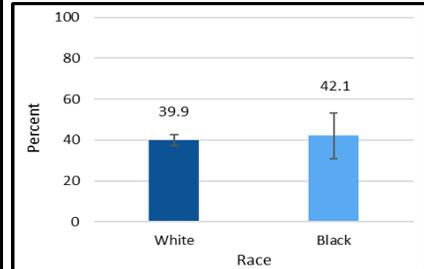
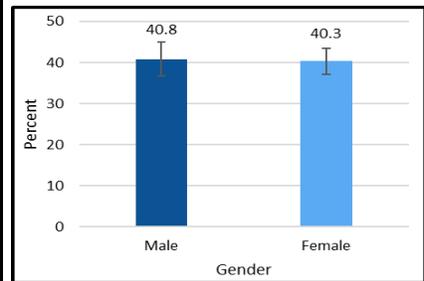
Percent of Adults (aged 65+) who did not get a Flu shot in the Past Year: Kentucky vs. Nationwide (States and DC) - 2016

Who is at risk in Kentucky?

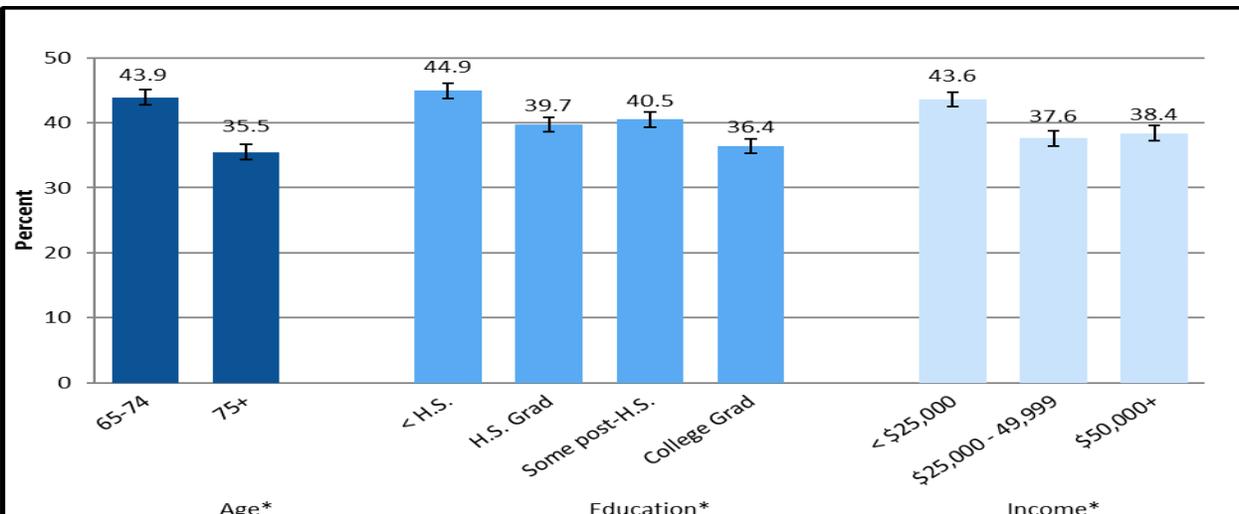
- ◆ About 40.6% of Kentucky adults aged 65 years or older reported that they did not get a flu shot in the past year. This was slightly lower than the United States estimate of 41.4%.
- ◆ The prevalence of adults who did not get a flu shot in the past year did not significantly differ by gender.
- ◆ There were no statistically significant differences between whites and blacks (aged 65+) who did not get a flu shot in the past year.
- ◆ A significantly higher percentage of adults aged 65-74 years did not get a flu shot in the past year, compared to adults aged 75 years or older (43.9% vs. 35.5%).
- ◆ A significantly higher percentage of adults (aged 65+) with less than high school education did not get a flu shot in the past year compared to adults with a college education (44.9% vs 36.4%).
- ◆ The highest prevalence of adults who did not get a flu shot in the past year was observed among those with an annual household income of less than \$25,000.



Percent of Kentucky Adults (aged 65+) who did not get a Flu shot in the Past Year, by Gender, and by Race—2016



Percent of Kentucky Adults (aged 65+) who did not get a Flu Shot in the Past Year, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

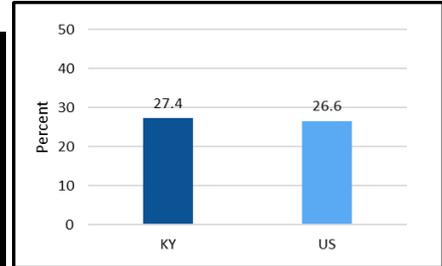
Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

PNEUMOCOCCAL VACCINATION (Age 65+)

Question: Have you ever had a pneumonia shot?

At Risk: Adults aged 65 years or older who have never had a pneumonia shot (pneumococcal vaccine) are considered at risk.

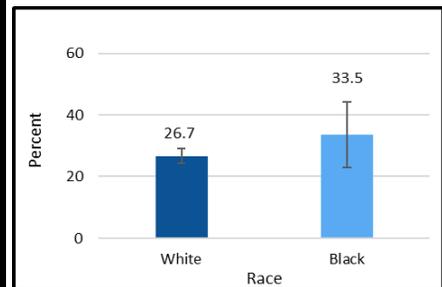
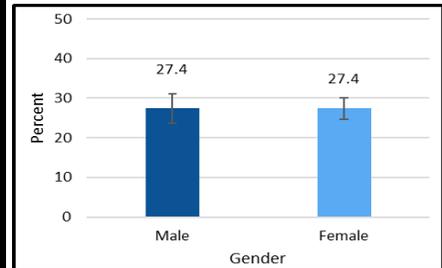
Percent of Adults (aged 65+) who have never had a Pneumococcal Vaccination: Kentucky vs. Nationwide (States and DC) - 2016



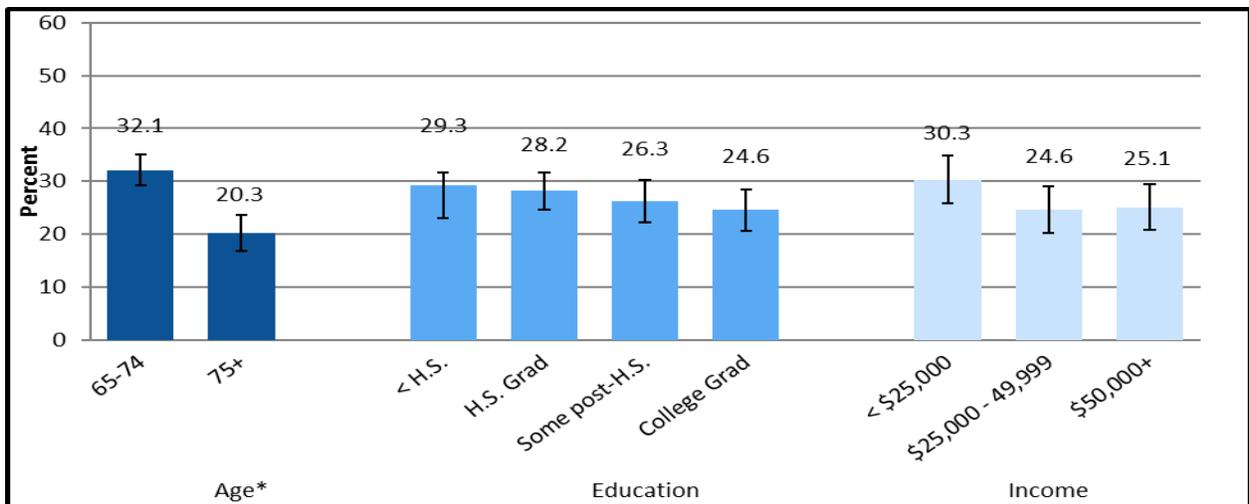
Who is at risk in Kentucky?

