



Kentucky Behavioral Risk Factor Surveillance System

2008 Annual Report



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ACKNOWLEDGMENTS

The Behavioral Risk Factor Surveillance System (BRFSS) is a collaborative effort of the Kentucky Department for Public Health (DPH) and the Centers for Disease Control and Prevention (CDC). Kentucky has been conducting this on-going surveillance since 1985. Administrative responsibility lies within the Division of Prevention and Quality Improvement (PQI) of the Kentucky Department for Public Health.

This report was prepared by Seth Siameh, MPHc, BRFSS Epidemiologist, and Dr. Sarojini Kanotra, BRFSS Director and Coordinator.

The Kentucky Department for Public Health would especially like to thank our two prominent Steering Committee members Dr. Richard Wilson and Dr. Kraig Humbug for taking time from their busy schedules and reviewing this report to provide us with constructive feedback. The program would also like to thank Sara Robeson, MPH, and Dennis Peyton, MPH, for their input.

The program is very grateful for the support provided by Dr. Steve Davis and Dr. William Hacker. Special thanks for help with document review go to Sue Thomas-Cox, RN, Branch Manager, and the team of epidemiologists: Dr. Teri Wood, Dr. Samantha Albuquerque, and Jennifer Schilling, MPH.

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.

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A message from the Commissioner

The Kentucky Department for Public Health in the Cabinet for Health and Family Services, in conjunction with the Centers for Disease Control and Prevention, is pleased to present this 2008 Report of the Kentucky Behavioral Risk Factor Surveillance System (BRFSS). Through an annual telephone survey, Kentuckians from across the Commonwealth contribute important information about their health status and health behaviors to the BRFSS. As such, the BRFSS report provides unique insight into our collective health as a state.

The BRFSS is a state specific data source and assists in monitoring the health goals of our state. One of the objectives outlined in *Healthy Kentuckians 2010* is to reduce the proportion of adults who smoke cigarettes in the state to 25% by the year 2010. According to BRFSS, we are currently less than a percentage point away from reaching this important target. This is a significant improvement that must spur us on to moving Kentucky further down the list of states with the highest smoking prevalence. We have also shown improvements in important prevention practices such as colorectal cancer screening and influenza immunization.

However, we still have more to do to improve the health of individuals in the state. The current data shows prevalence estimates of chronic conditions like asthma, diabetes, cardiovascular disease, and obesity that are much higher than the national median. About a quarter of our citizens reported that they were limited in their activities because of physical, mental, or emotional health problems. The data contained in this report are a challenge to every Kentuckian to make a personal commitment to improving his or her health---whether by exercising more with families, making healthier food choices or discontinuing tobacco use.

The report challenges us as a department and a cabinet to recognize and correct the gaps in health and health behaviors evidenced in this report. How? By improving data collection and assessment functions in order to examine the reasons behind risky behaviors, by strengthening outreach and education strategies, initiate development of health promotion policies, and by broadening access to medical care.

Again, the Kentucky Department for Public Health is pleased to make available to you this telling snapshot of Kentucky's health. Used in collaboration with other data sources, the 2008 BRFSS Report helps provide a clearer picture of where we are as a Commonwealth in terms of health and which areas need special attention.

Sincerely,

William D. Hacker, MD, FAAP, CPE
Commissioner

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Executive Summary

The 2008 KY BRFSS Annual Data Report presents a snapshot of the health behaviors and health status indicators, that place Kentucky adults at risk for chronic diseases, injuries, and preventable infectious diseases. The report is based on information collected from residents aged 18 years or older from over 8,000 households in the Commonwealth of Kentucky throughout 2008. Some key findings from the survey include:

Alcohol Consumption:

In 2008, prevalence of binge drinking among adults in Kentucky (11.3%) was lower than the national median estimate of 15.5%. This report defines binge drinkers as males who report having five or more drinks on one occasion or females who report having four or more drinks on one occasion in the past month. Prevalence of binge drinking among men (16.7%) was significantly higher than among women (6.4%).

Asthma:

The estimated proportion of adults in Kentucky who have ever been told by their health care professional that they had asthma was 14.7% in 2008. An estimated 9.7% of Kentucky adults had current asthma in the same year. Women were two times more likely to have current asthma than men (12.7% versus 6.5%).

Colorectal Cancer Screening:

An estimated 36.3% of adults aged 50 years or older in Kentucky have never had a sigmoidoscopy or colonoscopy. The above estimate is less than the 2008 national median estimate which was 38.2%. About 50% of Kentucky adults aged 50+ years with less than a high school education have never had a colonoscopy or sigmoidoscopy.

Disability:

In 2008, 25.5% of adults in Kentucky reported that they are limited in their activities because of physical, mental, or emotional problems. Residents who reported this form of disability were generally older, had lower levels of education, and lower levels of annual household income. The national median estimate for activity limitation as defined above was 20.5% in 2008.

Heart Attack/Stroke:

In 2008, an estimated 5.4% of adults in Kentucky had ever been told by a health care professional that they had a heart attack and 3.6% had ever been told they had a stroke. A higher percentage of men (6.9%) than women (4.0%) reported ever having a heart attack.

Health Care Access/Coverage:

The estimated proportion of adults in Kentucky without health care coverage or health insurance was 14.4% in 2008. This estimate is similar to the national median estimate of 14.6% in 2008.

Obesity:

In 2008, an estimated 30.3% of Kentucky adults were classified as obese based on Body Mass Index (BMI) classification. Kentucky had the 7th highest prevalence of adult obesity in the nation. Obesity prevalence in Kentucky was significantly higher among black adults (44.5%) than among white adults (29.4%). Obesity prevalence among adults in Kentucky has been trending upwards since 1995 when it was 16.9%.

Tobacco Use:

About a quarter (25.2%) of Kentucky's adult population were current smokers in 2008. This report defines current smokers as adults who have smoked at least 100 cigarettes (five packs) in their lifetime and currently smoke every day or some days. The current estimate (25.2%) represents a 3% reduction in the prevalence estimate reported in 2007 (28.2%) for Kentucky. However, smoking prevalence among Kentucky adults in 2008 was much higher when compared to the national median estimate of 18.3% for the same year.

Introduction

What is the BRFSS?

The Behavioral Risk Factor Surveillance System (BRFSS) is a telephone health survey jointly sponsored by the Centers for Disease Control and Prevention (CDC) and the Kentucky Department for Public Health (KDPH). The survey is administered to randomly selected non-institutionalized adults who live in a household with a landline telephone. Participation in the survey is strictly voluntary. Personal identifying information, such as a person's name or address, is not collected. The BRFSS is a nationwide surveillance tool. In Kentucky, the BRFSS has been conducted continuously since 1985.

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 18 years of age 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.

Who participated in the 2008 KY BRFSS survey?

A total of 8,091 Kentucky residents (aged 18 years or older) participated in the 2008 BRFSS. Of the 8,091 respondents, 48.3% were male and 51.7% were female; 90.4% were White, 5.4% were African American/Black, 1.3% were Hispanic, 2.1% were 'other races', and 0.8% were multiracial. The initial sample of 8,091 residents was used to "weight" these survey data in order to obtain representative estimates for the state of Kentucky.

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 2010*

How is the data analyzed?

Data is analyzed using the following statistical analysis software: SAS 9.1, SAS Callable SUDAAN 9.1, and SPSS Complex Samples 18.0. 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 responses to be projected to a state estimate. Factors in weighting include the number of telephone numbers per household, the number of adults per household, and the demographic distribution of the sample. The data are not age-adjusted. Data estimates for fewer than fifty respondents are considered statistically unreliable by the CDC and are not included in this report.

Introduction (continued)

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. Respondents who indicate “don’t know”, “not sure”, or “refused” are excluded from the calculation of prevalence estimates. Therefore, the sample sizes used to calculate the estimates in this report vary.

Non-coverage bias

The BRFSS is a telephone survey. According to the 2006-2008 American Community Survey 3-Year Estimate, 5.7% of Kentuckians were without landline telephones and therefore could not be reached to participate in the survey. This excluded the socio-economic differences between the surveyed population and the general population. The BRFSS only surveys adults in households. Individuals living in a group setting, such as a nursing home, college dormitory, 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 more healthy lifestyle may occur.

Race

Beginning in 2001, the BRFSS race question allowed reporting of more than one race. Therefore, data users should be extremely 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 population tends to make data regarding that population statistically unstable. Data users are advised to use caution when using the data due to the above reason. Race data, therefore, may be excluded from this report due to the small nature of the sample size.

Small sample size for subgroups

Producing accurate prevalence estimates for different subgroups (men, women, Whites, Blacks, women aged 40+, etc.) requires a minimum number of 50 respondents per question. In some cases, the KY BRFSS 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). For this reason, we are unable to include data on Hispanics and sometimes Blacks. The same problem of small numbers of responses occurs at the county level. In order to provide locally relevant estimates, KY BRFSS data is reported by ADD. In this report, if the confidence interval for a subgroup is too large (i.e. CI half width > 10), the data are not reported.

ALCOHOL CONSUMPTION: BINGE DRINKING

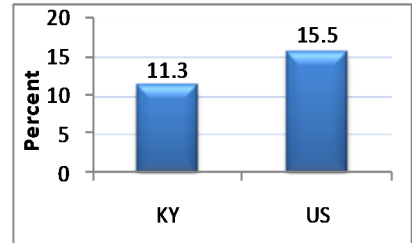
Question: Considering all types of alcoholic beverages, how many times during the past month did you have four or more drinks on one occasion?

At Risk: Adult males 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.

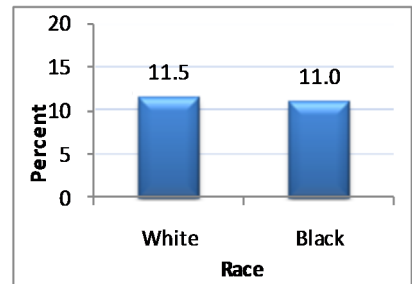
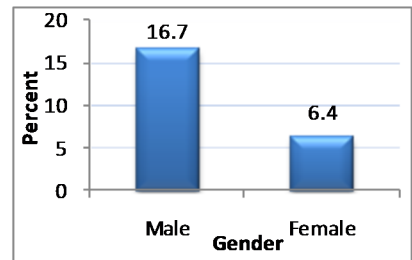
Who is at risk in Kentucky?

- In 2008, 11.3 % of Kentucky adults reported binge drinking. This estimate is lower than the national median estimate of 15.5%.
- Men were significantly more likely to report binge drinking than women (16.7% versus 6.4%).
- There was no significant difference in reported binge drinking by race.
- The percentage of adults who reported binge drinking decreased with age.
- Binge drinking did not vary significantly by education.
- Among the five income groups used in this report, the highest proportion of binge drinking was reported by adults who had an annual household income of \$50,000 or more (14%).

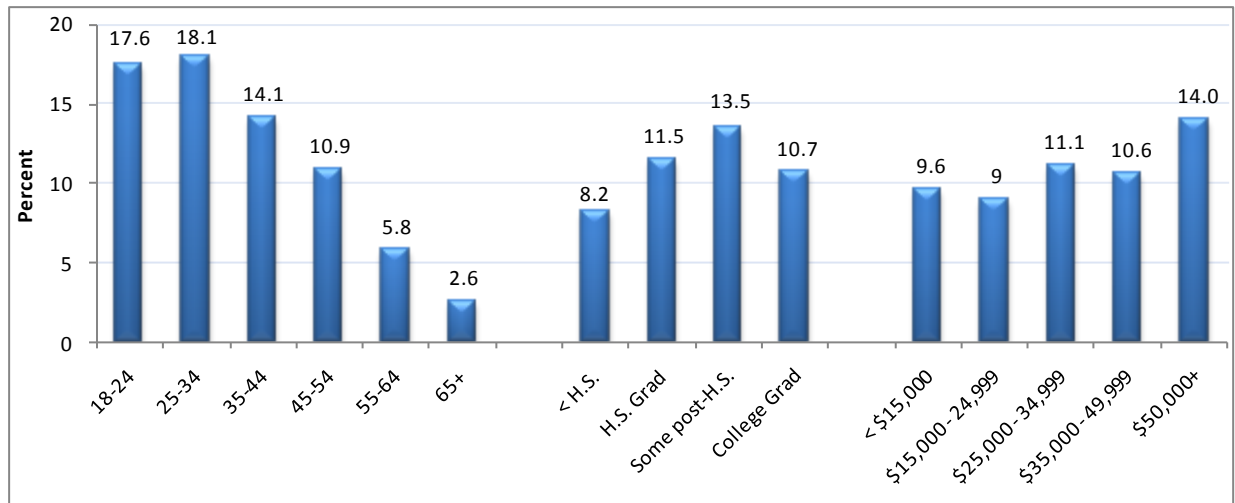
Percent of Adults Classified as Binge Drinkers: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults Classified as Binge Drinkers, by Gender*, and by Race, 2008



Percent of Kentucky Adults Classified as Binge Drinkers, by Age, Education, and Income, 2008



* Denotes a statistically significant difference among the values. In this report, the term 'significant' only refers to statistically significant differences in prevalence.

PHYSICAL ACTIVITY

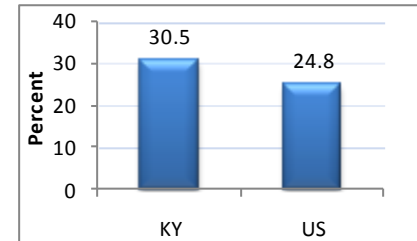
Question: During the past 30 days, other than your regular job, did you participate in any physical activity or exercise such as running, calisthenics, golf, gardening, or walking for exercise?

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

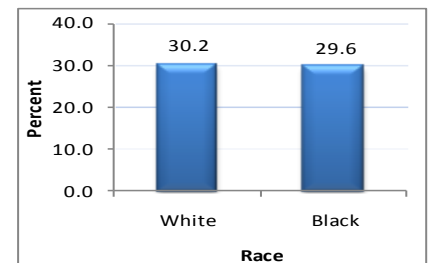
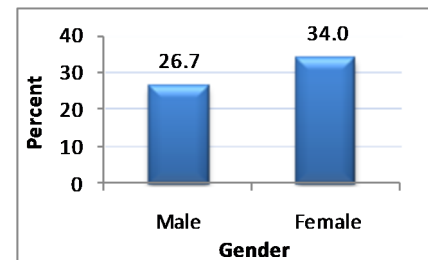
Who is at risk in Kentucky?

- In 2008, 30% of Kentucky adults reported not participating in any physical activity or exercise during the past month.
- There was a significantly higher percentage of women who reported not participating in any physical activity compared to men (34.0% versus 26.7%).
- There was no significant difference between white and black residents who reported not participating in any physical activity.
- Lack of physical activity generally increased with age, with the highest proportion among adults aged 65 and above (40.2%).
- Adults with lower levels of education were more likely to report a lack of physical activity.
- Over 40% of Kentucky adults with a household income of less than \$25,000 a year reported not participating in any physical activity.

