

HEALTH DISPARITIES in the Commonwealth

A Report on Race and Ethnicity and Health in Kentucky



Rachelle E. Seger
Huong Luu, MD, MPH
W. Jay Christian, MPH, PhD

*A project of the Foundation for a Healthy Kentucky
and the University of Kentucky College of Public Health*



FOUNDATION FOR A
**HEALTHY
KENTUCKY**



The Foundation for a Healthy Kentucky is a non-profit, philanthropic organization launched in 2001. Its mission is to address the unmet health care needs of Kentuckians by developing and informing health policy, improving access to care, reducing health risks and disparities, and promoting health equity.

The Foundation makes grants, supports data/research, holds educational forums, and convenes communities to engage and develop the capacity of the Commonwealth to improve the health and quality of life of all Kentuckians. Seger is a community health research officer at the Foundation. For more information about the Foundation and its mission, please visit www.healthy-ky.org.



The University of Kentucky is a public, land-grant university dedicated to improving people's lives through excellence in education, research and creative work, service, and health care. As Kentucky's flagship institution, the University plays a critical leadership role by promoting diversity, inclusion, economic development and human well-being.

As a component of Kentucky's land grant institution, the mission of the College of Public Health at the University of Kentucky is to apply comprehensive health approaches to understand better and to help reduce the burdens and disparities of health problems on individuals, families and communities. Christian and Luu are affiliated with the University of Kentucky. For more information about the University and its mission, please visit www.uky.edu.

This project was funded by a grant from the **Foundation for a Healthy Kentucky**.

Suggested citation:

Seger RE, Luu H, Christian WJ. Health Disparities in the Commonwealth, A Report on Race and Ethnicity and Health in Kentucky. Louisville, KY: Foundation for a Healthy Kentucky, 2016.



Table of Contents

About this Report	5
Understanding the Data	6
Key Findings for the Access to Care Indicators	7
Key Findings for the Social and Behavioral Health Indicators	7
Key Findings for the Health Outcomes	7
Access to Care	8
Foregoing Medical Care Due to Cost.....	8
Personal Doctor	8
No Health Insurance Coverage	9
Completed Seasonal Flu Vaccination	9
Ever Tested for HIV	10
Social and Health Behaviors	10
Current Smokers.....	10
Binge Drinking	11
No Physical Activity.....	11
Activity Limitations.....	12
Obesity	12
Overweight or Obese	13
Health Outcomes	13
Fair or Poor Health	13
Poor Mental Health.....	14
Poor Physical Health	14
Asthma.....	15
Diabetes.....	15
Reference Tables	16
References	18
Acknowledgements	19

Health Disparities in the Commonwealth

A Report on Race and Ethnicity and Health in Kentucky

One of the overarching goals of Healthy People 2020 is to “achieve health equity, eliminate disparities, and improve the health of all groups.”¹ Echoing this goal, the first ever National Prevention Strategy identified four strategic directions to improve health and well-being in the United States, including the elimination of health disparities.² In adopting this strategic direction, the National Prevention Council stated:

“All Americans should have the opportunity to live long, healthy, independent, and productive lives, regardless of their race or ethnicity, religion, socioeconomic status, gender, age, mental health, cognitive, sensory, or physical disability, sexual orientation or gender identity, geographic location, or other characteristics.”

(National Prevention Strategy, p. 11)

The Foundation for a Healthy Kentucky believes that health disparities *can* be eliminated, and that they *must* be eliminated. The first step is to understand and monitor where disparities exist. By harnessing the power of health information, we can inform policymakers, community leaders and concerned citizens about health disparities in our state. We hope that this report will contribute to the conversation about health in our communities, and fuel efforts to change systems and policies so that all Kentuckians may experience optimal health throughout their lives.

About this Report

This report is the third in a series of reports exploring health disparities in the Commonwealth using data from the Kentucky Behavioral Risk Factor Surveillance System (BRFSS). This report focuses on disparities by race and ethnicity, particularly differences associated with access to care, social and health behaviors, and health outcomes.

The first report in this series focused on geographic disparities, and differences in health status for the Appalachian and Delta regions of the state. The second report focused on socioeconomic disparities, and differences in health status related to income and education level. Future reports will analyze disparities related to mental health, disability status, and other

demographic characteristics of Kentucky adults.