- ◆ An estimated 27.4% of Kentucky adults 65 years or older have never had a pneumococcal vaccination; this was slightly higher than the United States estimate of 26.6%.
- ◆ There were no statistically significant differences between men and women (aged 65+) who have never had a pneumococcal vaccination.
- ◆ The prevalence of adults (aged 65+) who have never had a pneumococcal vaccination did not significantly differ by race.
- ◆ Adults aged 65-74 years were significantly more likely to have never had a pneumococcal vaccination compared to adults who are 75 years or older (32.1% vs. 20.3%).
- ◆ The prevalence of adults who have never had a pneumococcal vaccination did not significantly differ by educational attainment.
- ◆ The prevalence of adults who have never had a pneumococcal vaccination did not significantly differ by household income.

Percent of Kentucky Adults (aged 65+) who have never had a Pneumococcal Vaccination, by Gender, and by Race—2016



Percent of Kentucky Adults (aged 65+) who have never had a Pneumococcal Vaccination, by Age*, Education, and Income—2016



* Denotes a statistically significant difference among the values.

In this report, the term 'significant' only refers to statistically significant differences in prevalence.

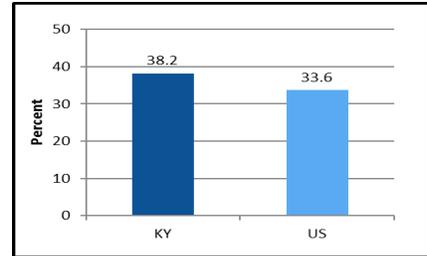
Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

ORAL HEALTH

Question: How long has it been since you visited the dentist or dental clinic for any reason?

At Risk: Adults who answered “more than 1 year ago” or “never” are consider at risk.
(pneumococcal vaccine) are considered at risk.

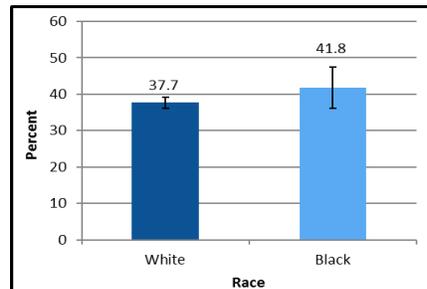
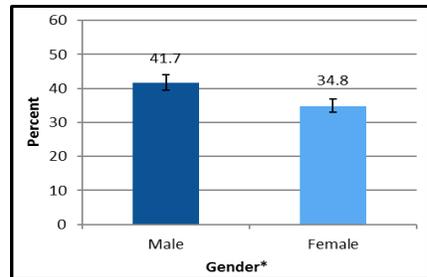
Percent of Adults who did not have a Dental Visit in the Past Year: Kentucky vs. Nationwide (States and DC) - 2016



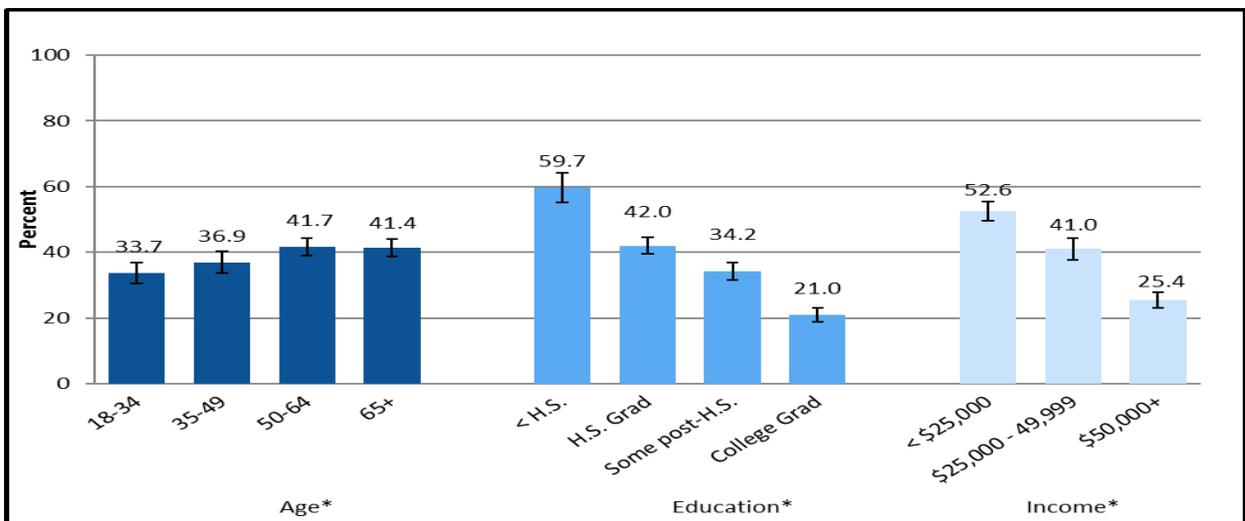
Who is at risk in Kentucky?

- ◆ About 38.2% of Kentucky adults reported that they did not have a dental visit in the past year. This was higher than the United States estimate of 33.6%.
- ◆ An estimated 41.7% of men reported that they did not have a dental visit in the past year. This estimate was significantly higher compared to women (34.8%).
- ◆ No significant differences were observed in prevalence of adults who did not have a dental visit in the past year by race.
- ◆ About 41.4% of adults aged 65 years or older did not have a dental visit in the past year; this was a significantly higher estimate compared to young adults aged 18-34 years.
- ◆ A significantly higher proportion of adults with less than a high school education did not have a dental visit in the past year compared to those with a college education (59.7% vs. 21.0%).
- ◆ The proportion of adults who did not have a dental visit in the past year decreased significantly with increasing levels of annual household income.

Percent of Kentucky Adults who did not have a Dental Visit in the Past Year, by Gender*, and by Race—2016



Percent of Kentucky Adults who did not have a Dental Visit in the Past Year, by Age*, Education*, and Income* - 2016



* Denotes a statistically significant difference among the values.

In this report, the term ‘significant’ only refers to statistically significant differences in prevalence.

Due to BRFFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Prevalence Estimates by Area Development District (ADD)

The remainder of this report incorporates ArcGIS mapping to illustrate prevalence estimates by Area Development District (ADD) for each risk factor, condition, or indicator presented in the preceding pages.

Kentucky has 120 Counties that are divided into 15 ADDs for the planning of a variety of programs. Data for this part of the report are analyzed by ADDs, rather than by county, because sample sizes for most counties are too small to provide statistically reliable estimates.

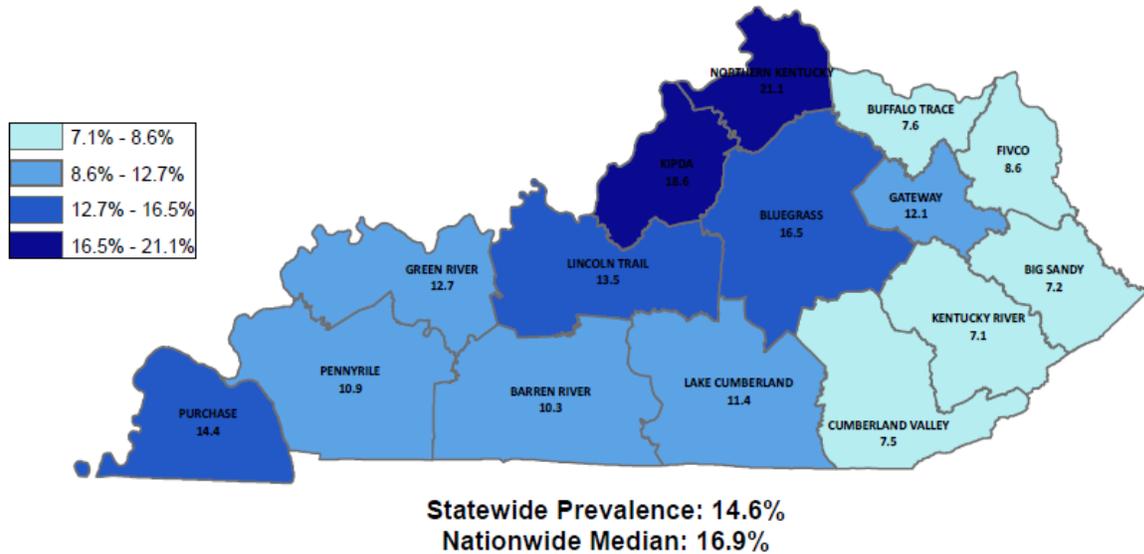


1. Barren River ADD	5. Cumberland Valley ADD	9. Kentucky River ADD	13. Northern Kentucky ADD
2. Big Sandy ADD	6. FIVCO ADD	10. KIPDA ADD	14. Pennyriple ADD
3. Bluegrass ADD	7. Gateway ADD	11. Lake Cumberland ADD	15. Purchase ADD
4. Buffalo Trace ADD	8. Green River ADD	12. Lincoln Trail ADD	