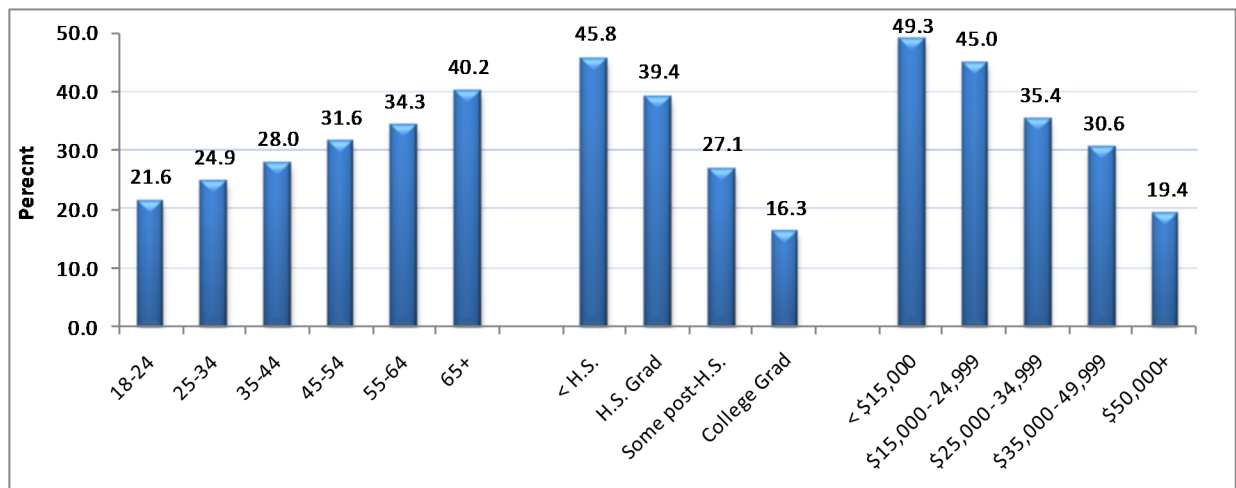
Percent of Adults who did not Participate in any Physical Activity in the Past 30 Days: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days, by Gender*, and by Race, 2008



Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days, by Age, Education, and Income, 2008



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TOBACCO USE

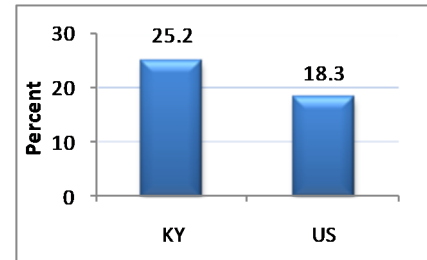
Question: If you have smoked at least 100 cigarettes in your entire life, are you now smoking everyday, some days, or not at all?

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

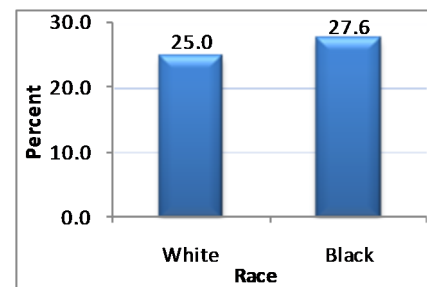
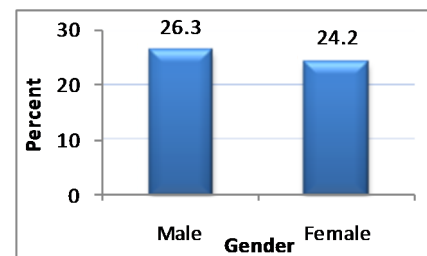
Who is at risk in Kentucky?

- In 2008, one in four Kentucky adults reported that they smoke cigarettes every day or some days.
- Smoking prevalence among Kentucky adults in 2008 was much higher when compared to the national median estimate of 18.3%.
- Smoking prevalence was not statistically different between men and women.
- Tobacco use in Kentucky did not vary significantly by race.
- A greater proportion of Kentucky adults who reported that they currently smoke are less than 65 years of age.
- Over 40% of adults who earn less than \$15,000 a year are current smokers and have less than a high school education.

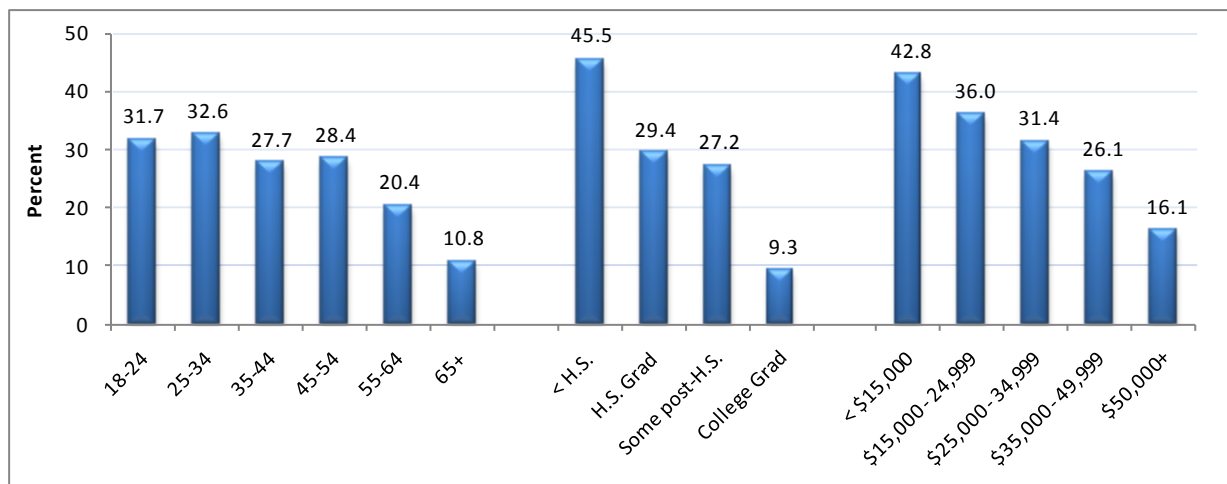
Percent of Adults who are Current Smokers: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who are Current Smokers, by Gender, and by Race, 2008



Percent of Kentucky Adults who are Current Smokers, by Age, Education, and Income, 2008



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ASTHMA

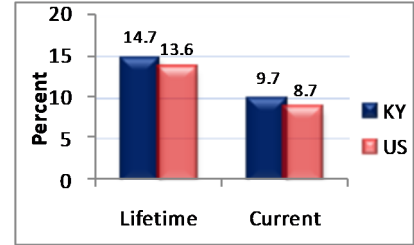
- Questions:**
1. Have you ever been told by a doctor, nurse, or other health professional that you had asthma? (lifetime)
 2. Do you still have asthma? (current)

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

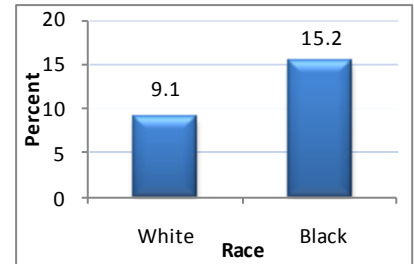
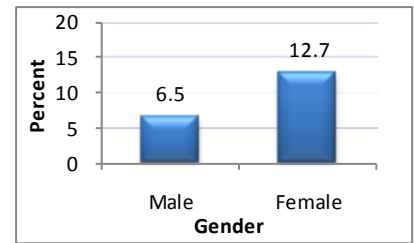
Who is at risk in Kentucky?

- In 2008, almost one in ten (9.7%) Kentucky adults reported that they currently have asthma.
- Prevalence of current asthma among women residents was two times higher than among men (12.7% versus 6.5%); the difference was statistically significant.
- There were no statistically significant differences in current asthma prevalence among black and white residents.
- There were no statistically significant variations in current asthma prevalence across age groups.
- Prevalence of current asthma was highest among adults with lower levels of education and income.
- An estimated 92,650 children (under 18 years of age) in Kentucky (9.5%) were told by a health professional that they had asthma. The estimate is based on information gathered from their parents, who participated in this survey.

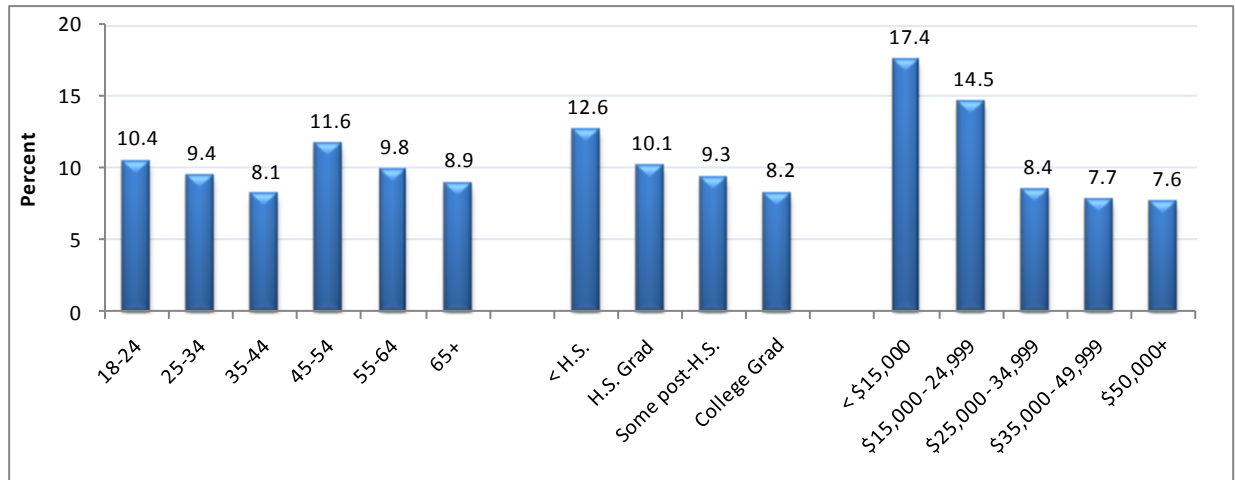
Percent of Adults with Lifetime and Current Asthma: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who have Current Asthma, by Gender*, and by Race, 2008



Percent of Kentucky Adults who have Current Asthma, by Age, Education, and Income, 2008



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DIABETES

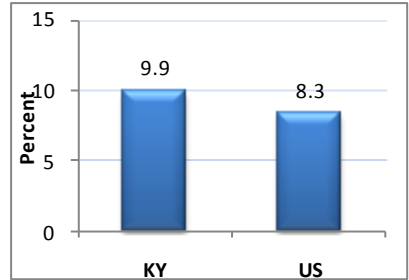
Question: Have you ever been told by a doctor that you have diabetes?

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

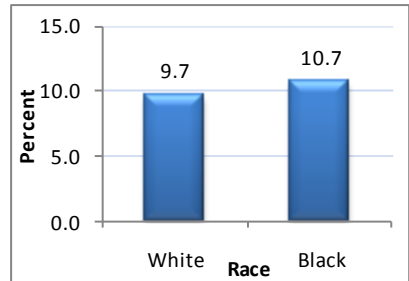
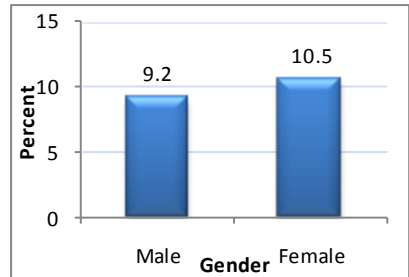
Who is at risk in Kentucky?

- In 2008, almost 10% of Kentucky adults reported that they have been told by a doctor that they have diabetes.
- There were no statistically significant differences in the percent of adults with diabetes by race or gender.
- The percentage of Kentucky adults with diabetes typically increased with age; prevalence of diabetes was highest among adults aged 65 years and above (21.9%).
- Diabetes prevalence was highest among Kentucky adults with lower levels of education and lower income.

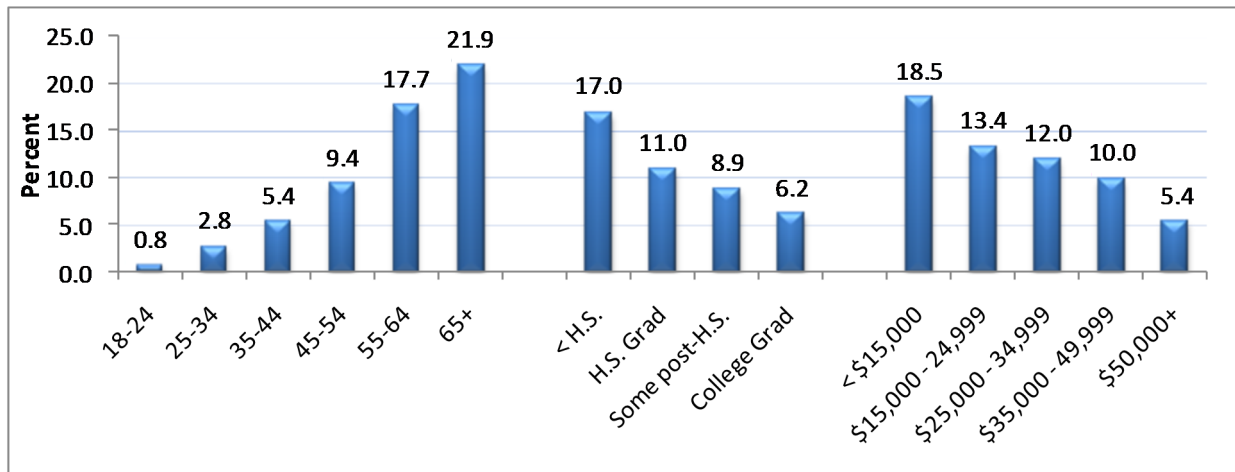
Percent of Adults who have Diabetes: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who have Diabetes, by Gender, and by Race, 2008



Percent of Kentucky Adults who have Diabetes, by Age, Education, and Income, 2008



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HEART ATTACK

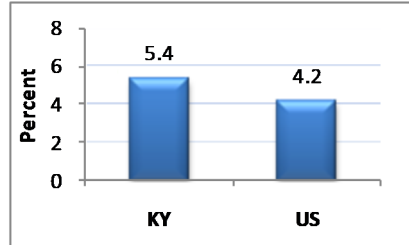
Question: Have you ever been told by a doctor, nurse, or other health professional that you had a heart attack, also called a myocardial infarction?

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

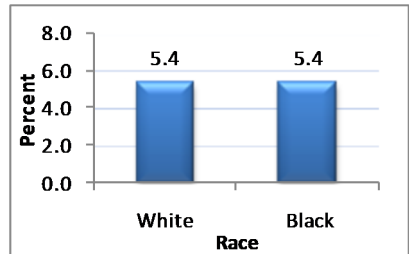
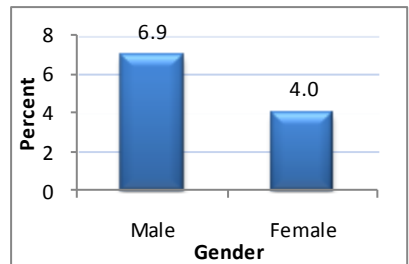
Who is at risk in Kentucky?

- In 2008, more adults in Kentucky reported having been told that they had a heart attack compared to the rest of the nation (5.4% versus 4.2%)
- A significantly higher percentage of men (6.9%) than women (4.0%) reported ever having a heart attack.
- There was no difference in heart attack prevalence among white and black residents.
- As would be expected, the prevalence of heart attack increased with age.
- Prevalence of heart attack was highest among Kentuckians with lower levels of education and lower income.