Nationally, BRFSS is a joint effort of the Centers for Disease Control and Prevention (CDC) and the participating states and territories. It is the world’s largest telephone health survey, and has been used to track information on risk behaviors, prevention practices, and access to care since 1984. Each year, the Kentucky BRFSS gathers input from nearly 11,000 Kentucky adults. As part of a memorandum of understanding, the Cabinet for Health and Family Services makes data from the Kentucky BRFSS available to the University of Kentucky and to the Foundation for a Healthy Kentucky for this research. We are grateful to the Kentucky BRFSS program, without which this analysis would not be possible.

Health Disparities in the Commonwealth, A Report on Race and Ethnicity and Health in Kentucky describes the health outcomes and health behaviors of adults by self-reported race and ethnicity.

Health disparities between racial and ethnic groups in the United States are well documented and persistent.³ Researchers have demonstrated, for example, that obesity rates are much higher among black Americans than among white Americans.⁴ Similarly, Hispanic Americans are more likely to lack health insurance than white, non-Hispanic Americans.⁵ These racial and ethnic disparities also exist in Kentucky.

This report is presented in three sections. Each section compares Kentucky BRFSS combined data for the years 2011, 2012 and 2013 across racial and ethnic groups. For comparison, these data are presented with results for the state and nation as a whole.

The first section of this report looks at access to health care and preventive services as measured in BRFSS. The second section looks at a variety of social and behavioral health indicators. The third section describes health outcomes, including prevalence of some chronic diseases in Kentucky. This report will serve as an important baseline for consideration and comparison to outcomes from current Kentucky health system changes including Medicaid expansion in Kentucky.

Understanding the Data

Each graph in this report presents estimates and confidence intervals. The estimate represents the proportion of respondents who gave a particular answer when they were contacted by the Kentucky Behavioral Risk Factor Surveillance System (BRFSS). The confidence interval tells us what the responses would have been if we had contacted every adult, instead of just a sample. We can be 95% confident that if we had contacted everyone, the true proportion of all respondents who would have given that answer would fall within that confidence interval.

The more people we talk to, the better our estimate. For this reason, the confidence intervals for state-level estimates tend to be narrower than for any of the estimates by race and ethnicity, where the sample size is smaller. The Hispanic, other, and multiracial groups each had fewer respondents than the white and black groups, so 95% confidence intervals for these groups are typically much wider.

For example, 31.6% of the adults contacted by Kentucky BRFSS were obese (having a body mass index⁶ of 30.0 or higher) in 2011-2013.

If we had contacted everyone, we would expect that between 30.8% and 32.4% of adults would be obese. For this question, the 95% confidence interval ranges from 30.8% to 32.4%.

Why does this matter? When the confidence intervals don't overlap, we know that the differences we have measured between groups would be real – no matter how many adults we surveyed. For example, there are real differences in the rates of obesity between white and black Kentuckians. Thirty-one percent of white Kentucky adults reported obesity, or a body mass index of 30.0 or higher, with a 95% confidence interval of 30.2% to 31.8%. And, 42.0% of black Kentucky adults reported obesity with a 95% confidence interval of 38.1% to 46.0%.

But when two confidence intervals overlap, we cannot know for certain if the differences in responses are a result of real differences between the groups, or if those differences are a function of who happened to answer the phone when Kentucky BRFSS called. It is important to understand where these real differences – or disparities – exist, so that we can work together to address the differences and promote health throughout the Commonwealth.

What is race and ethnicity?

For this report, race and ethnicity groups were created using BRFSS questions that asked respondents about their race and ethnicity, and recoded into the following mutually exclusive groups:

- White, non-Hispanic;
- Black, non-Hispanic;
- Hispanic of any race;
- Multiracial, non-Hispanic;
- Other, non-Hispanic, (which includes Asian, Hawaiians/Pacific Islander, American Indians/Alaska Native, and unspecified Other).

Please see additional details in Table 1. Respondents by race and ethnicity KY-BRFSS and U.S. Census⁷ population and Table 2. BRFSS Indicators and Question Text.