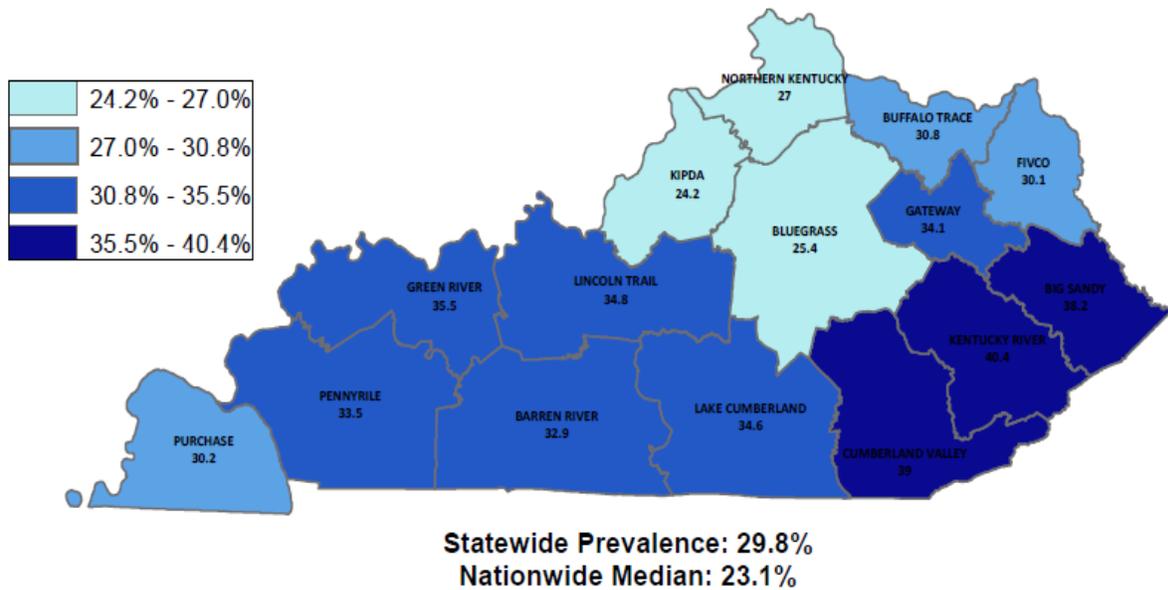
Counties in each ADD

Barren River:	Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson, Warren
Big Sandy:	Floyd, Johnson, Magoffin, Martin, Pike
Bluegrass:	Anderson, Bourbon, Boyle, Clark, Estill, Fayette, Franklin, Garrard, Harrison, Jessamine, Lincoln, Madison, Mercer, Nicholas, Powell, Scott, Woodford
Buffalo Trace:	Bracken, Fleming, Lewis, Mason, Robertson
Cumberland Valley:	Bell, Clay, Harlan, Jackson, Knox, Laurel, Rockcastle, Whitley
FIVCO:	Boyd, Carter, Elliott, Greenup, Lawrence
Gateway:	Bath, Menifee, Montgomery, Morgan, Rowan
Green River:	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
Kentucky River:	Breathitt, Knott, Lee, Leslie, Letcher, Owsley, Perry, Wolfe
KIPDA:	Bullitt, Henry, Jefferson, Oldham, Shelby, Spencer, Trimble
Lake Cumberland:	Adair, Casey, Clinton, Cumberland, Green, McCreary, Pulaski, Russell, Taylor, Wayne
Lincoln Trail:	Breckinridge, Grayson, Hardin, Larue, Marion, Meade, Nelson, Washington
Northern Kentucky:	Boone, Campbell, Carroll, Gallatin, Grant, Kenton, Owen, Pendleton
Pennyriple:	Caldwell, Christian, Crittenden, Hopkins, Livingston, Lyon, Muhlenberg, Todd, Trigg
Purchase:	Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, McCracken, Marshall

Percent of Kentucky Adults Classified as Binge Drinkers, by Area Development District, 2016

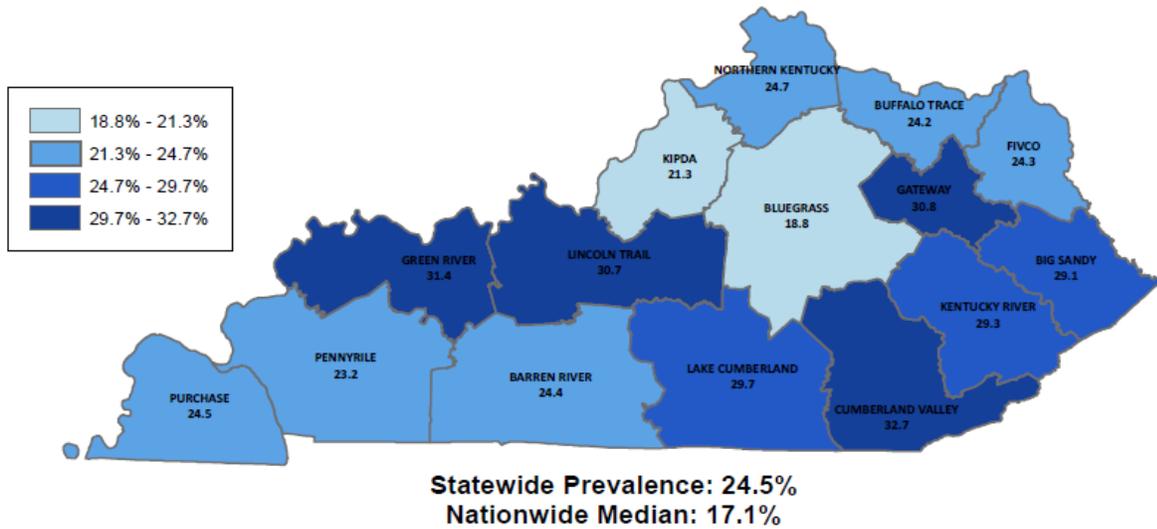


Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days, by Area Development District, 2016

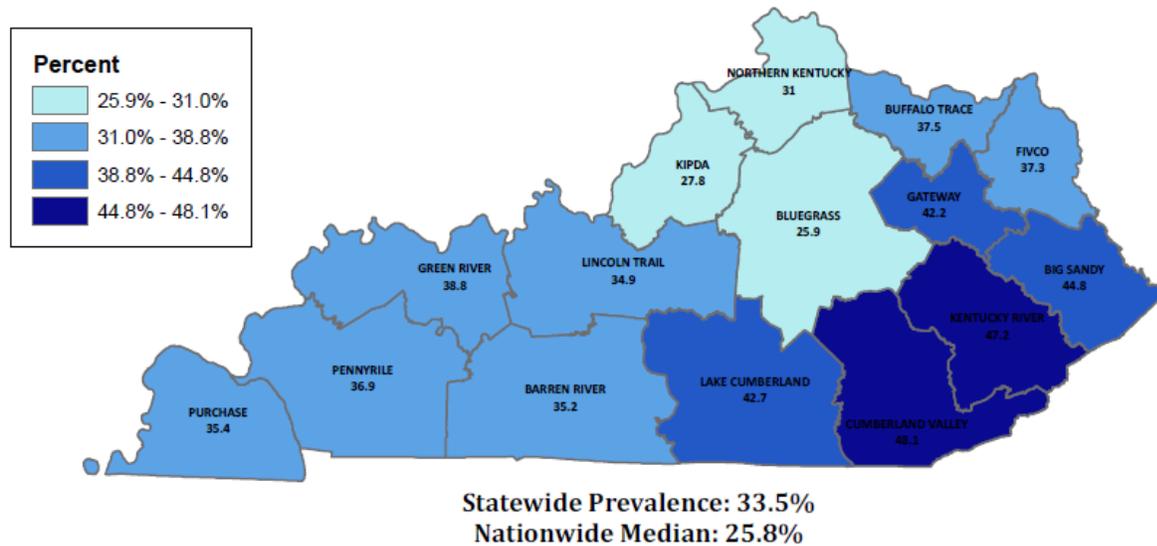


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults who are Current Smokers, by Area Development District, 2016