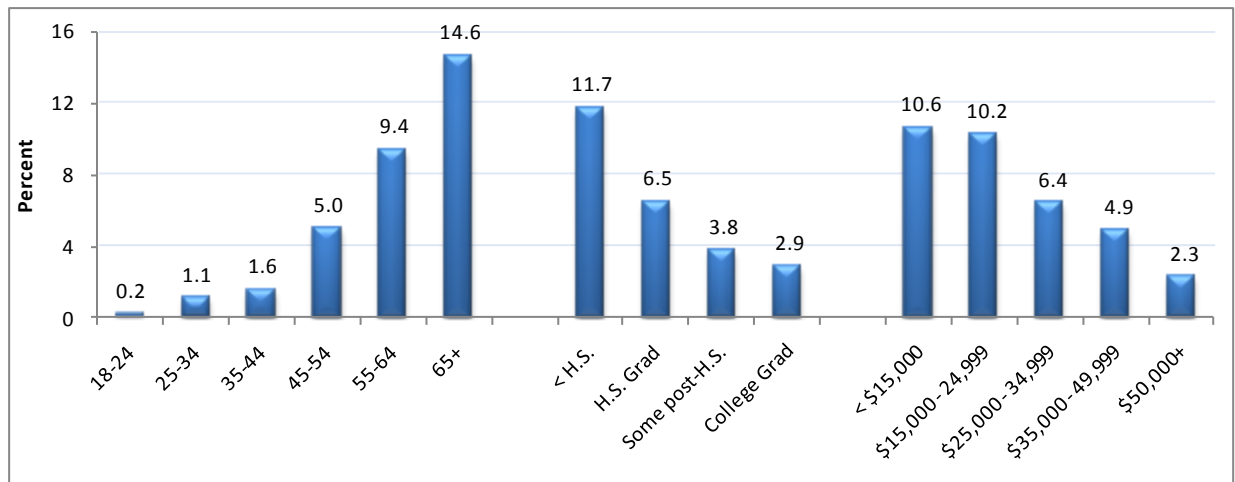
Percent of Adults who have ever been told that they had a Heart Attack: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who have ever been told that they had a Heart Attack, by Gender*, and by Race, 2008



Percent of Kentucky Adults who have ever been told that they had a Heart Attack, by Age, Education, and Income, 2008



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STROKE

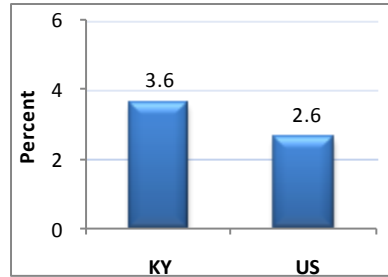
Question: Have you ever been told by a doctor, nurse, or other health professional that you had a stroke?

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

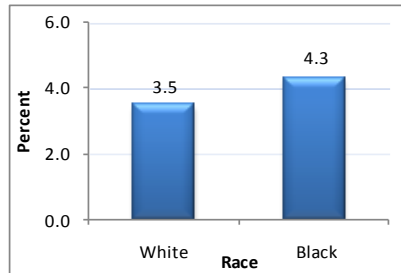
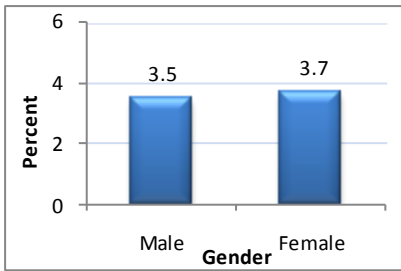
Who is at risk in Kentucky?

- Prevalence of stroke was higher among adults in Kentucky (3.6%) than in the rest of the nation (2.6%)
- There was no significant difference between men and women who reported ever having a stroke.
- There were no statistically significant differences in the prevalence of stroke among black and white residents.
- Stroke prevalence among Kentucky adults increased with age.
- Prevalence of stroke was highest among Kentuckians aged 65+, adults with less than a high school education, and among adults earning less than \$15,000 a year.

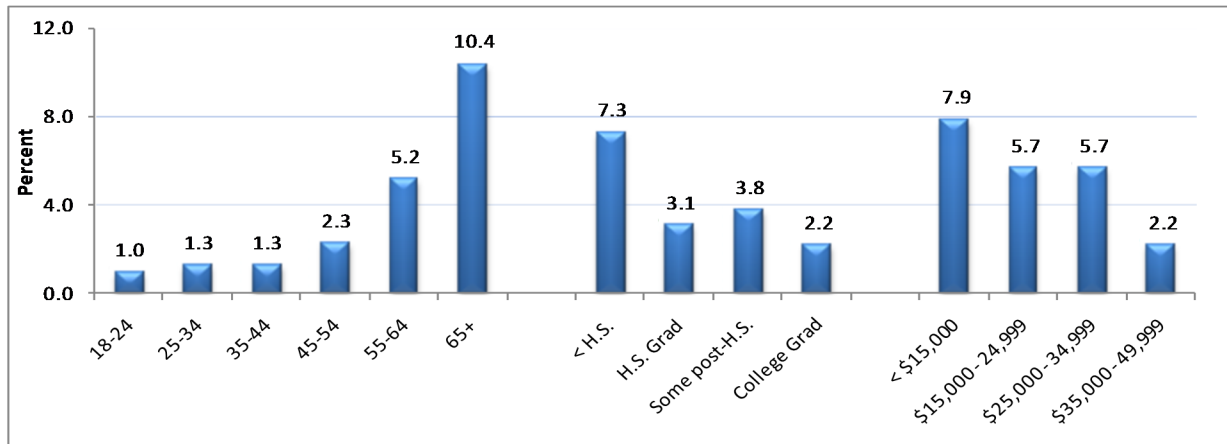
Percent of Adults who have ever been told that they had a Stroke: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who have ever been told that they had a Stroke, by Gender, and by Race, 2008



Percent of Kentucky Adults who have ever been told that they had a Stroke, by Age, Education, and Income, 2008



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OBESITY

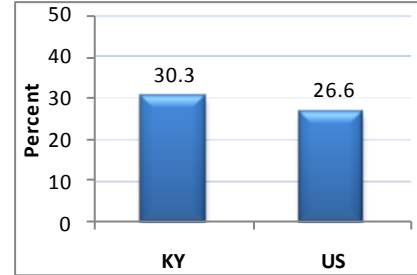
Questions: Body Mass Index (BMI) was calculated based on data collected from:
 1) How much do you weigh without shoes?
 2) How tall are you without shoes?

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

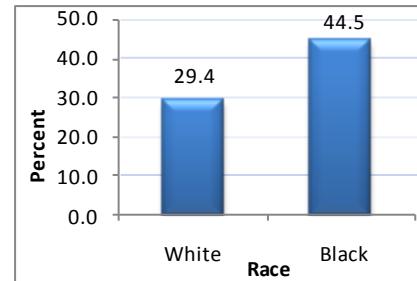
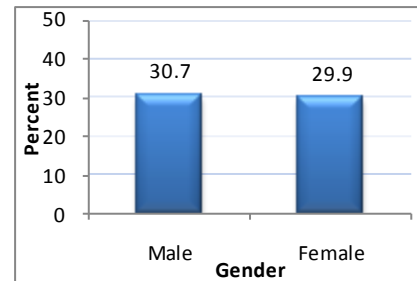
Who is at risk in Kentucky?

- In 2008, 30.3% of Kentucky adults were classified as obese. (i.e. Body Mass Index greater or equal to 30.0).
- Obesity prevalence among adults in Kentucky was higher than the national median estimate of 26.6%.
- There was no significant difference in the prevalence of obesity between men and women.
- Obesity prevalence among black residents was significantly higher than among white residents (44.5% versus 29.4%).
- There were no significant variations in obesity prevalence by age, education, or income.

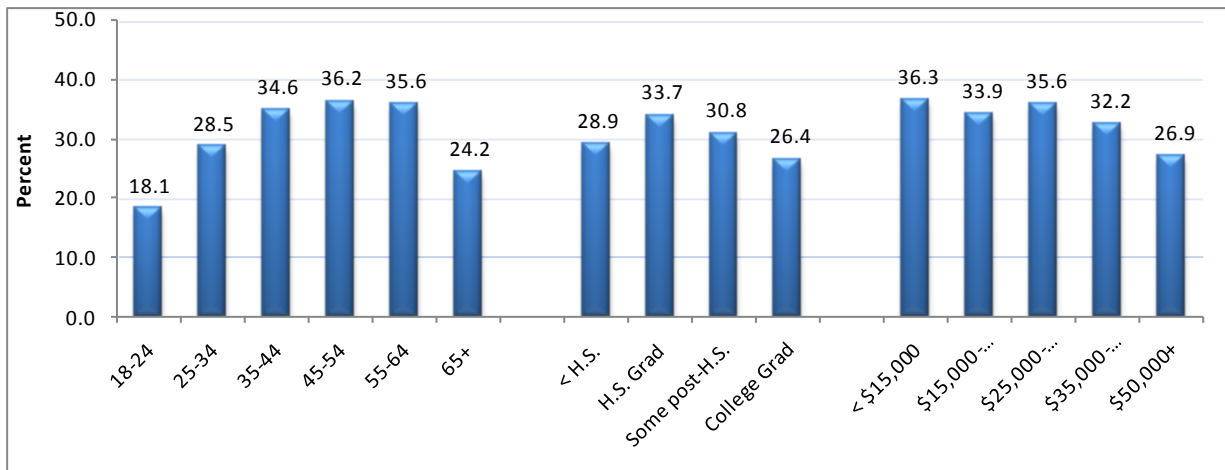
Percent of Adults who are Obese: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who are Obese, by Gender, and by Race*, 2008



Percent of Kentucky Adults who are Obese, by Age, Education, and Income, 2008



* Denotes a statistically significant difference among the values. In this report, the term 'significant' only refers to statistically significant differences in prevalence.

DISABILITY

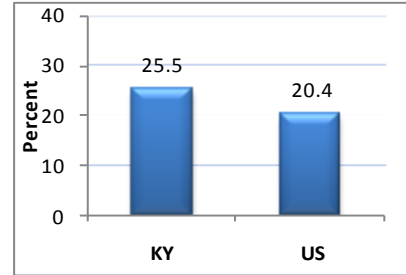
Question: Are you limited in any way in any activities because of physical, mental, or emotional problems?

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

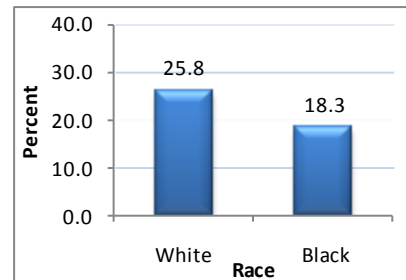
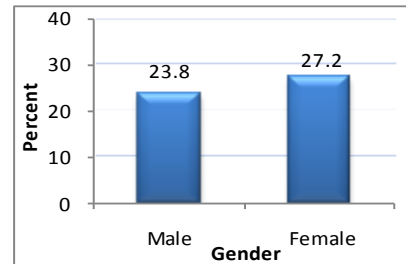
Who is at risk in Kentucky?

- In 2008, a quarter of Kentucky’s adult population reported having limited activities because of physical, mental, or emotional problems.
- There were no statistically significant differences in the prevalence of reported activity limitation by gender.
- There were no statistically significant variations in the prevalence of activity limitations among black and white residents.
- Kentuckians who reported limited activities due to physical, mental, or emotional problems were generally older, and had lower levels of education and income.

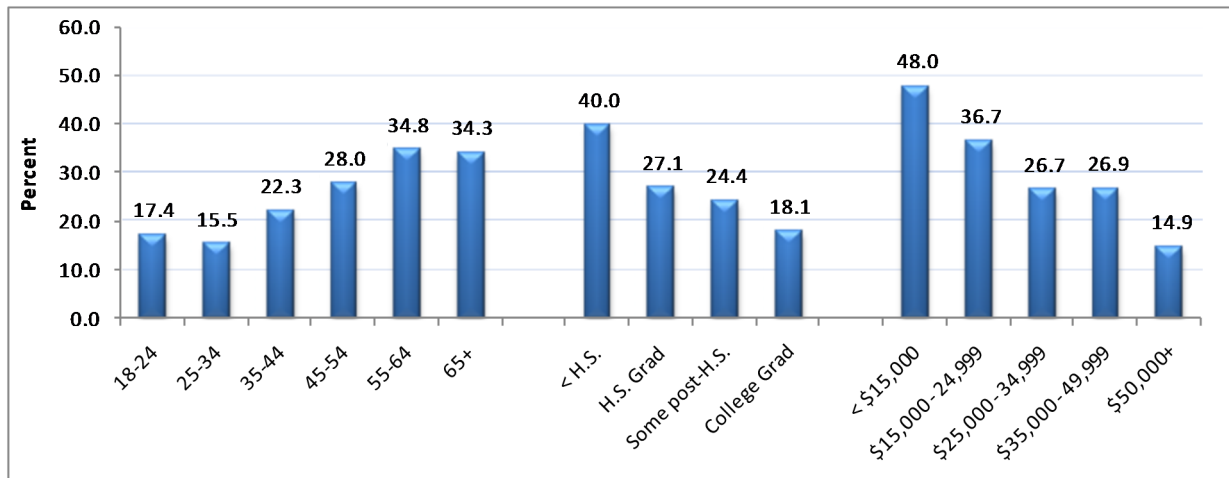
Percent of Adults who reported Limited Activity due to Physical, Mental, or Emotional Problems: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who reported Limited Activity due to Physical, Mental, or Emotional Problems, by Gender, and by Race, 2008



Percent of Kentucky Adults who reported Limited Activity due to Physical, Mental, or Emotional Problems, by Age, Education, and Income, 2008



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GENERAL HEALTH

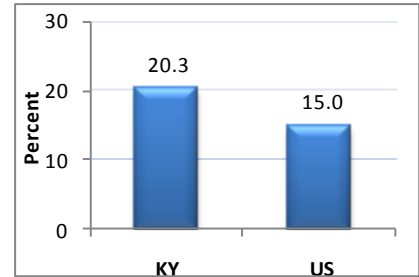
Question: Would you say that your general health is “Excellent”, “Very good”, “Good”, “Fair”, or “Poor”?

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

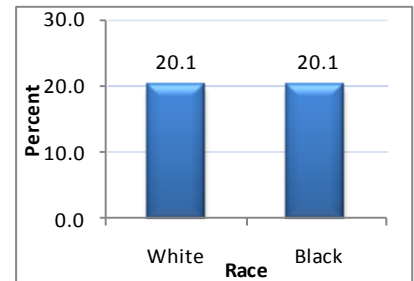
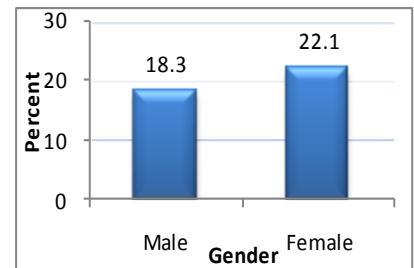
Who is at risk in Kentucky?

- Twenty percent of Kentucky adults rated their general health as fair or poor in 2008 as compared to 15% in the nation.
- A significantly higher percentage of females (22.1%) than males (18.3%) rated their general health as fair or poor.
- Equal proportions of white and black residents rated their general health as fair or poor.
- There were no statistically significant variations by age, however, residents who reported fair or poor health tended to be older than those who reported excellent or good health.
- Fair or poor general health ratings significantly decreased with increasing education and income levels.
- About 50% of Kentuckians who earn less than \$15,000 per year reported fair or poor general health compared to only 8.1% of those earning \$50,000 or more.