BRFSS Questions on Race and Ethnic Group

“Which one or more of the following would you say is your race?” (Select all that apply.) White; Black or African American; American Indian or Alaska Native; Asian (Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, Other Asian); Pacific Islander (Native Hawaiian, Guamanian or Chamorro, Samoan, Other Pacific Islander); Other

and

“Are you Hispanic, Latino/a, or Spanish origin?”

KEY FINDINGS

Key Findings for the Access to Care Indicators

In general, there were significant associations between racial and ethnic identification and access to care in Kentucky. For these indicators (2011-2013):

- White Kentuckians were the least likely to experience cost as a barrier to medical care. Overall, Kentuckians reported they had to forego medical care due to cost more often than did average adults in the U.S.
- White Kentuckians were most likely to report having a personal doctor. In Kentucky, more adults reported having a personal doctor than reported the same nationally.
- Black and Hispanic Kentuckians were less likely to have health insurance than white Kentuckians.
- Black Kentuckians were less likely as a group to have an annual flu shot compared to white Kentuckians.
- White Kentuckians were significantly less likely to have been tested for HIV than other racial or ethnic groups in Kentucky.

Key Findings for the Social and Behavioral Health Indicators

In Kentucky, adults engaged in these risky social and health behaviors at rates higher than reported for the U.S. The exception is binge drinking where all racial and ethnic groups in Kentucky reported less binge drinking than national reports. For the social and behavioral health indicators (2011-2013):

- Kentuckians were significantly more likely to be current smokers than U.S. adults. More than 1 in 4 Kentucky adults (27.9%) smoke cigarettes. Multiracial Kentuckians reported the highest rate of smoking in the state (41.3%).
- All racial and ethnic groups in Kentucky reported high rates of physical inactivity.
- Multiracial Kentuckians were most likely to have activity limitations due to health conditions.
- Black Kentuckians were significantly more likely to be overweight or obese than white and other Kentuckians. However, for the state as a whole, the vast majority (66.9%) of Kentuckians were overweight or obese.

Key Findings for the Health Outcomes

For the health outcomes (2011-2013):

- Kentucky adults reported worse health status than U.S. adults. This trend was seen across racial and ethnic groups in Kentucky except for Hispanic Kentuckians who were about as likely as U.S. adults to report fair or poor health.
- Multiracial and other race Kentuckians were more likely to report poor mental health than white or black Kentuckians.
- There were no differences in self-reported physical health by race and ethnicity in Kentucky. Overall, Kentucky adults reported worse physical health when compared to the U.S. average.
- Multiracial Kentuckians reported slightly more asthma diagnoses than other racial and ethnic groups in Kentucky. For the state as a whole, the Kentucky asthma prevalence was only slightly higher than the national rate.
- Diabetes in Kentucky was comparable to diabetes across the U.S. In Kentucky, Hispanic and other race Kentuckians were slightly less likely to report having diabetes.

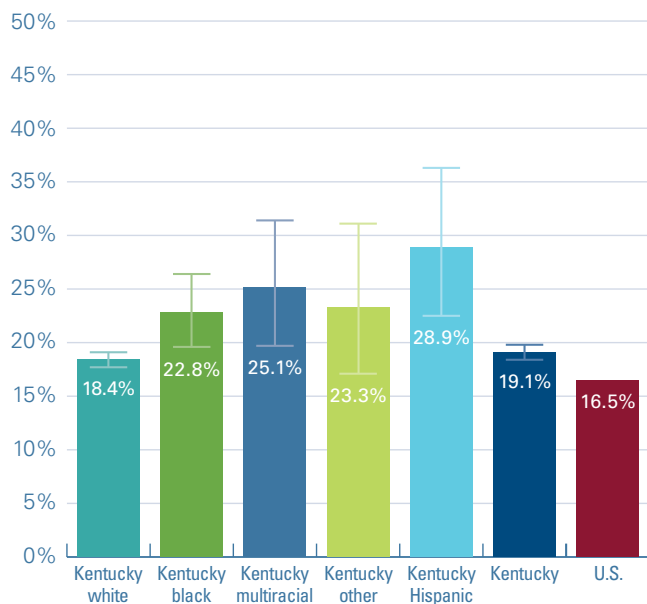
Access to Care

Foregoing Medical Care Due to Cost

Nearly 1 in 5 Kentucky (19.1%) adults reported that there was a time in the prior year when they needed to see a doctor but could not because of the cost. It is difficult to get and stay healthy if you cannot get care when you need it. Yet, 19.1% of Kentuckians were foregoing care due to the expense. Access to care was considerably more limited for Hispanic adults in Kentucky, with nearly 1 in 3 adults (28.9%) unable to afford needed medical care. Hispanic adults in Kentucky also had lower rates of insurance coverage. For 2011-2013, Kentucky was above the national rate of adults going without needed health care.