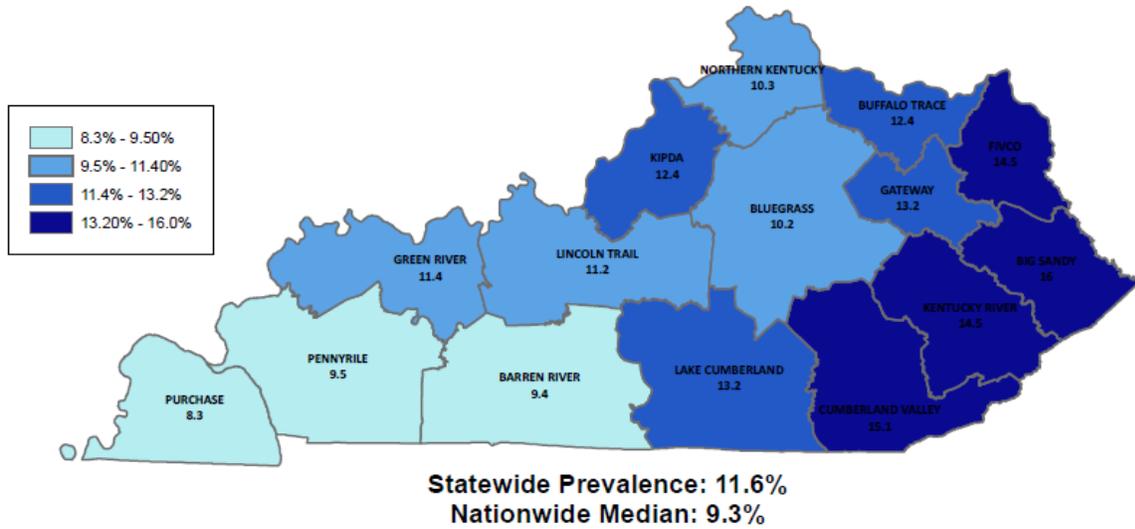


Percent of Kentucky Adults who have Arthritis, by Area Development District, 2016

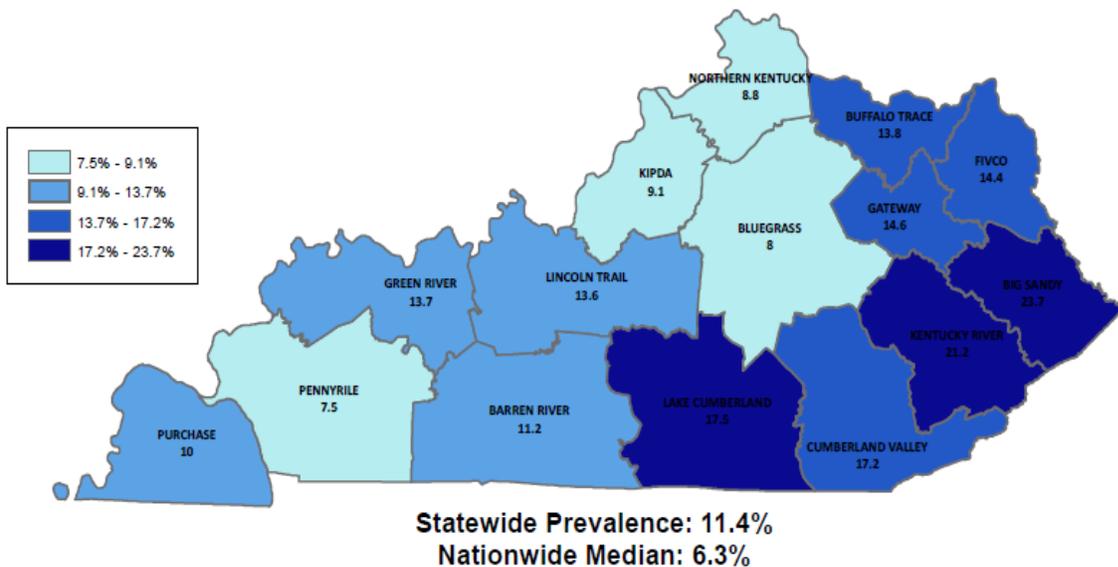


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults who have Current Asthma, by Area Development District, 2016