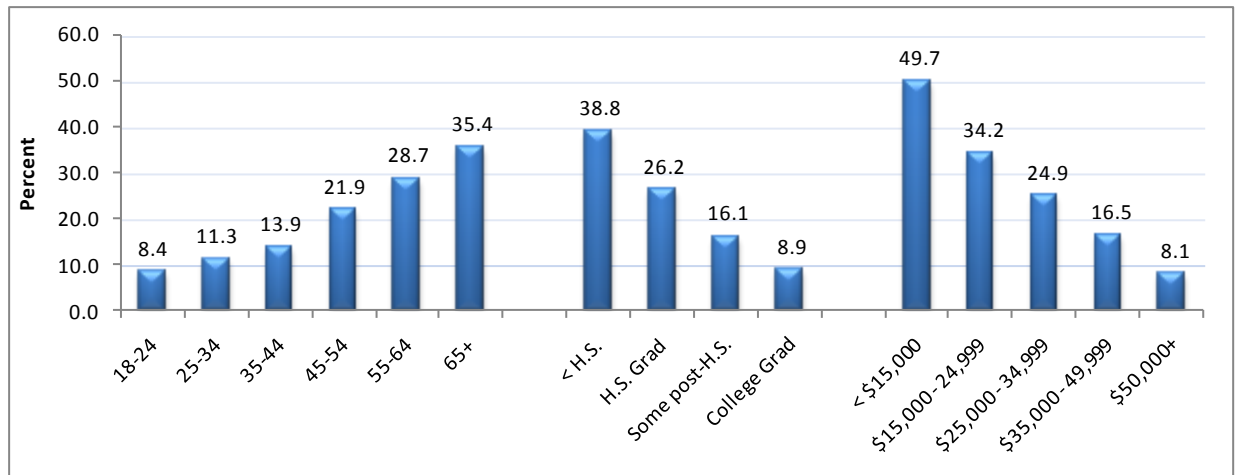
Percent of Adults who reported their General Health as Fair or Poor: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who reported their General Health as Fair or Poor, by Gender*, and by Race, 2008



Percent of Kentucky Adults who reported their General Health as Fair or Poor, by Age, Education*, and Income*, 2008



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HEALTH CARE ACCESS/COVERAGE

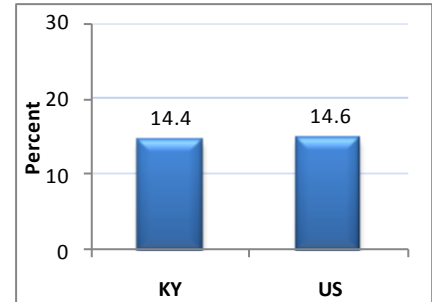
Question: Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or governmental plans such as Medicare?

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

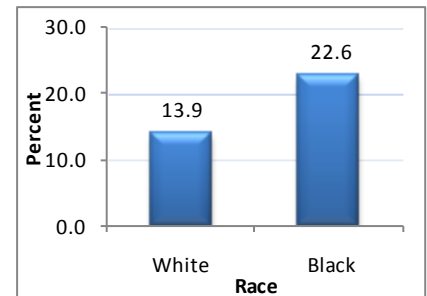
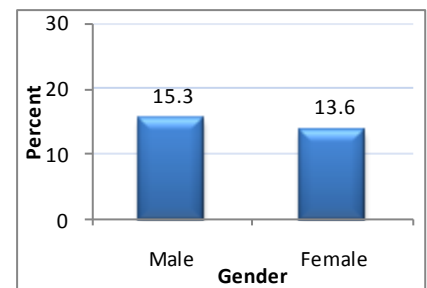
Who is at risk in Kentucky?

- About 14% of Kentuckians reported not having any form of health care coverage.
- A significantly higher proportion of men (15.3%) than women (13.6%) did not have health care coverage.
- There were no statistically significant variations between the proportion of white and black residents who did not have health care coverage.
- Lack of health care coverage decreased with increasing age, increasing education level, and increasing income level.
- The highest percentages of residents with no health care coverage were adults aged 18-24 years (29.8%), adults with less than a high school education (25.6%), and adults earning less than \$15,000 a year (30.8%).

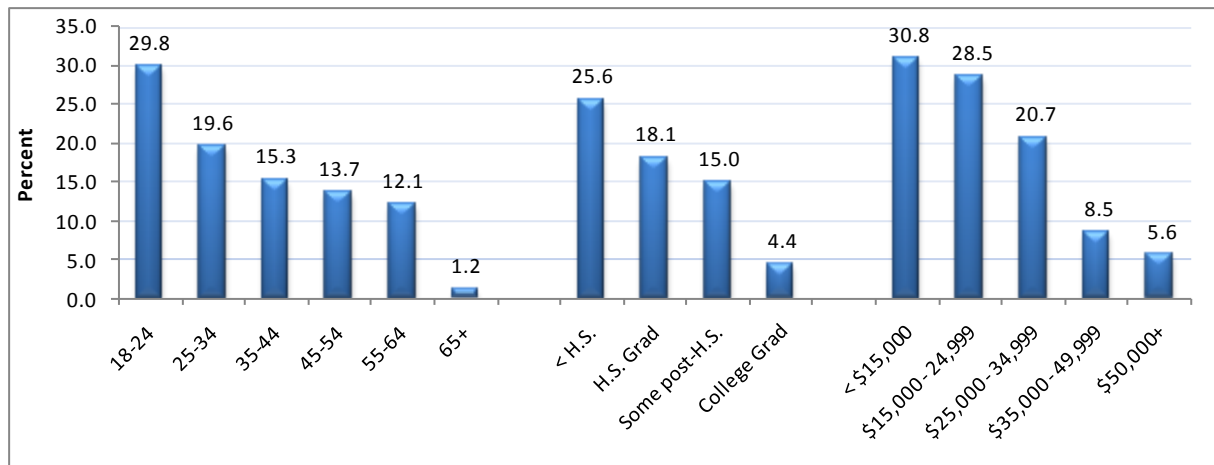
Percent of Adults with no Health Insurance: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults with no Health Insurance, by Gender*, and by Race, 2008



Percent of Kentucky Adults with no Health Insurance, by Age, Education, and Income, 2008



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BREAST CANCER SCREENING (Age 40+)

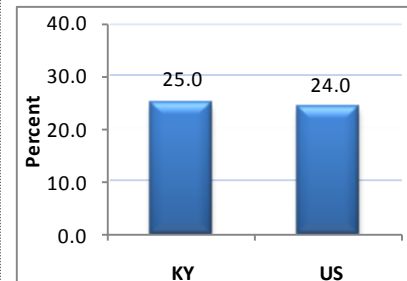
Question: A mammogram is an x-ray of each breast to look for breast cancer. Have you ever had a mammogram?
How long has it been since you had your last mammogram?

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.

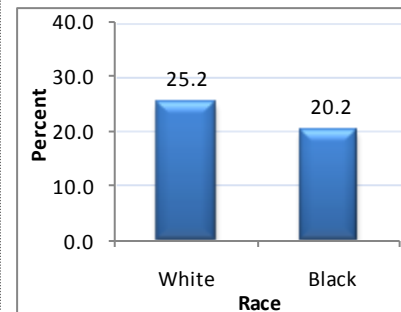
Who is at risk in Kentucky?

- In 2008, 25% of Kentucky women aged 40 years or older reported that they have not had a mammogram in the past two years.
- There were no statistically significant variations between the proportion of white and black women (aged 40 years or older) who did not have a mammogram in the past 2 years.
- About 38% of women (aged 40 years or older) who have less than a high school education did not have a mammogram in the past two years.
- The proportion of women (aged 40 years or older) who did not have a mammogram in the past two years ranged from 38.4% among those earning \$15,000 - \$24,999 a year to 17.1% among those earning more than \$50,000 a year.

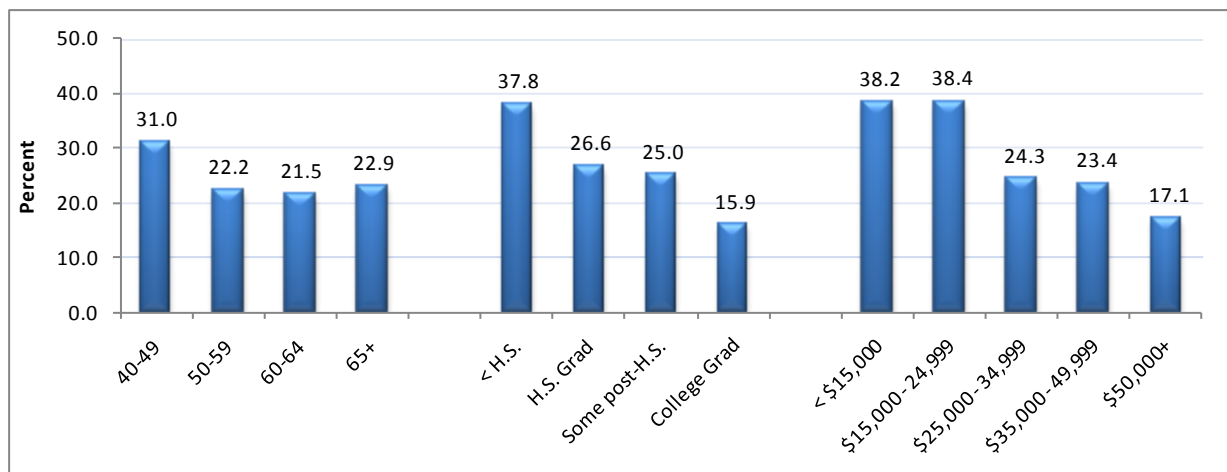
Percent of Women aged 40+ who did not have a Mammogram in the Past Two Years: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Women aged 40+ who did not have a Mammogram in the Past Two Years, by Race, 2008



Percent of Kentucky Women aged 40+ who did not have a Mammogram in the Past Two Years, by Age, Education, and Income, 2008



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CERVICAL CANCER SCREENING

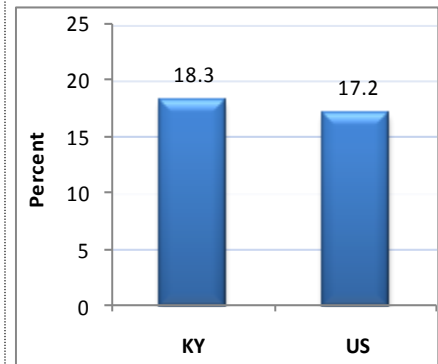
Question: A PAP Smear is a test for cancer of the cervix. How long has it been since you had your last PAP Smear test?

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

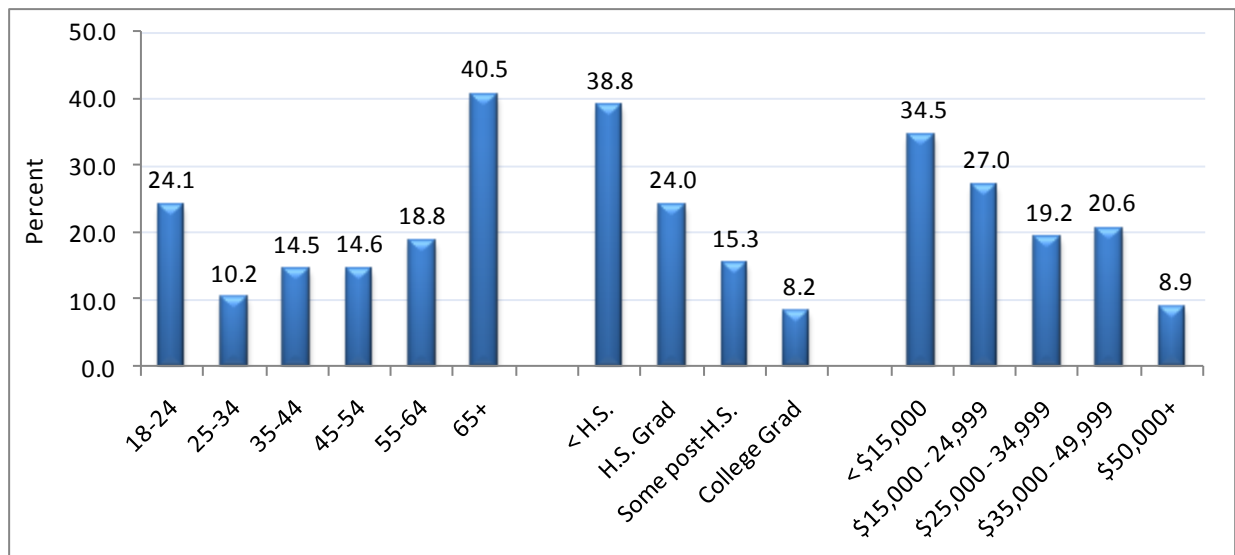
Who is at risk in Kentucky?

- 18.3% of Kentucky women reported that they have not had a PAP Smear test within the last three years.
- The number of black women who responded to this question in 2008 was too low to make statistically sound comparisons by race.
- Women with less than a college education were significantly more likely to report not having a PAP Smear test in the past three years.
- Almost 35% of women earning less than \$15,000 per year did not have a PAP Smear test within the past three years.

Percent of Adult Females who did not have a PAP Smear Test in the Past Three Years: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adult Females who did not have a PAP Smear Test in the Past Three Years, by Age, Education*, and Income, 2008



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COLORECTAL CANCER SCREENING (Age 50+)

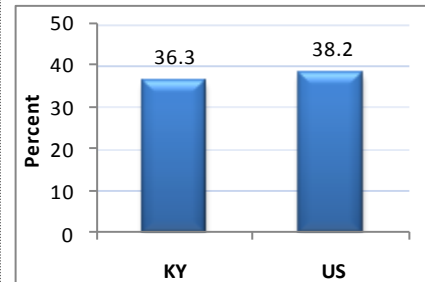
Question: Sigmoidoscopy and colonoscopy are exams in which a tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

At Risk: Adults aged 50 years or older who have never had a sigmoidoscopy or colonoscopy are considered at risk.

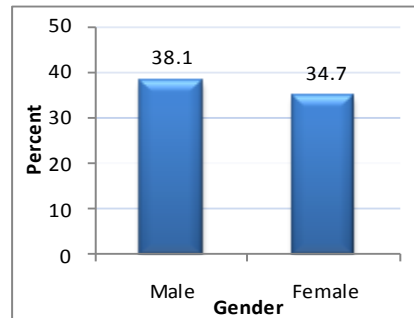
Who is at risk in Kentucky?

- Among Kentucky adults aged 50 years or older, 36.3% have never had a sigmoidoscopy or colonoscopy.
- There were no statistically significant variations between the proportion of men and women (aged 50+ years) who have never had a sigmoidoscopy or colonoscopy.
- The number of black residents aged 50+ years who responded to this question in 2008 was too low to make statistically sound comparisons by race.
- One in two Kentucky adults aged 50 years or older with less than a high school education has never had a sigmoidoscopy or colonoscopy.
- Over 40% of adults aged 50+ years who earn less than \$25,000 per year have never had a sigmoidoscopy or colonoscopy.