One of the objectives of Healthy People 2020 is to have fewer than 1 in 20 (4.2%)⁸ people forego needed medical care.

Foregoing Medical Care Due to Cost by Race and Ethnicity, 2011-2013

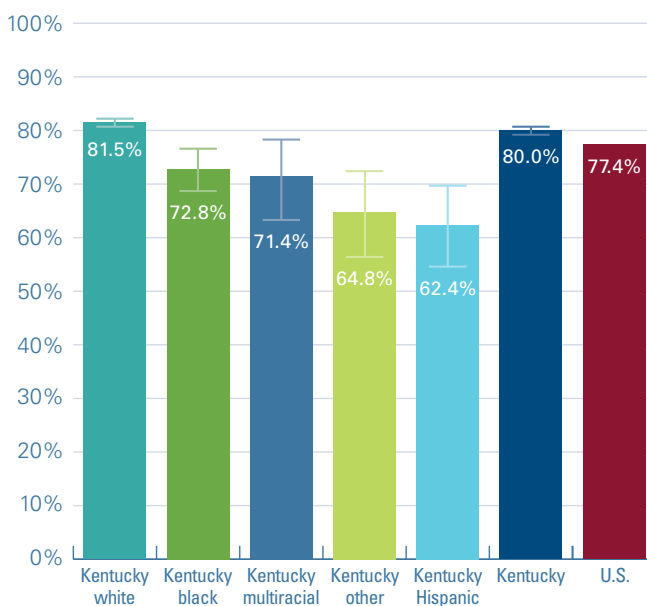


Personal Doctor

Eight in 10 adults in Kentucky (80%) had an individual that they thought of as their personal doctor or health care provider. Black, multiracial, other race, and Hispanic Kentuckians were each less likely than white Kentuckians to report having a personal doctor.

The Healthy Kentuckians 2020 goal IA-1-2⁹ is to increase the proportion of adults with a usual medical provider to greater than 90%.

Have a Personal Doctor by Race and Ethnicity, 2011-2013

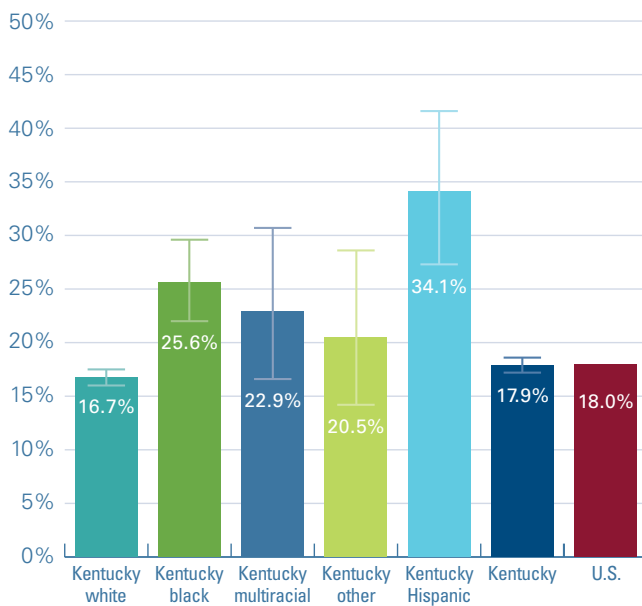


No Health Insurance Coverage

An important factor in obtaining needed health services is having medical coverage to help pay for those services, yet many Kentucky adults in the period 2011-2013 lacked health insurance. While virtually all Kentuckians over age 65 (99%) had some form of health insurance, coverage varied considerably for younger adults ages 18-64. For the years 2011-2013, nearly 2 in 10 Kentucky adults ages 18 and older (17.9%) reported being uninsured. Black and Hispanic Kentuckians had higher uninsured rates than white Kentucky adults.