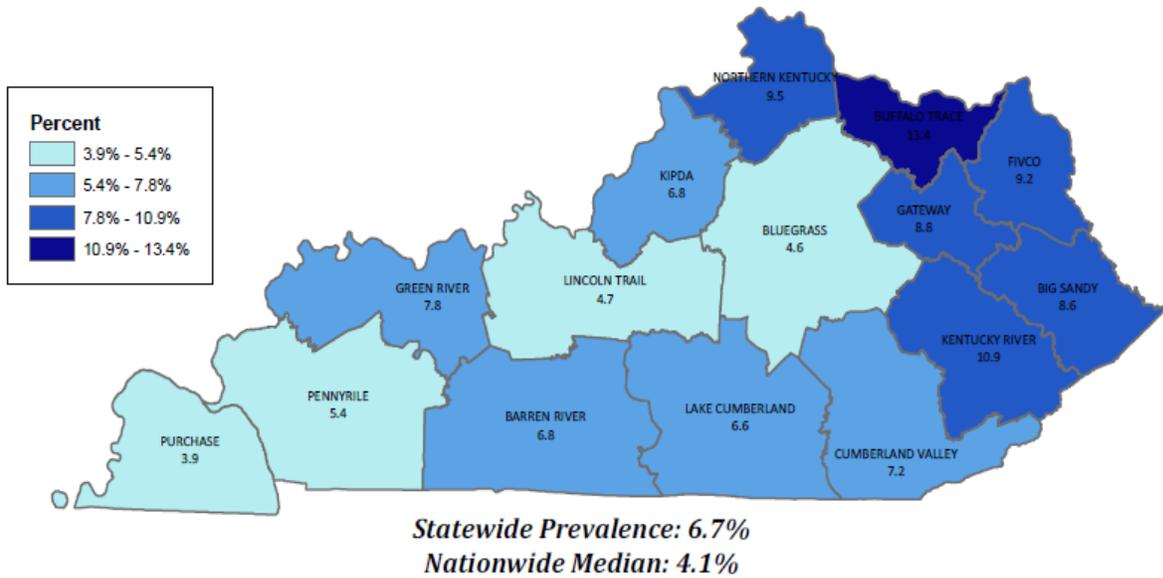


Percent of Kentucky Adults who have COPD, by Area Development District, 2016

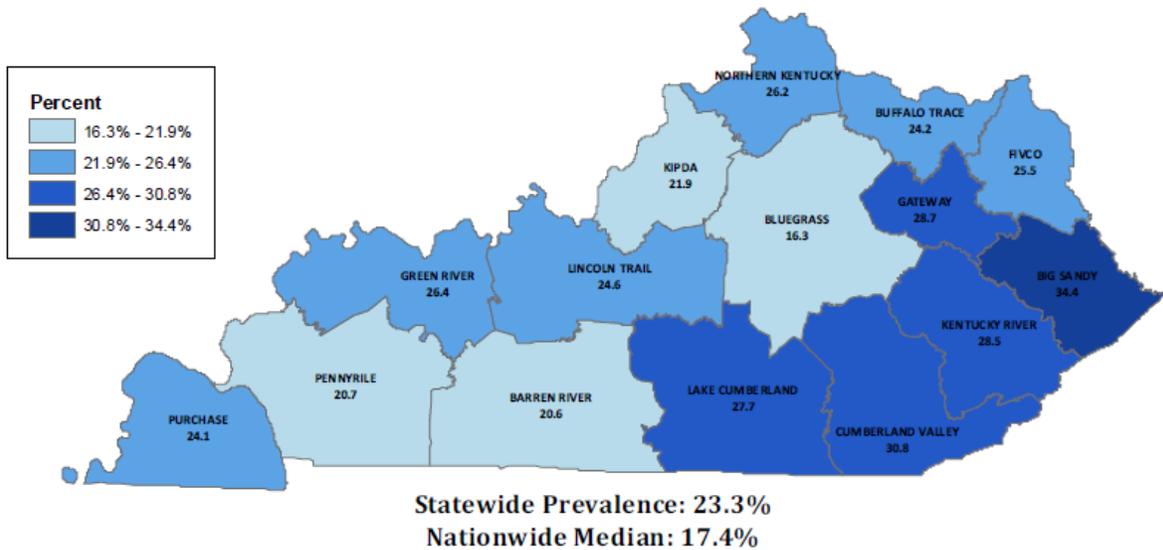


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults who have Coronary Heart Disease, by Area Development District, 2016

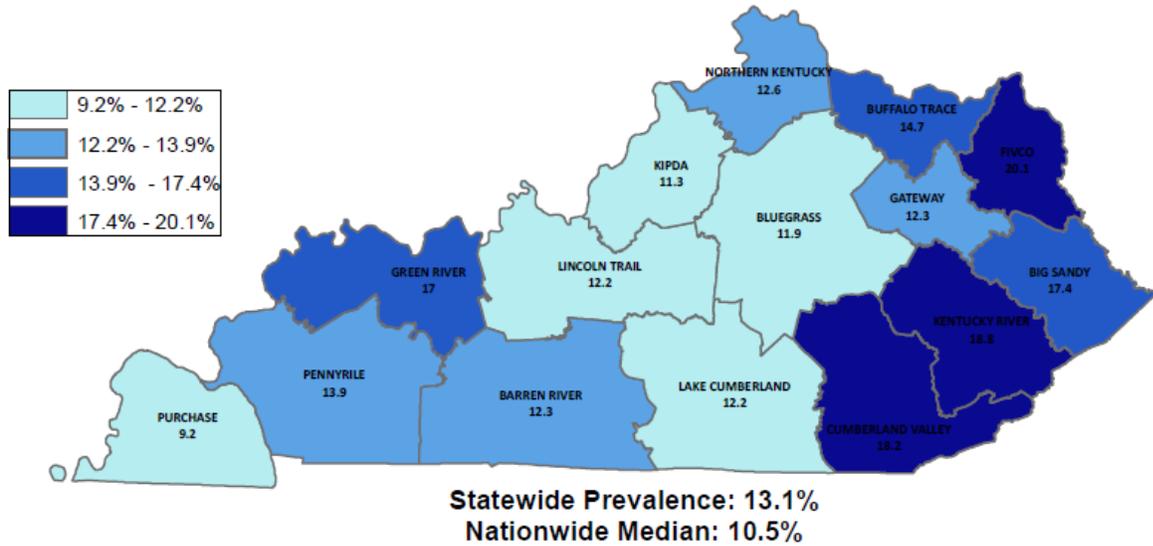


Percent of Kentucky Adults who have a Depressive Disorder, by Area Development District, 2016

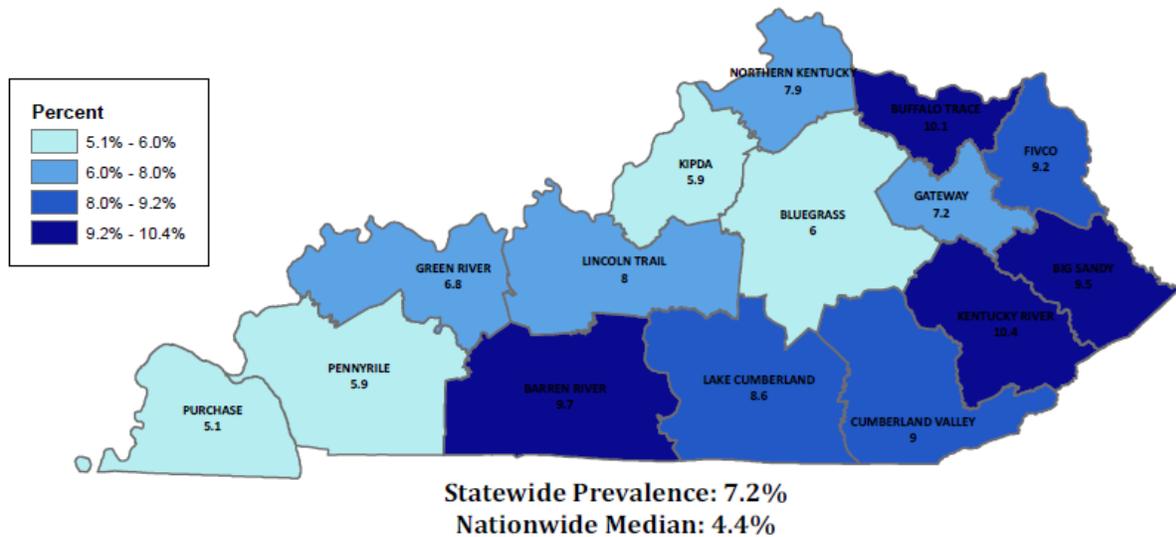


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults who have Diabetes, by Area Development District, 2016

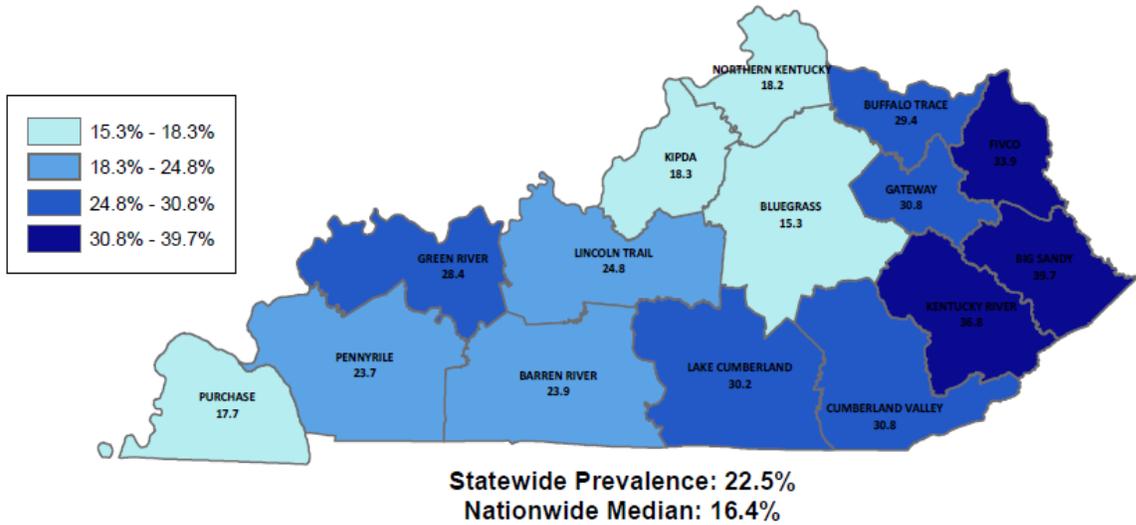


Percent of Kentucky Adults who have ever had a Heart Attack, by Area Development District, 2016