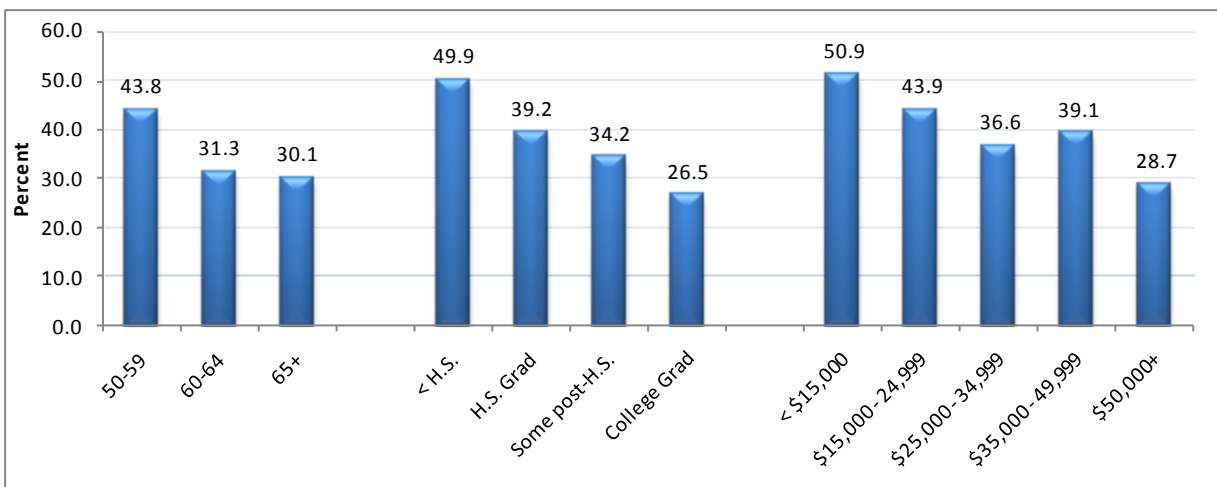
Percent of Adults aged 50+ years who have never had a Sigmoidoscopy or Colonoscopy: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults aged 50+ years who have never had a Sigmoidoscopy or Colonoscopy, by Gender, 2008



Percent of Kentucky Adults aged 50+ years who have never had a Sigmoidoscopy or Colonoscopy, by Age, Education, and Income, 2008



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PROSTATE CANCER SCREENING (Age 40+)

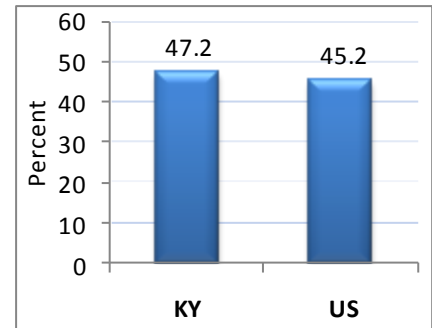
Question: Have you ever had a Prostate-Specific Antigen test, also called a PSA test?
How long has it been since you had your last PSA test?

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

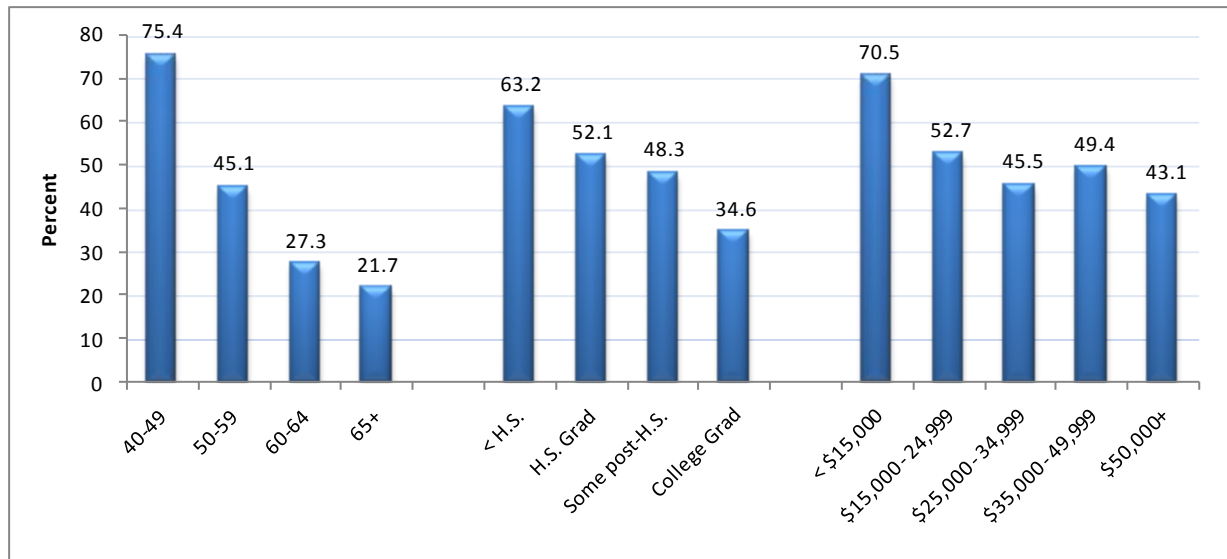
Who is at risk in Kentucky?

- About 47% of Kentucky men aged 40 years or older reported that they have not had a PSA test within the past two years.
- The number of black men aged 50+ years who responded to this question in 2008 was too low to make statistically sound comparisons by race.
- Three-fourths of the men in the 40 - 49 years age group reported that they have not had a PSA test in the last two years.
- The proportion of men aged 40+ years who did not have a PSA test in the past two years decreased with increasing levels of education.
- A high proportion (70.5%) of men (aged 40+ years) who earn less than \$15,000 a year did not have a PSA test in the past two years.

Percent of Men aged 40+ who did not have a PSA Test in the Past Two Years: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Men aged 40+ who did not have a PSA Test in the Past Two Years, by Age, Education, and Income, 2008



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INFLUENZA IMMUNIZATION (Age 65+)

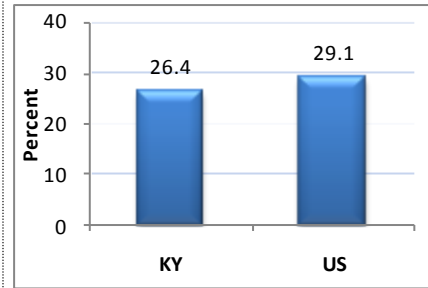
Question: In the past twelve months, have you had a flu shot?

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

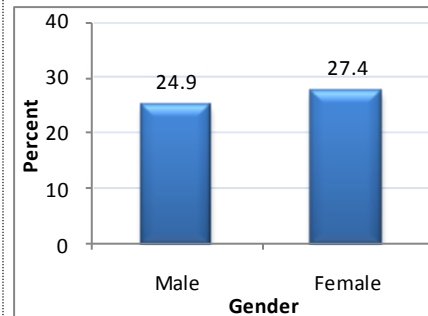
Who is at risk in Kentucky?

- In 2008, 26.4% of Kentucky adults aged 65 years or older reported that they did not get a flu shot in the past twelve months. This percentage is lower than the national median estimate (29.1%).
- There were no statistically significant variations between the proportion of men and women (aged 65+ years) who did not get a flu shot in the past twelve months.
- The number of black residents (aged 65+ years) who responded to this question in 2008 was too low to make statistically sound comparisons by race.
- Fewer adults in the 75+ years age group reported not getting a flu shot in the past 12 months compared to adults aged 65-74 years during the same period. The difference is statistically significant.
- There were no statistically significant variations by education or income.

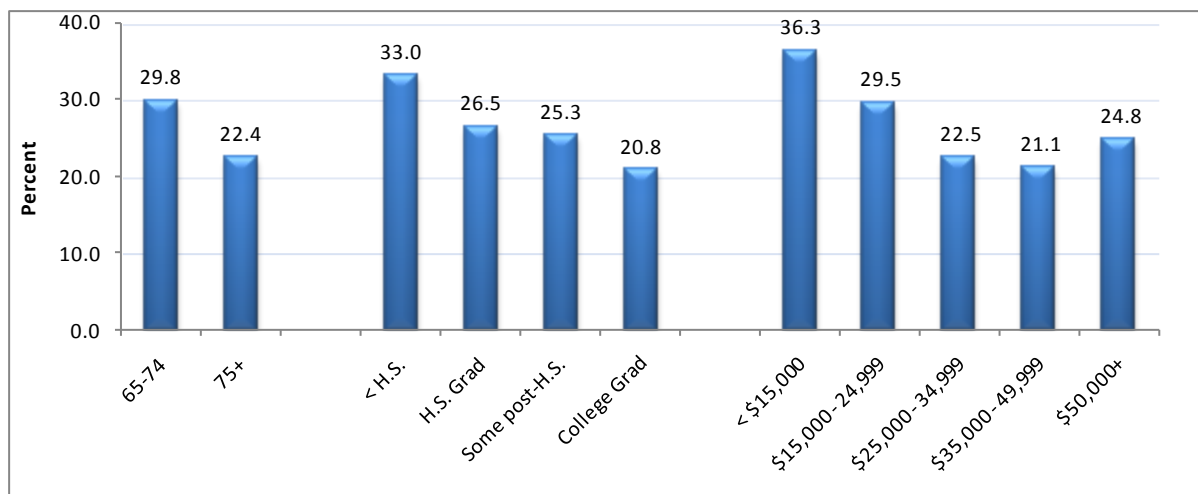
Percent of Adults aged 65+ years who did not get a Flu Shot in the Past Year: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults aged 65+ who did not get a Flu Shot in the Past Year, by Gender, 2008



Percent of Kentucky Adults aged 65+ who did not get a Flu Shot in the Past Year, by Age*, Education, and Income, 2008



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ORAL HEALTH

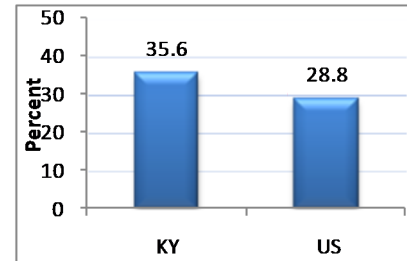
Question: How long has it been since you visited the dentist or dental clinic for any reason?

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

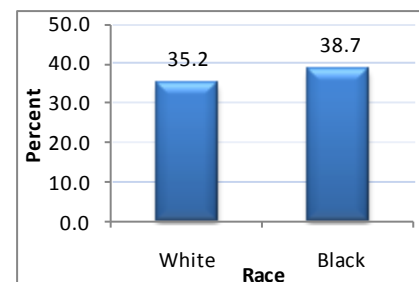
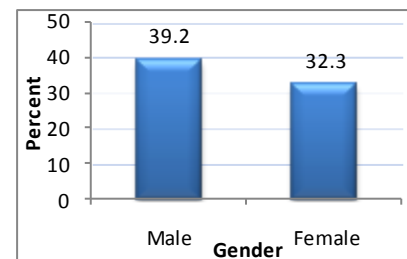
Who is at risk in Kentucky?

- About 36% of adults in Kentucky reported that they have not had a dental visit in the past year.
- A higher percentage of men (39.2%) compared to women (32.3%) did not visit the dentist or a dental clinic in the past year (the difference is statistically significant).
- There were no statistically significant variations between the proportion of black and white residents who did not have a dental visit in the past year.
- Adult residents who do not have a college degree are significantly less likely to have a dental visit compared to those who have a college degree.
- Over 50% of adults who earn less than \$25,000 a year reported that they did not have a dental visit in the past year.

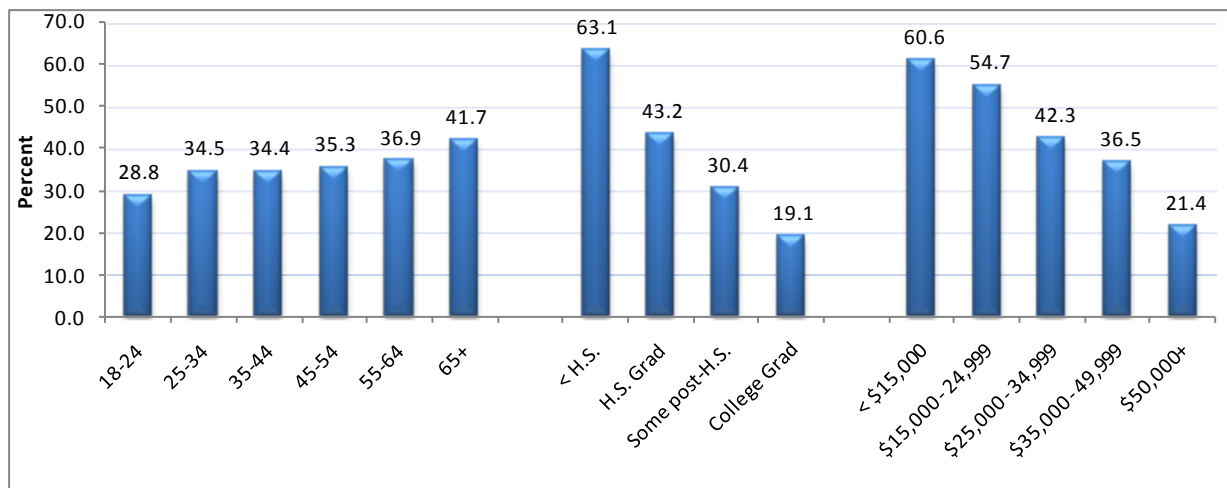
Percent of Adults who did not have a Dental Visit in the Past Year: Kentucky vs Nationwide (States, DC, and Territories), 2008



Percent of Kentucky Adults who did not have a Dental Visit in the Past Year: by Gender*, and by Race, 2008



Percent of Kentucky Adults who did not have a Dental Visit in the Past Year, by Age, Education*, and Income, 2008



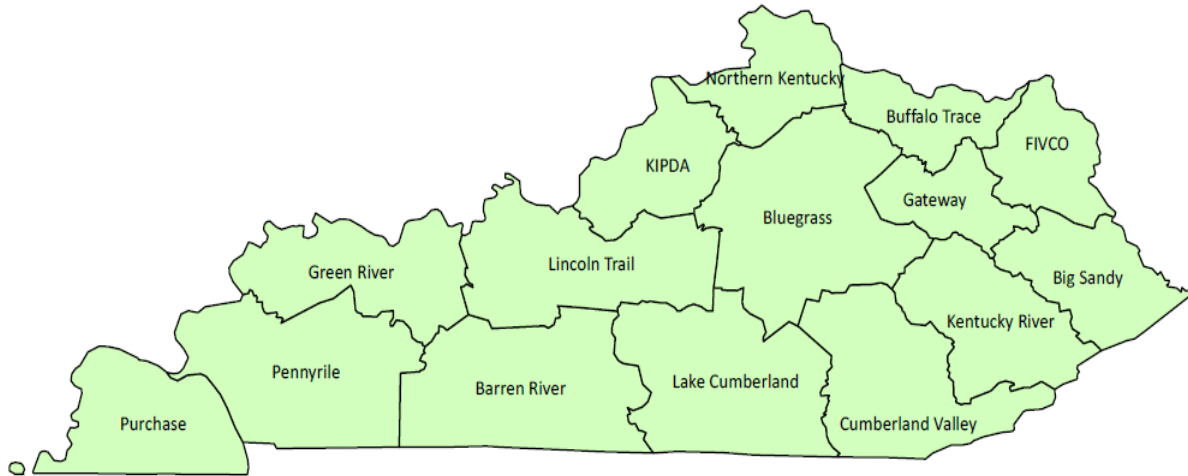
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Prevalence Estimates by Area Development District (ADD)

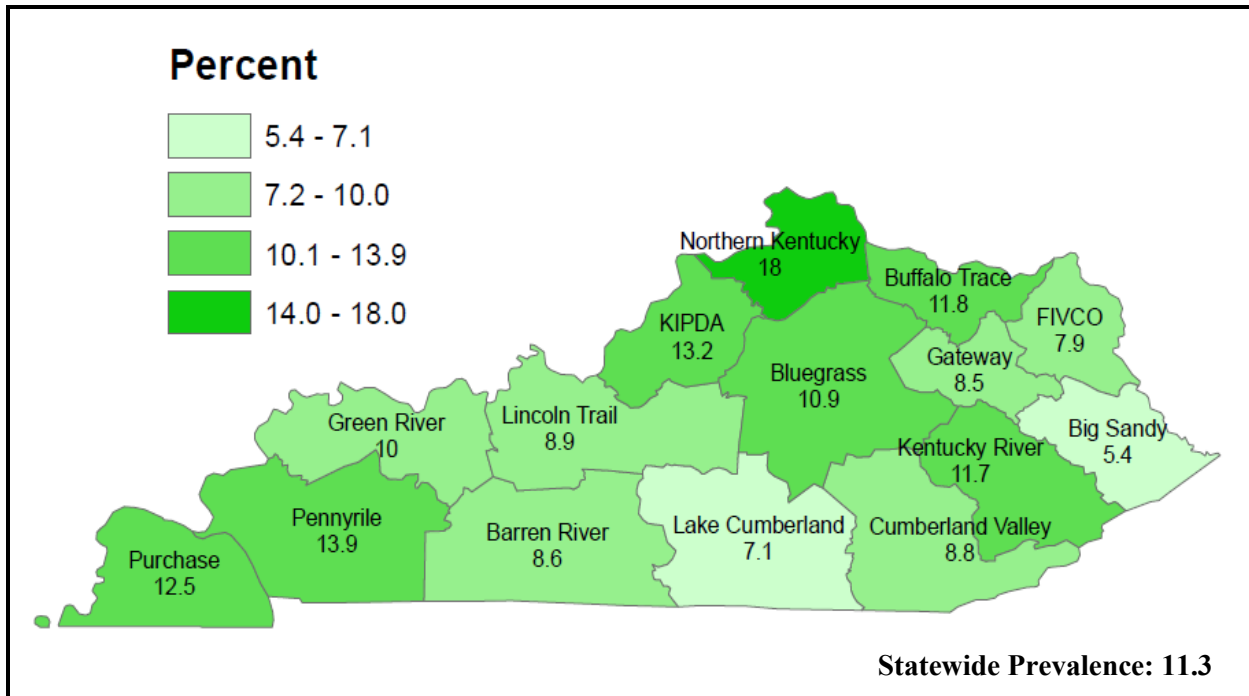
The remainder of this report incorporates ArcGIS mapping to illustrate prevalence estimates by Area Development District (ADD) for each risk factor, condition, or indicator presented in the preceding pages.