The Healthy Kentuckians 2020 goal IA-1-1 for medical insurance coverage (adults 18-64 years old) is 87.7% insured.¹⁰

No Health Insurance Coverage by Race and Ethnicity, 2011-2013

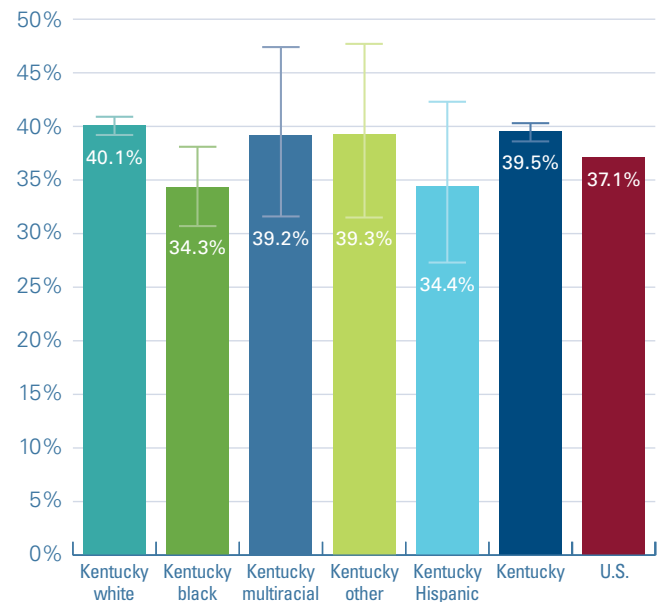


Completed Seasonal Flu Vaccination

An annual vaccine is the best way to prevent seasonal influenza, yet only about 4 in 10 Kentucky adults (39.5%) received annual flu shots.¹¹ Overall, the rate of Kentuckians receiving an annual flu shot was slightly higher than the U.S. rate. However, disparities associated with race and ethnicity exist in the 2011-2013 data. Black respondents were less likely than white respondents to report receiving an annual flu shot.

The Healthy Kentuckians 2020 Prev-5-3 target goal is to increase the proportion of adults in Kentucky who are vaccinated annually against seasonal influenza to 80%.¹²

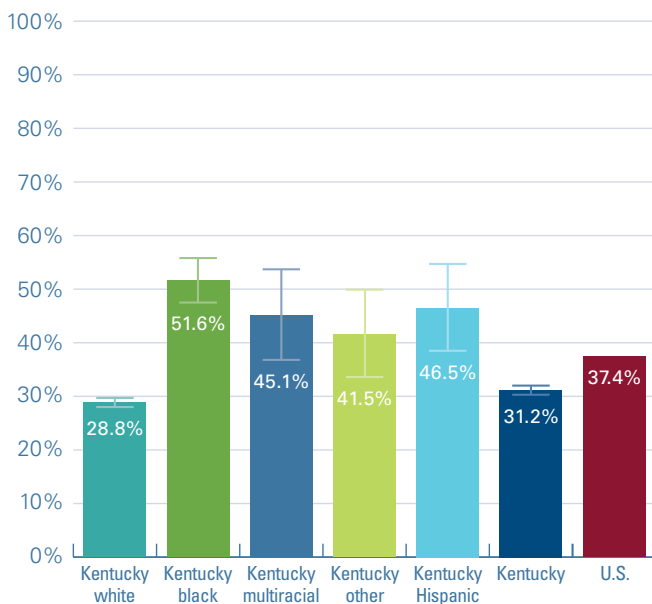
Completed Seasonal Flu Vaccination by Race and Ethnicity, 2011-2013



Ever Tested for HIV

Only respondents younger than 65 are asked about HIV screening on the BRFSS survey. Fewer than 3 in 10 white Kentuckians (28.8%) reported being tested for HIV. The state as a whole had a lower screening rate (31.2%) than that reported nationally (37.1%). The CDC recommends that HIV screening be provided to everyone, as part of their routine health care, unless they decline to be tested (this is called opt-out screening).¹³ White Kentucky adults were screened for HIV at the lowest rate of all racial and ethnic groups (28.8%) in Kentucky and nearly 10 percentage points lower than U.S. overall screening rates (37.4%).