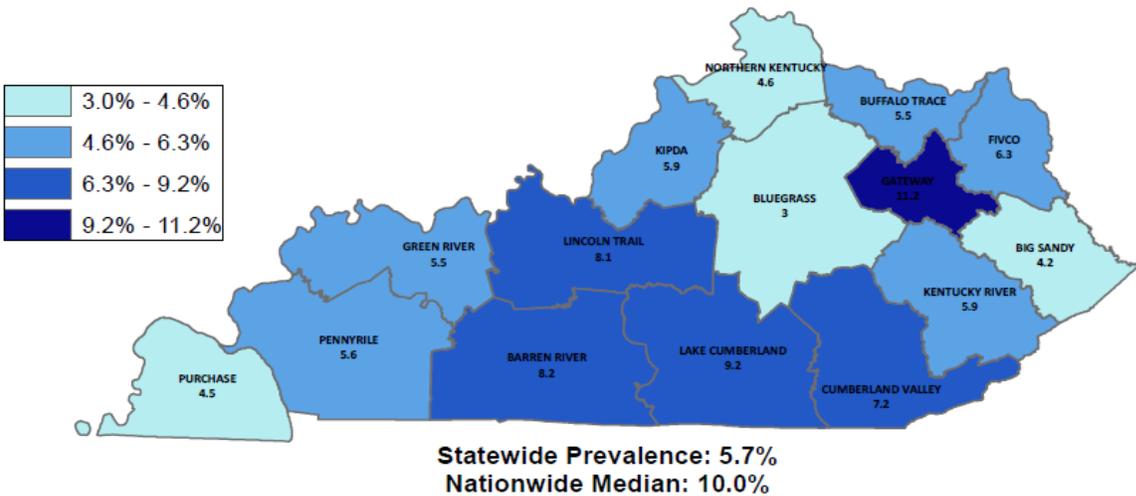


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults with Fair or Poor General Health, by Area Development District, 2016

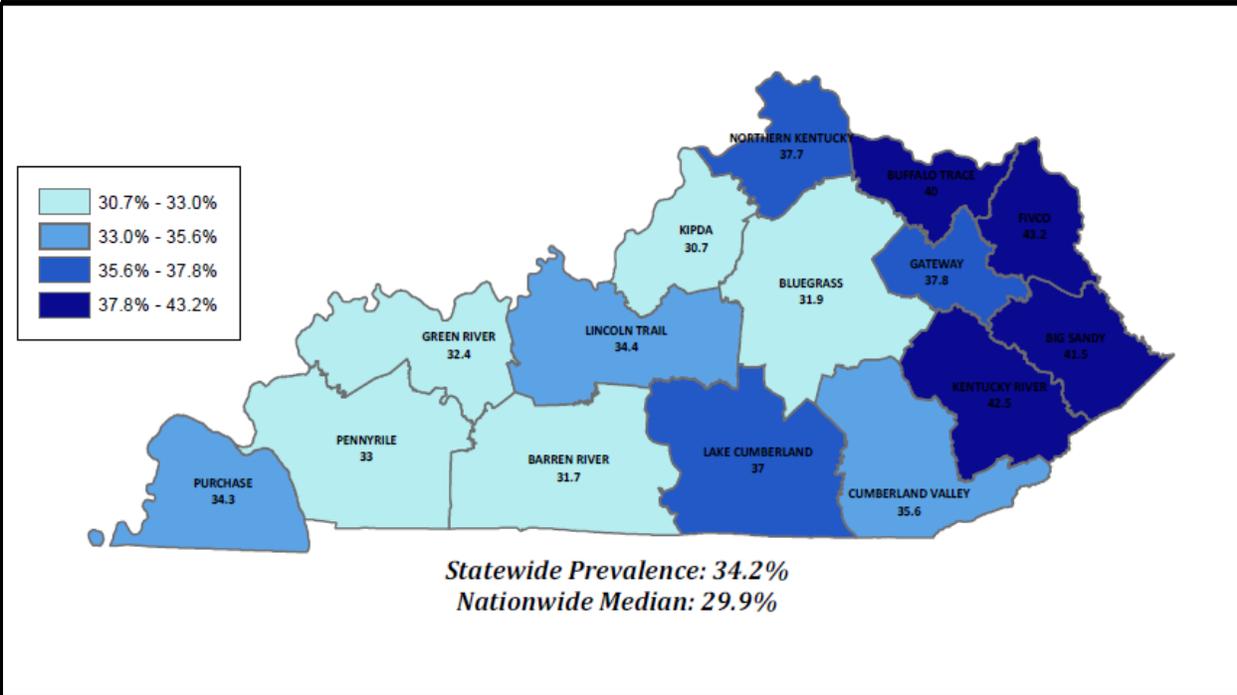


Percent of Kentucky Adults with No Health Care Coverage, by Area Development District, 2016

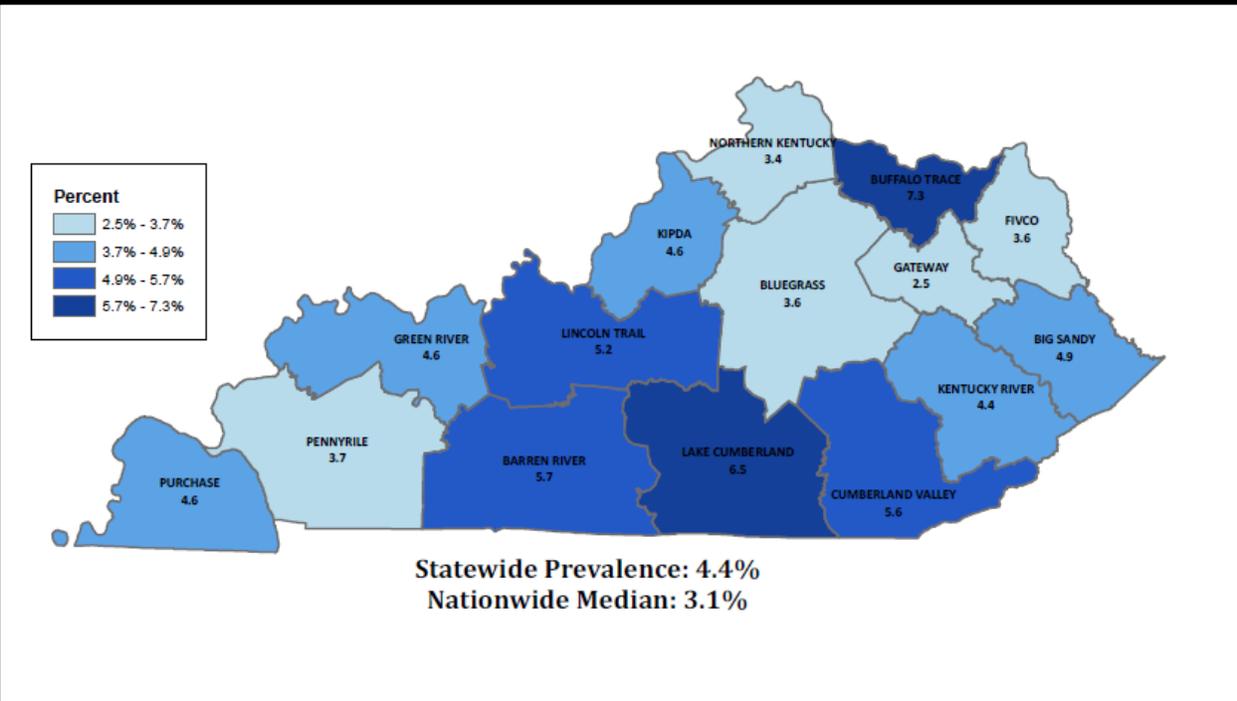


Due to BRFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults who are Obese (BMI \geq 30), by Area Development District, 2016