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.

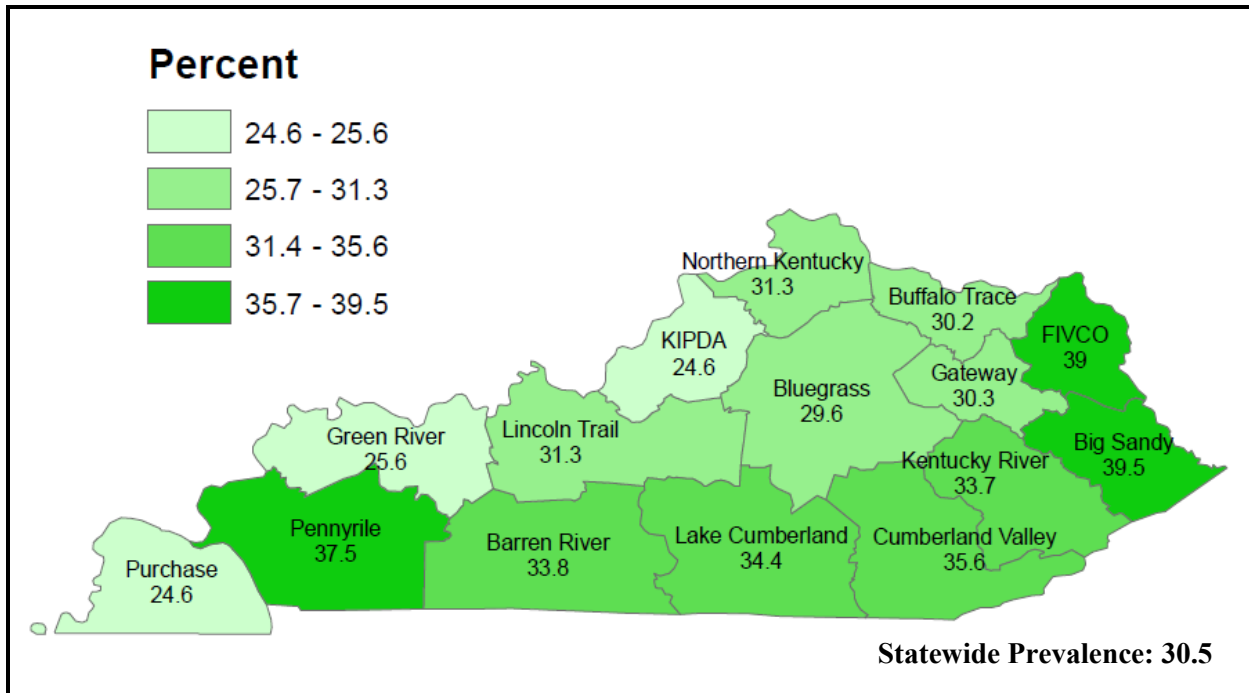


Counties in each ADD	
Barren River:	Allen, Barren, Butler, Edmonson, Hart, Logan, Metcalfe, Monroe, Simpson, Warren
Big Sandy:	Floyd, Johnson, Magoffin, Martin, Pike
Bluegrass:	Anderson, Bourbon, Boyle, Clark, Estill, Fayette, Franklin, Garrard, Harrison, Jessamine, Lincoln, Madison, Mercer, Nicholas, 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
Pennyrile:	Caldwell, Christian, Crittenden, Hopkins, Livingston, Lyon, Muhlenberg, Todd, Trigg
Purchase:	Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, McCracken, Marshall

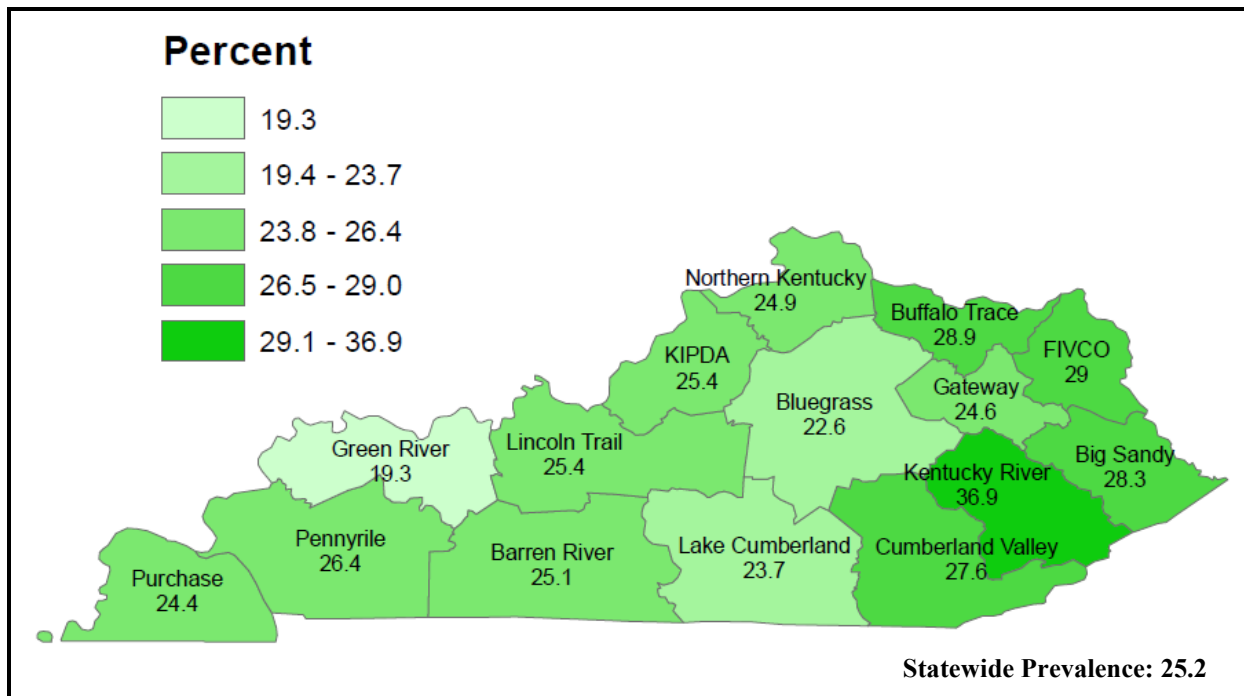
Percent of Kentucky Adults Classified as Binge Drinkers, by Area Development District, 2008



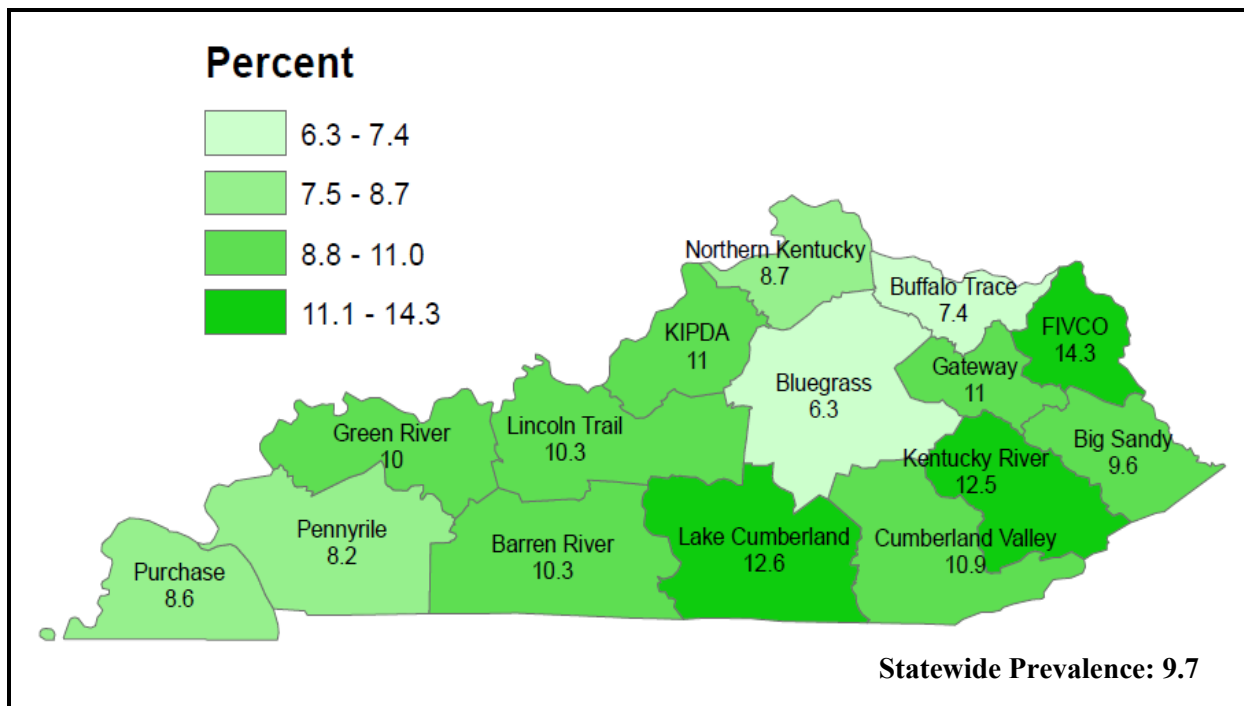
Percent of Kentucky Adults who did not Participate in any Physical Activity in the Past 30 Days, by Area Development District, 2008



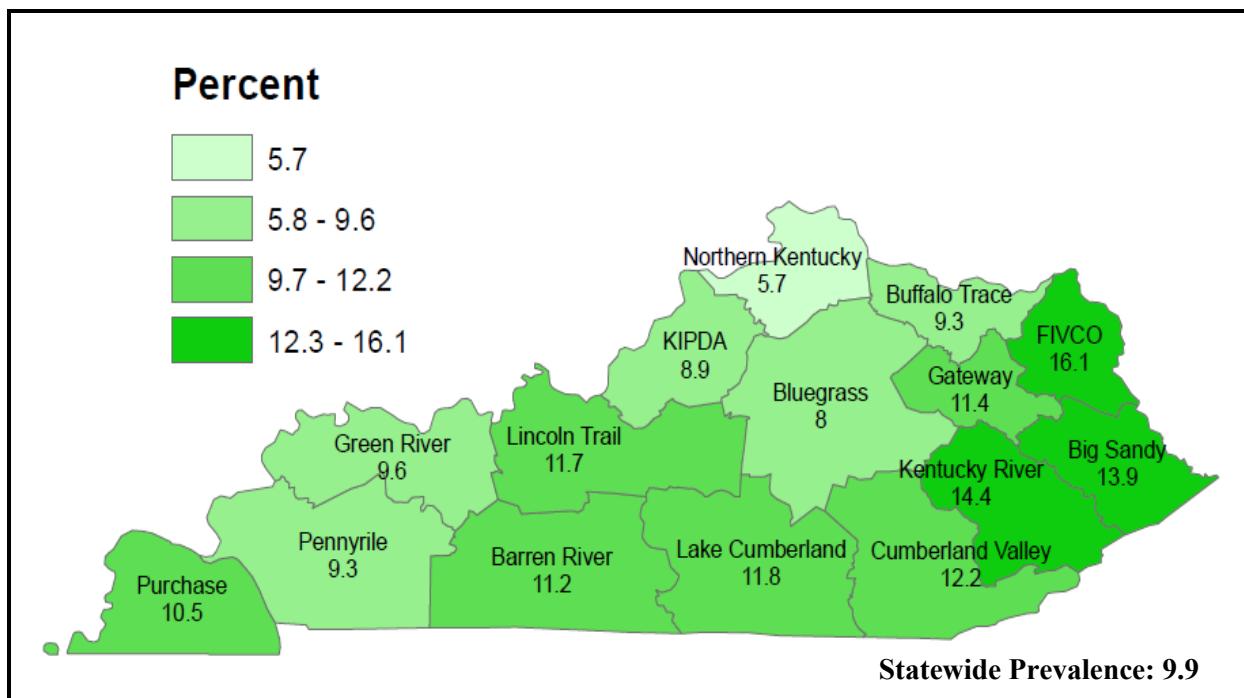
Percent of Kentucky Adults who are Current Smokers, by Area Development District, 2008