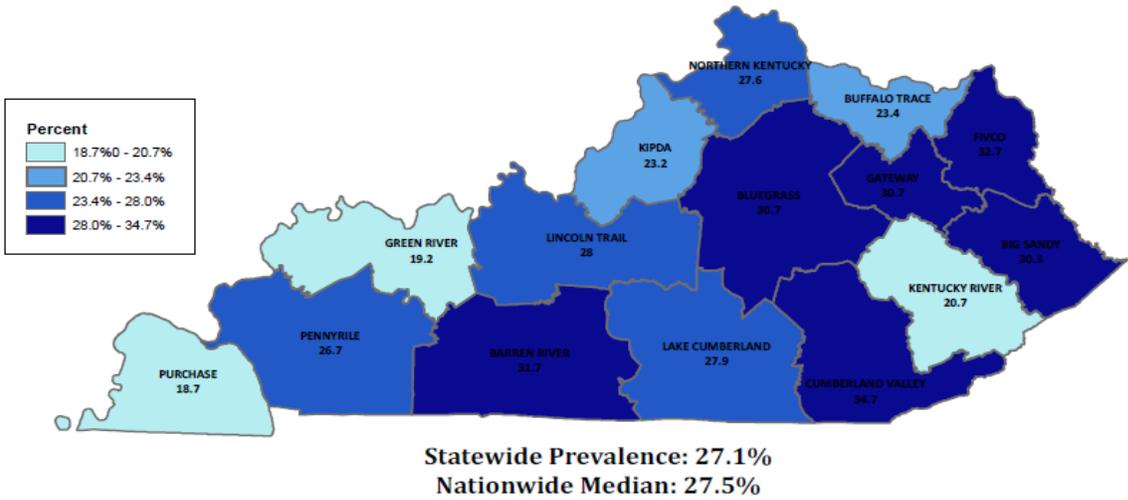


Percent of Kentucky Adults who have ever had a Stroke, by Area Development District, 2016

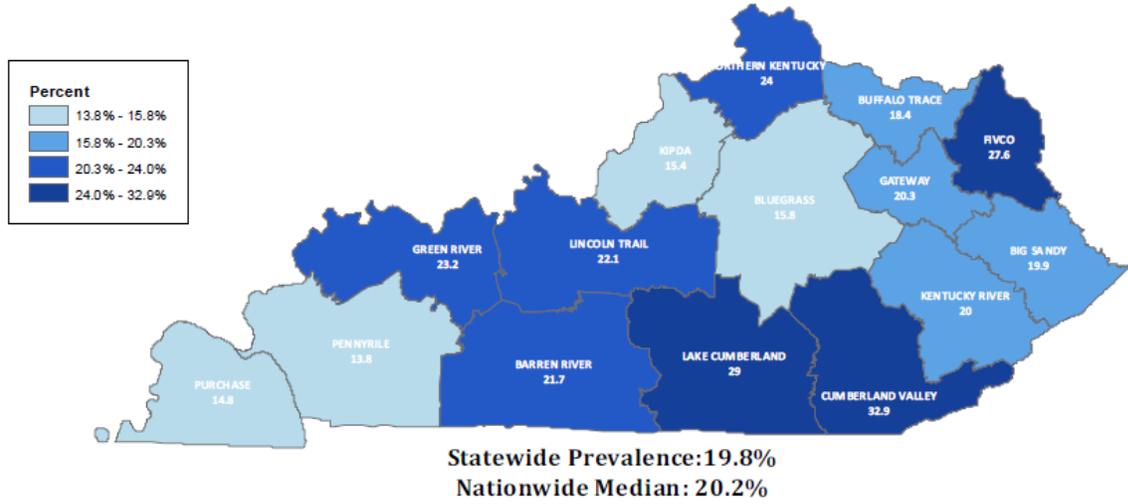


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Women (aged 40+) who did not have a Mammogram in the past two years, by Area Development District, 2016

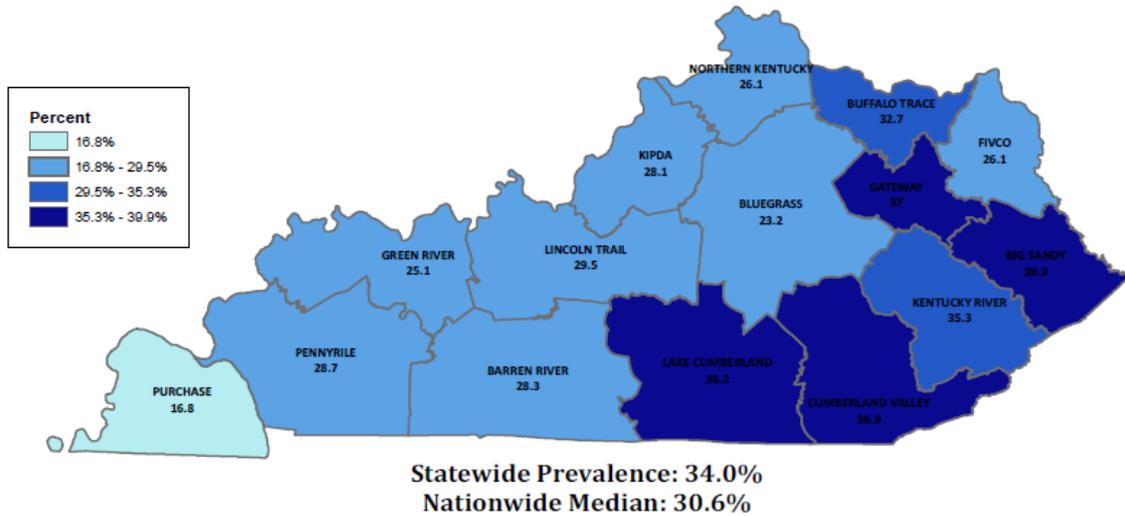


Percent of Kentucky Women (aged 21-64) who did not have a Pap Smear Test in the Past Three Years, by Area Development District, 2016

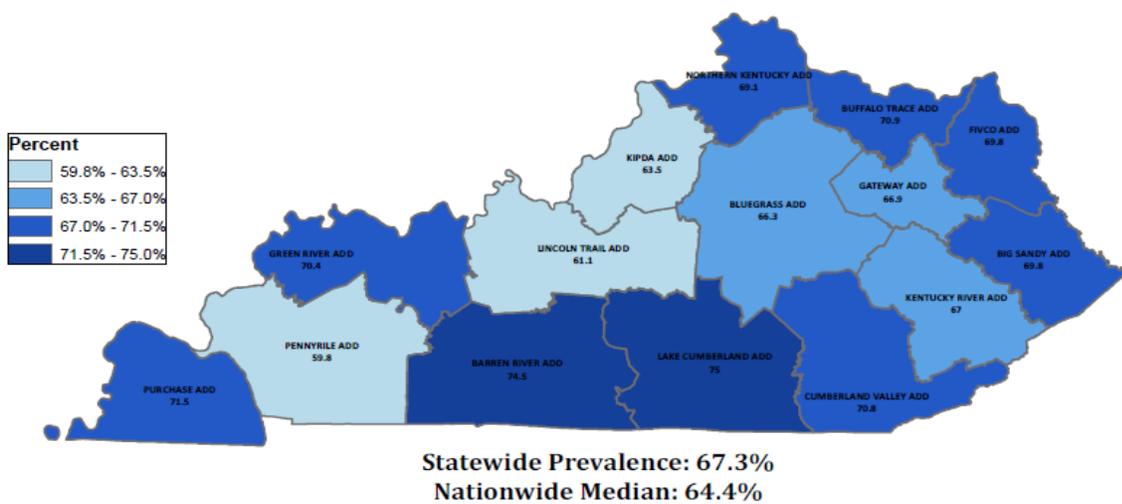


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Adults (aged 50-75) who have never had a Colonoscopy, by Area Development District, 2016