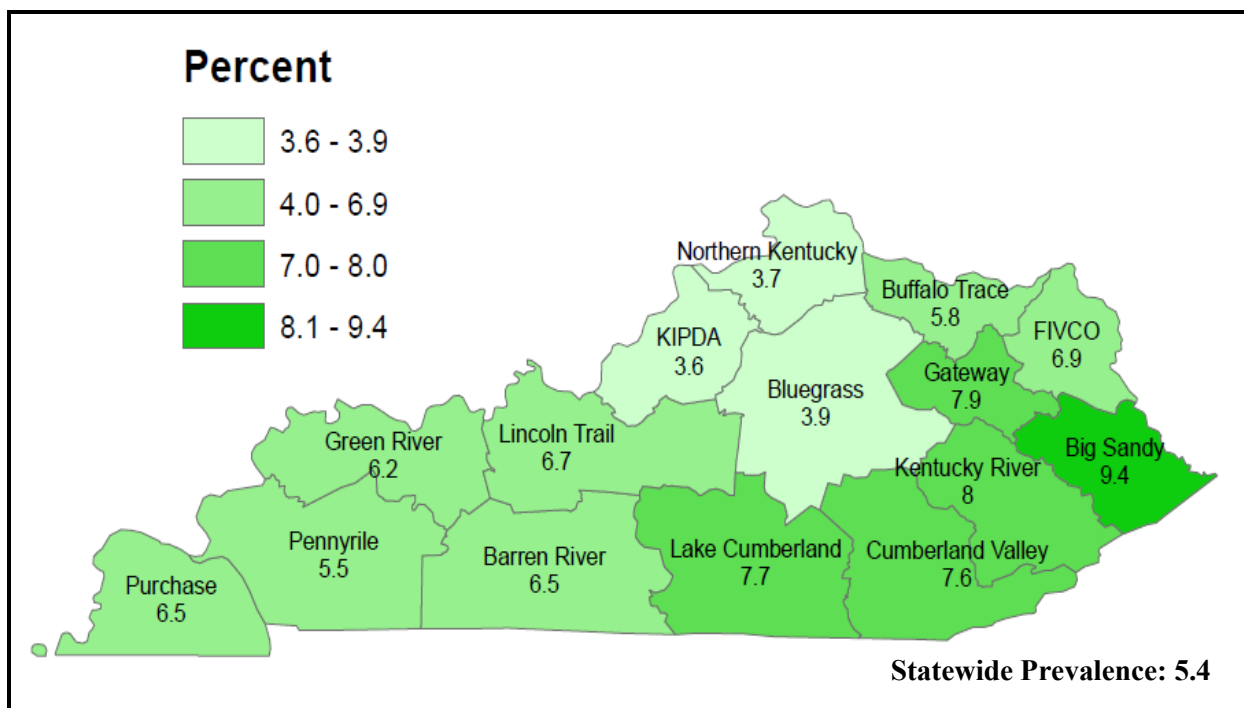
Percent of Kentucky Adults who have Current Asthma, by Area Development District, 2008



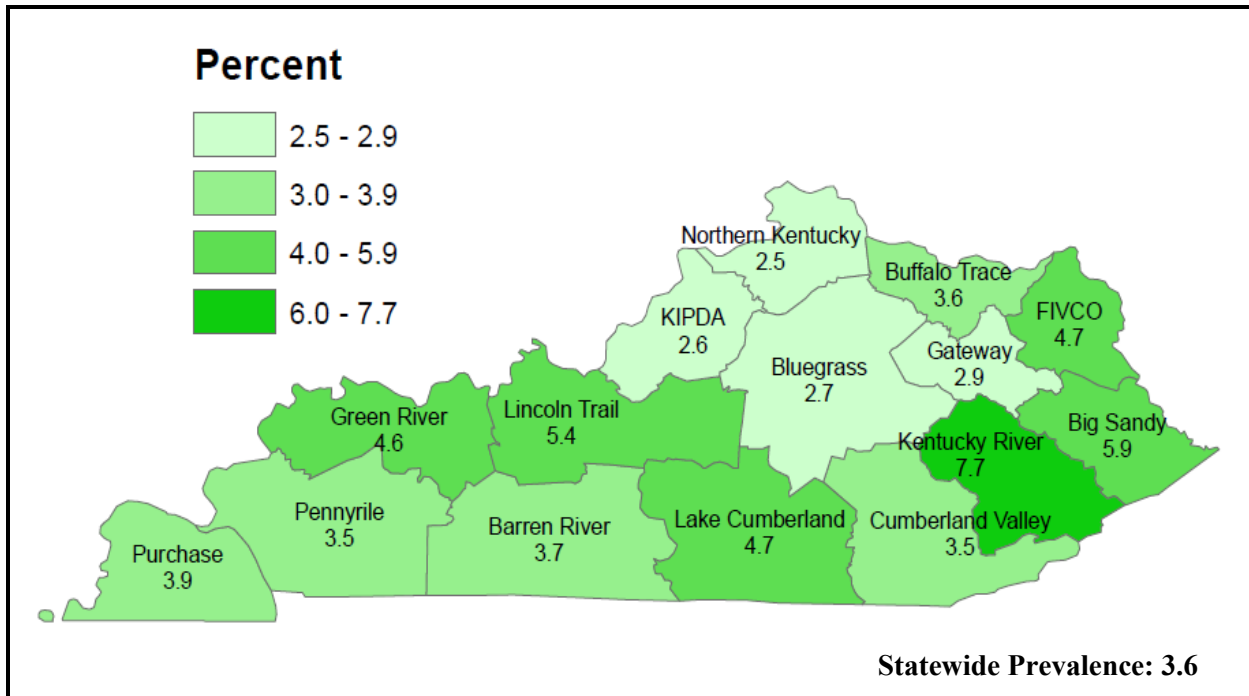
Percent of Kentucky Adults who have Diabetes, by Area Development District, 2008



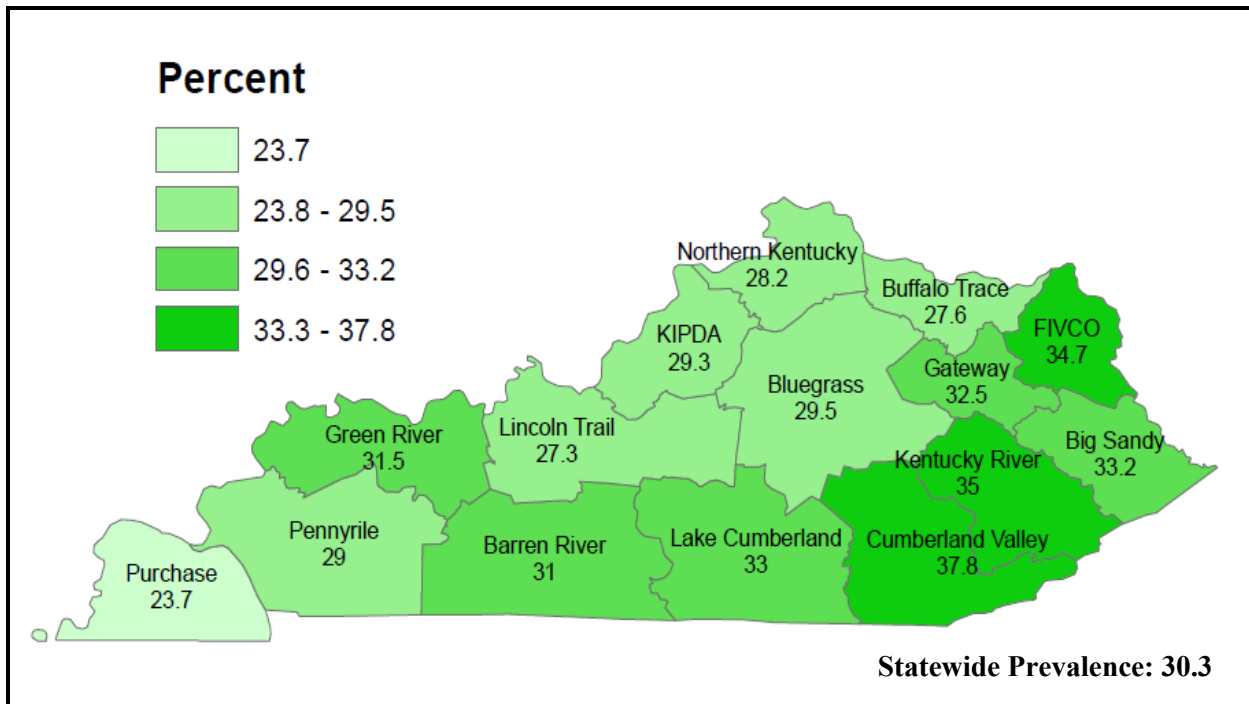
Percent of Kentucky Adults who have ever had a Heart Attack, by Area Development District, 2008



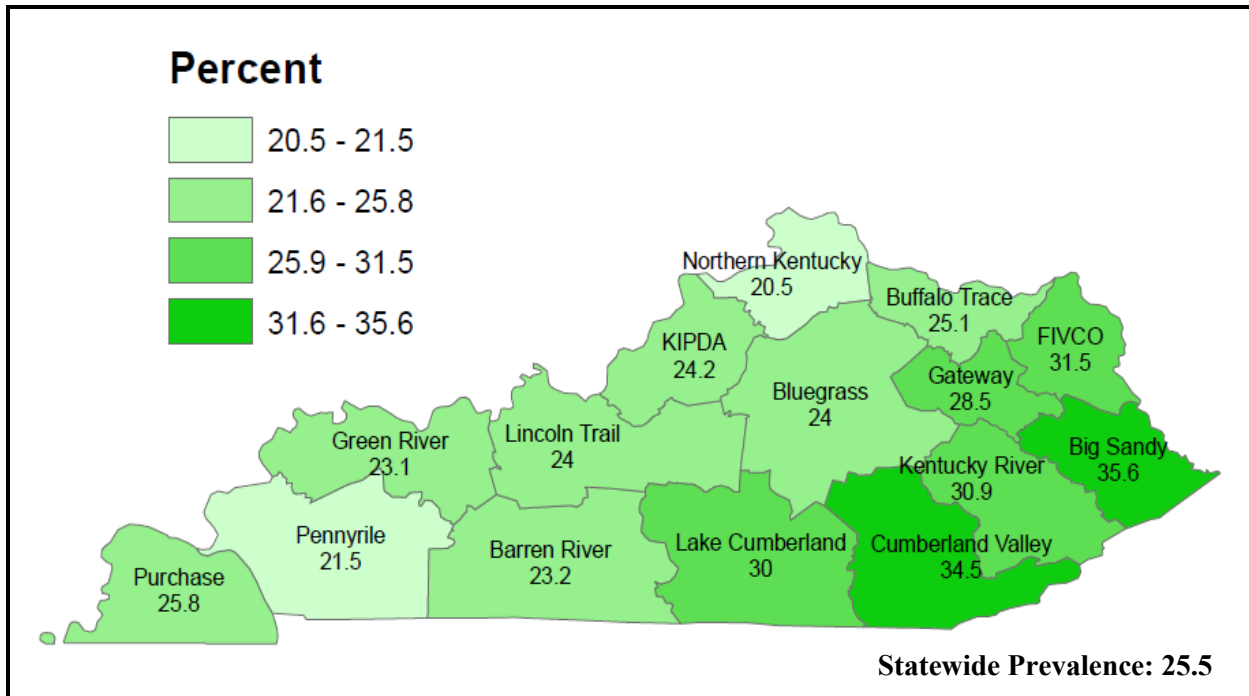
Percent of Kentucky Adults who have ever had a Stroke, by Area Development District, 2008



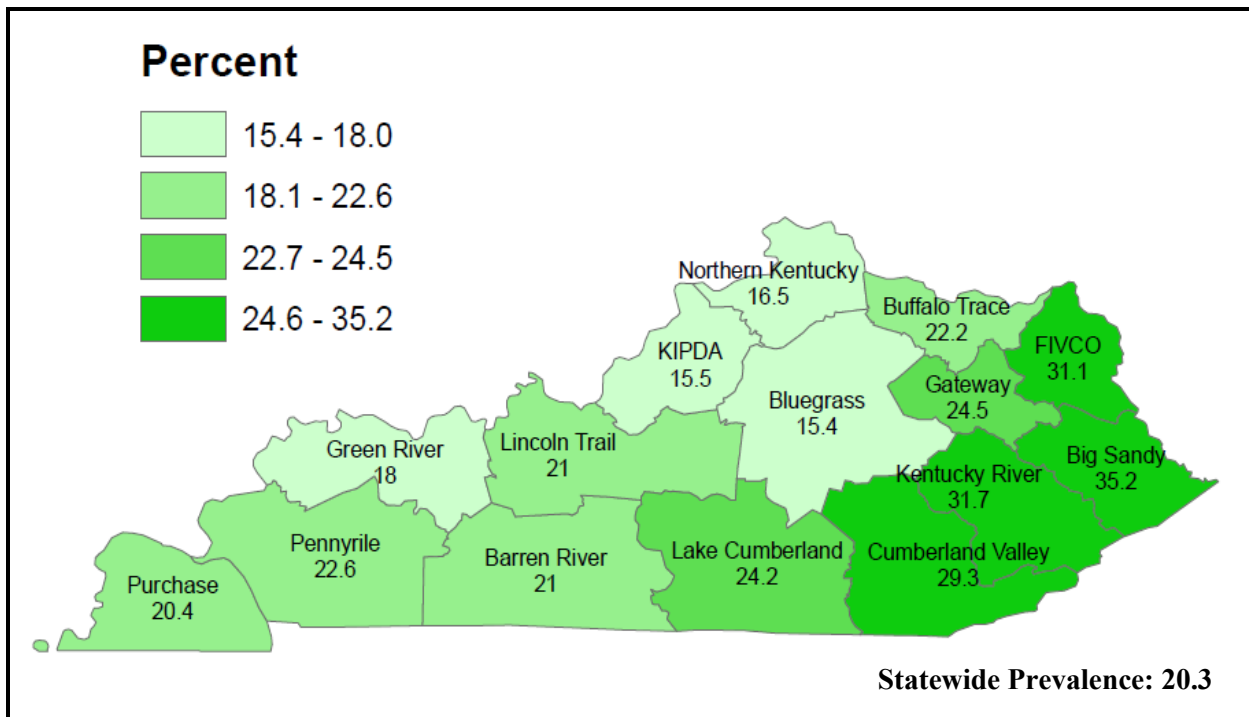
Percent of Kentucky Adults who are Obese, by Area Development District, 2008



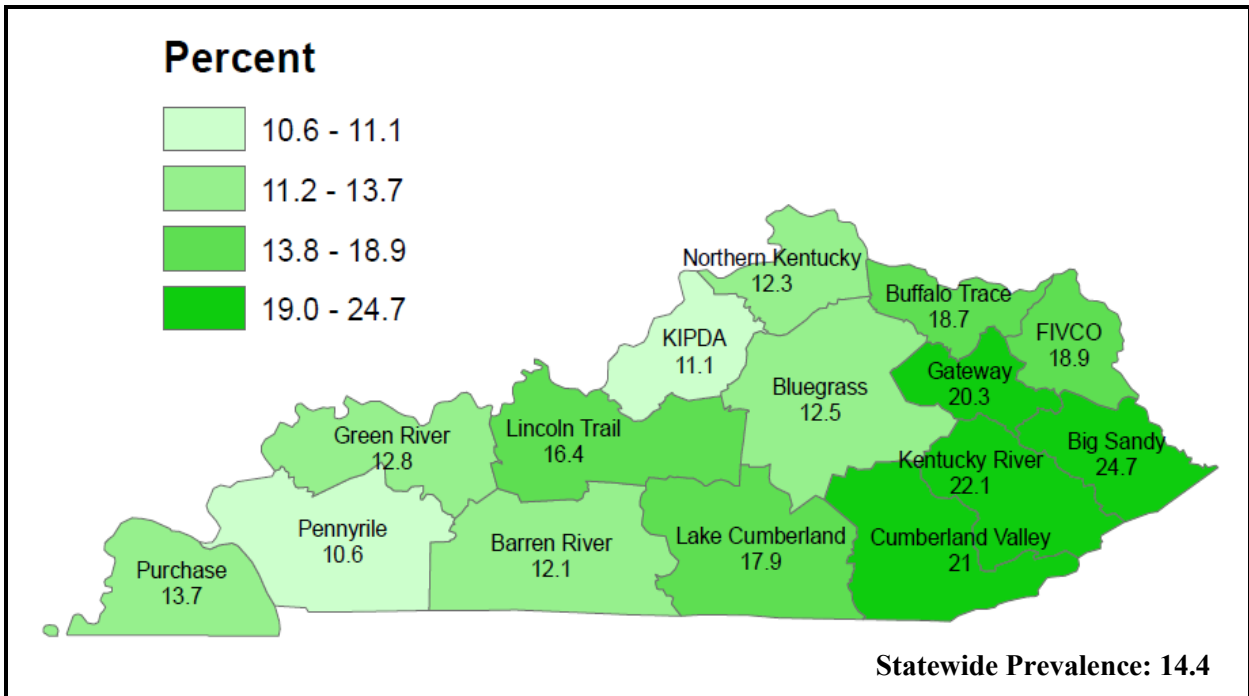
Percent of Kentucky Adults with Activity Limitations due to Health Problems, by Area Development District, 2008