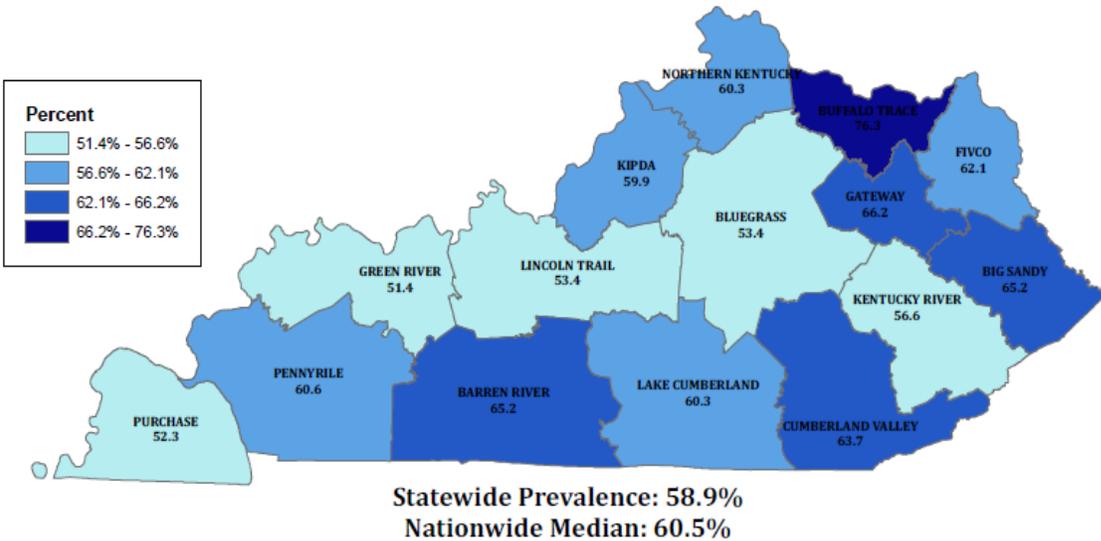


Percent of Kentucky Adults who have never been tested for HIV, by Area Development District, 2016

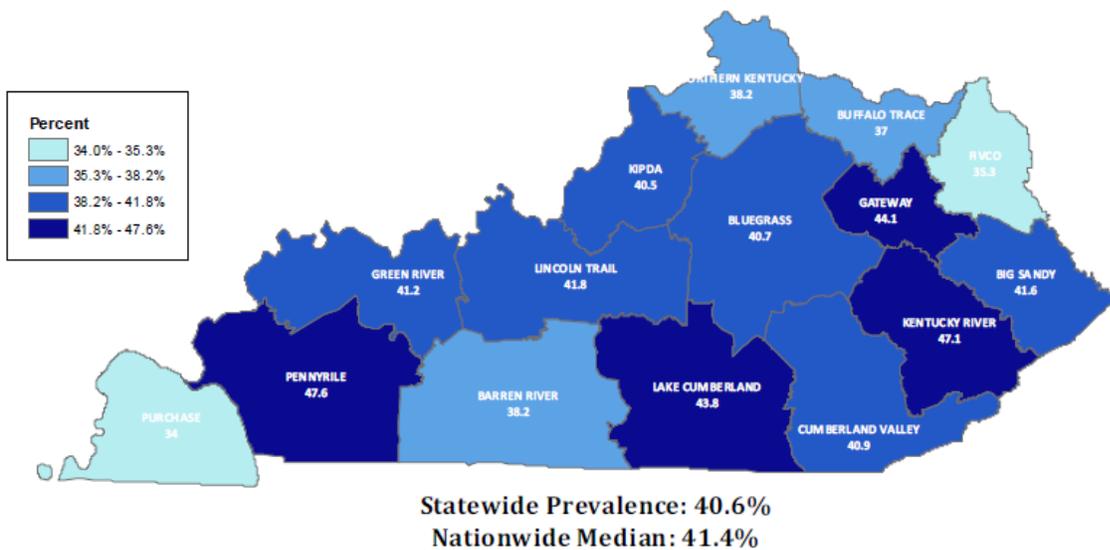


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Men (aged 40+) who did not a PSA Test in the Past Two Year, by Area Development District, 2016

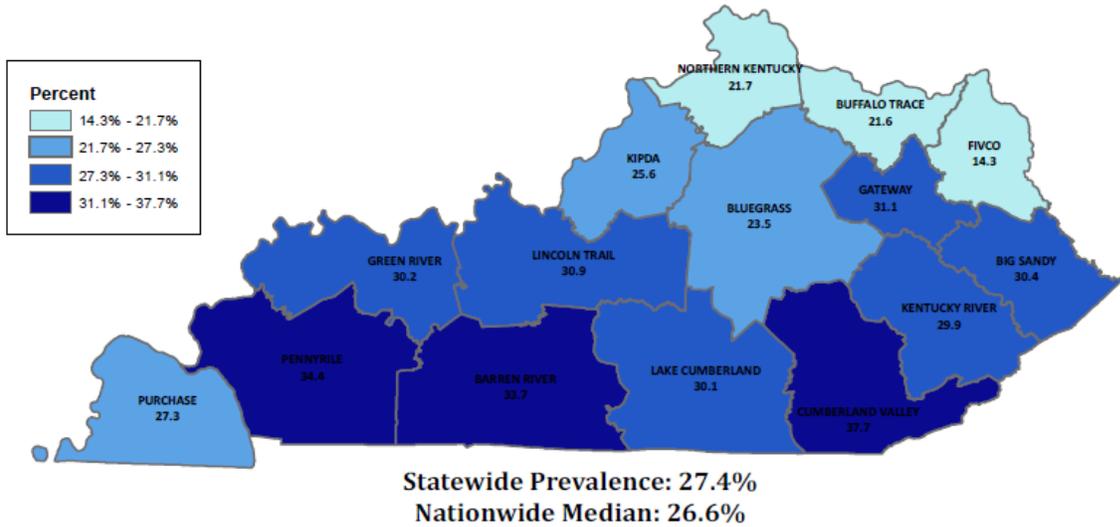


Percent of Kentucky Adults (aged 65+) who did not get a Flu Shot in the Past Year, by Area Development District, 2016

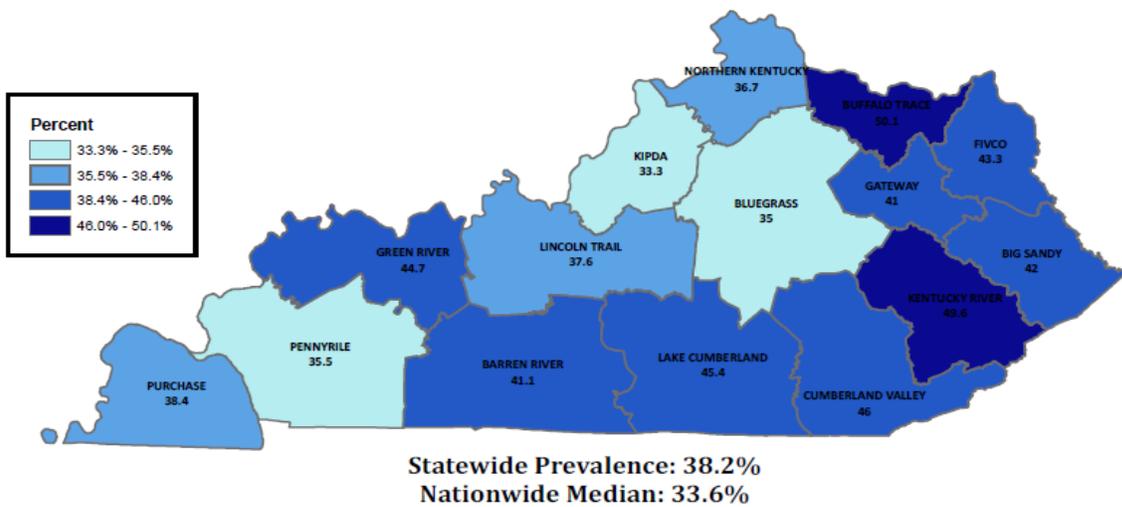


Due to BRFSS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.

Percent of Kentucky Men (aged 65+) who have never had a Pneumococcal Vaccination, by Area Development District, 2016



Percent of Kentucky Adults who did not have a Dental Visit in the Past Year, by Area Development District, 2016



Due to BRFS methodology changes in 2011, estimates from 2016 cannot be directly compared to estimates from years prior to 2011.