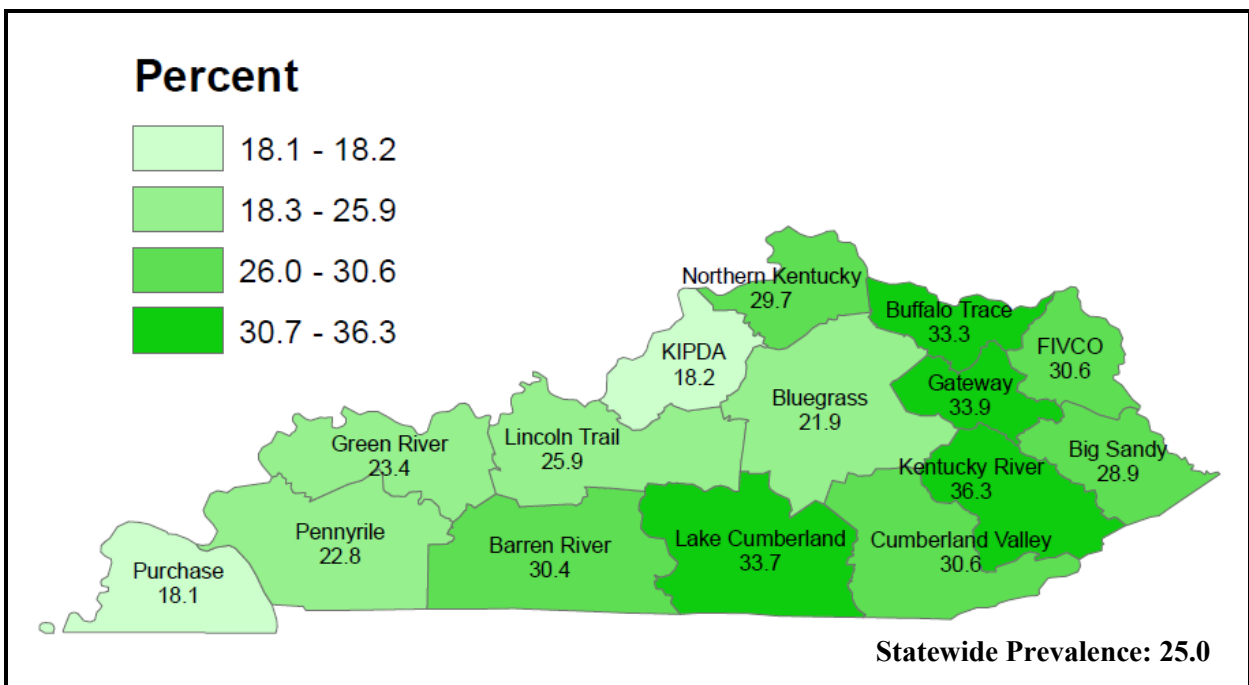
Percent of Kentucky Adults with Fair or Poor General Health, by Area Development District, 2008



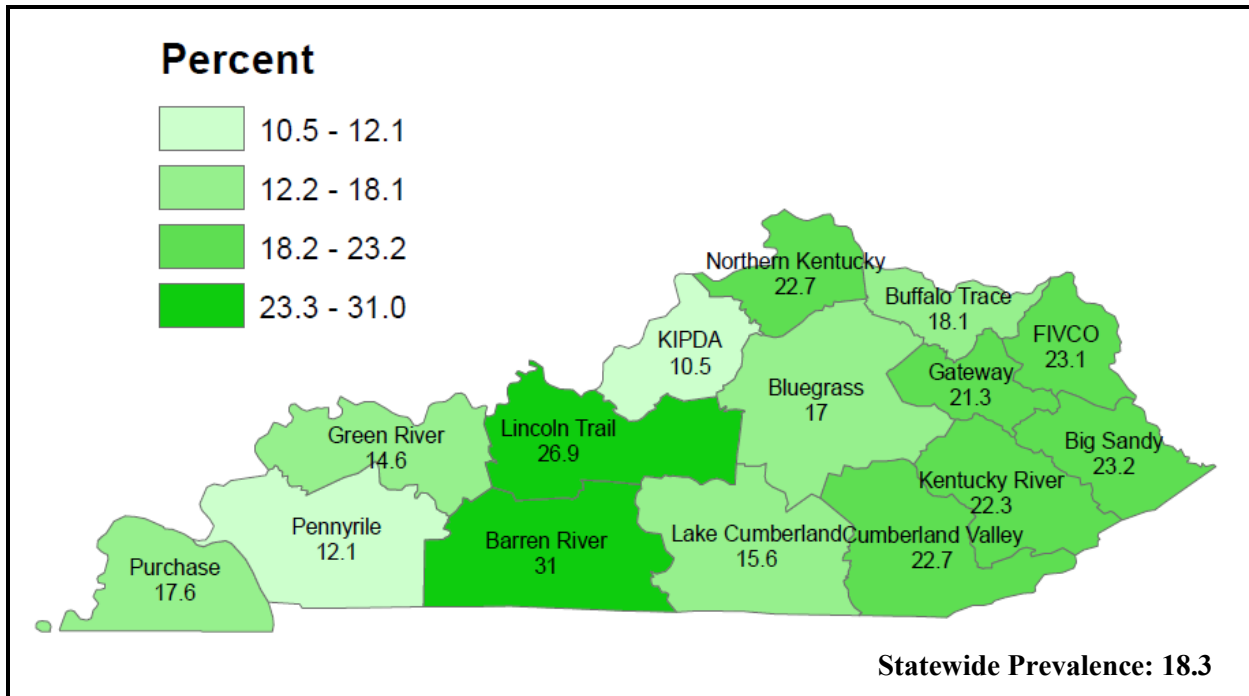
Percent of Kentucky Adults with No Health Care Coverage, by Area Development District, 2008



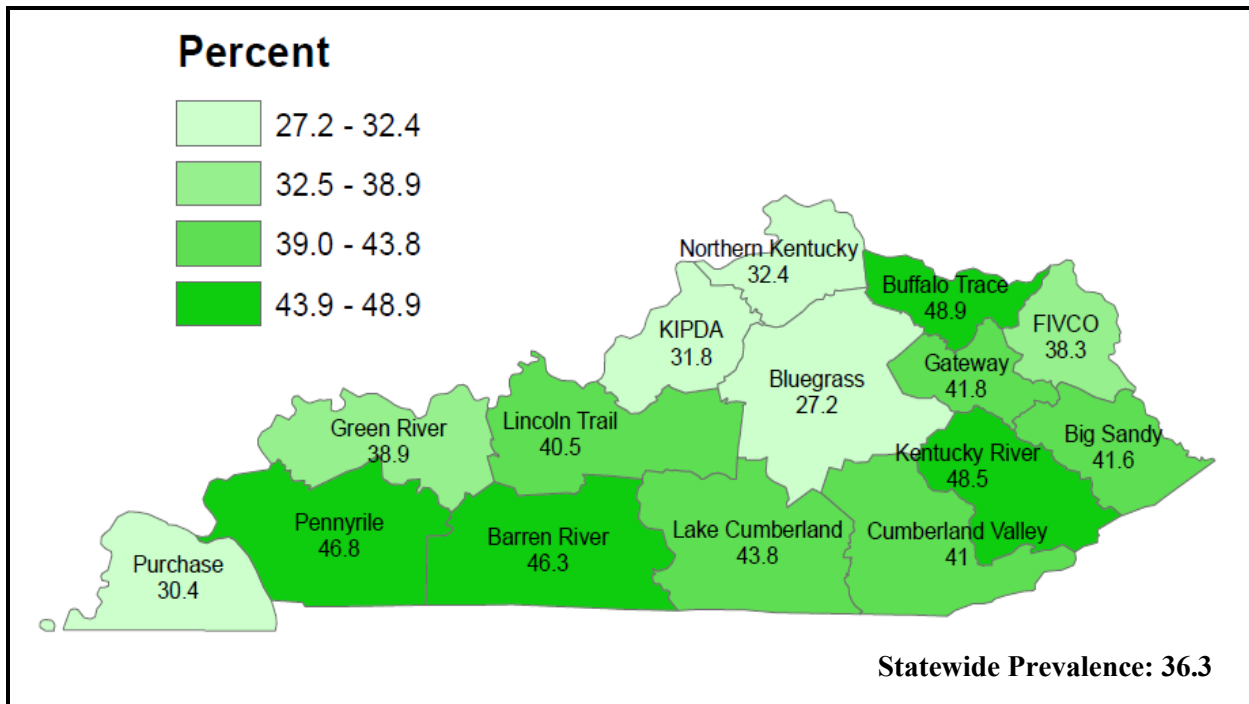
Percent of Kentucky Women (aged 40+) who did not have a Mammogram in the Past Two Years, by Area Development District, 2008



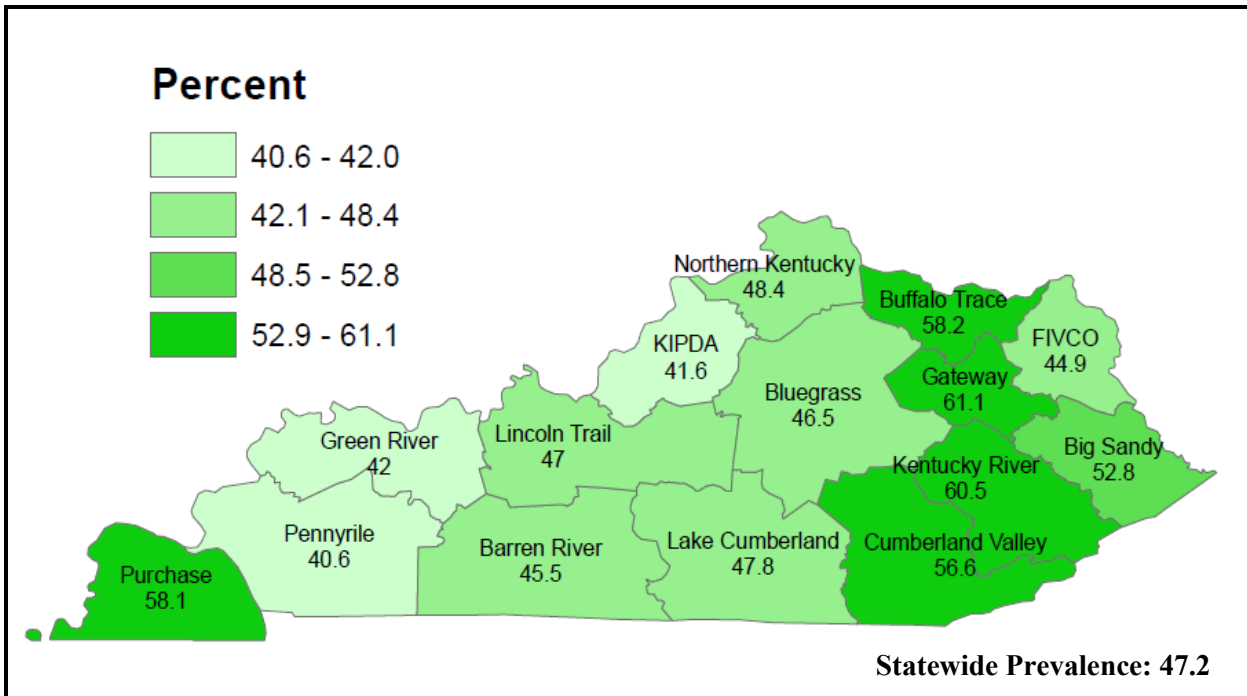
Percent of Kentucky Women who did not have a PAP Smear Test in the Past Three Years, by Area Development District, 2008



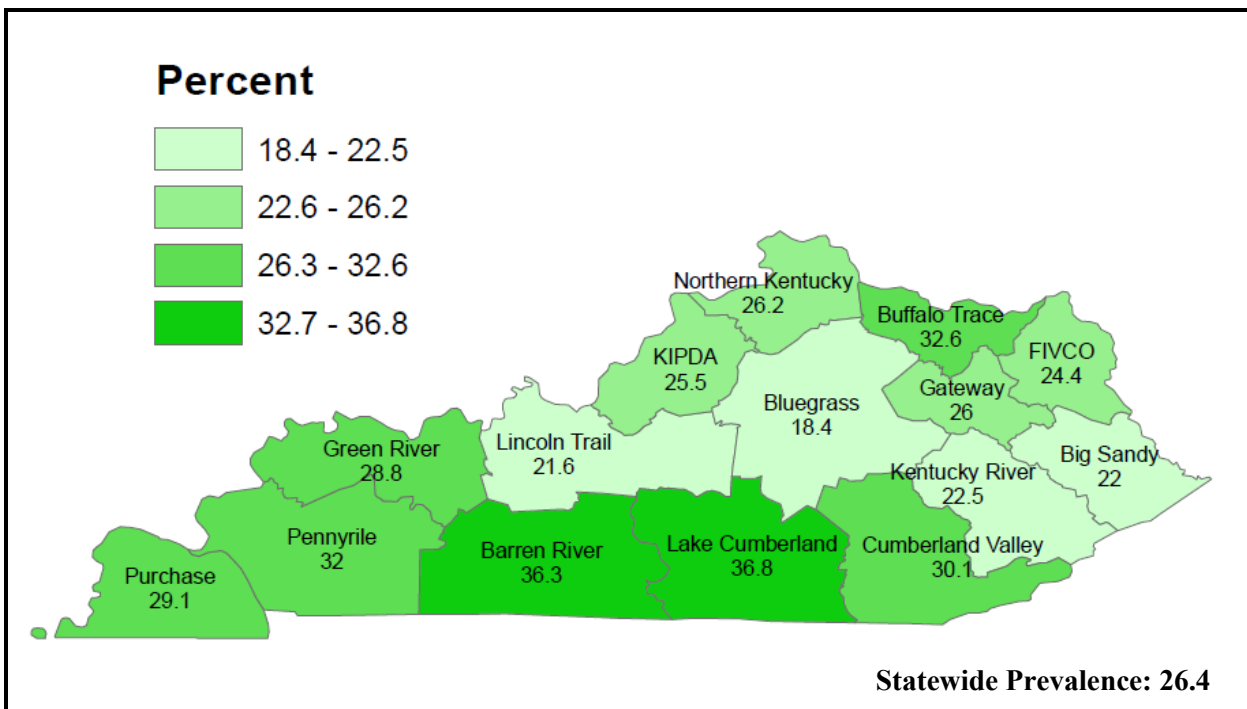
Percent of Kentucky Adults (aged 50+) who have never had a Sigmoidoscopy/Colonoscopy, by Area Development District, 2008



Percent of Kentucky Men (aged 40+) who did not have a PSA Test in the Past Two Years, by Area Development District, 2008



Percent of Kentucky Adults (aged 65+) who did not get a Flu Shot in the Past Year, by Area Development District, 2008



Percent of Kentucky Adults who did not have a Dental Visit in the Past Year, by Area Development District, 2008