Ever Tested for HIV by Race and Ethnicity, 2011-2013



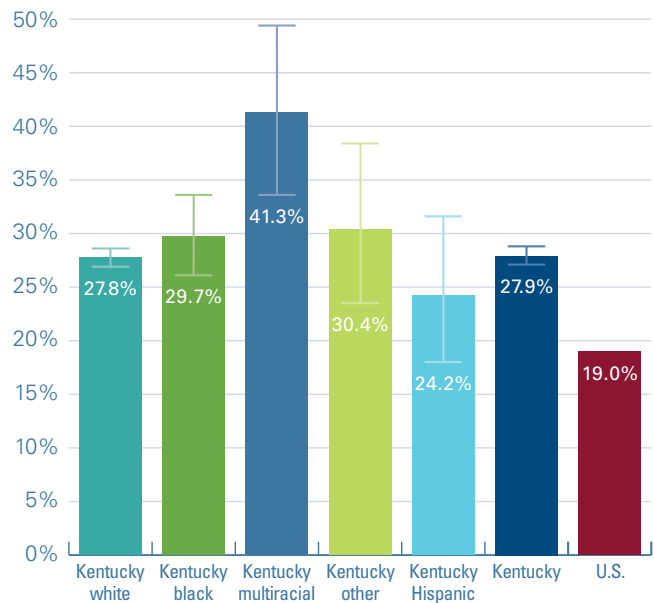
Social and Health Behaviors

Current Smokers

Smoking increases the risk of cancer, heart disease, stroke and other chronic conditions, exacerbates asthma, and reduces overall health status.¹⁴ In Kentucky, more than 1 in 4 adults (27.9%) was a current smoker. Multiracial Kentuckians were more likely to report being current smokers (41.3%) than white Kentuckians. Kentucky smoking rates were significantly higher than rates reported for the U.S. (19%).

Kentucky has considerable work to do in order to achieve the Healthy Kentuckians 2020 objective of having fewer than 1 in 6 adults (17.0%) be current smokers.¹⁵

Current Smokers by Race and Ethnicity, 2011-2013

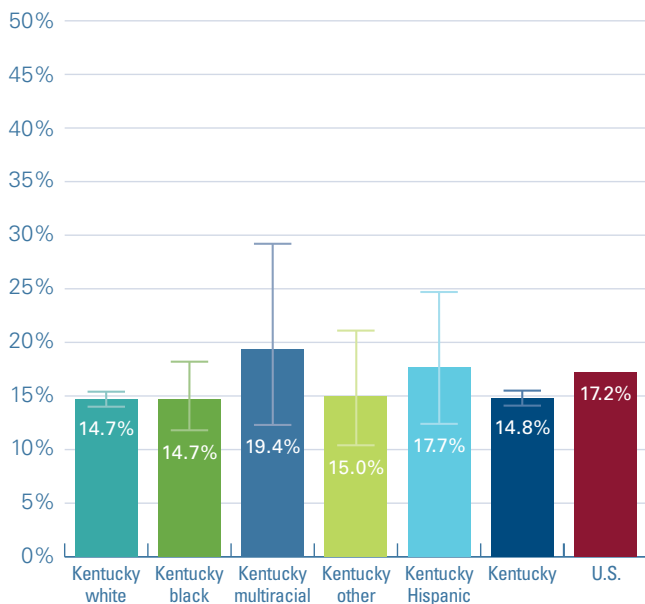




Binge Drinking

Binge drinking is defined as consuming five or more alcoholic beverages on one occasion for men, and consuming four or more alcoholic beverages on one occasion for women. Consuming large amounts of alcohol in a short period of time can impair judgment and increase risk of injuries, in addition to other health consequences. Fewer than 1 in 6 Kentucky adults (14.8%) had engaged in binge drinking in the month prior to the survey. The rate of binge drinking among Kentuckians did not differ by race and ethnicity. Overall, binge drinking is one of the health status indicators where Kentucky fared better in comparison to the national average (17.2%) 2011-2013.

Binge Drinking by Race and Ethnicity, 2011-2013

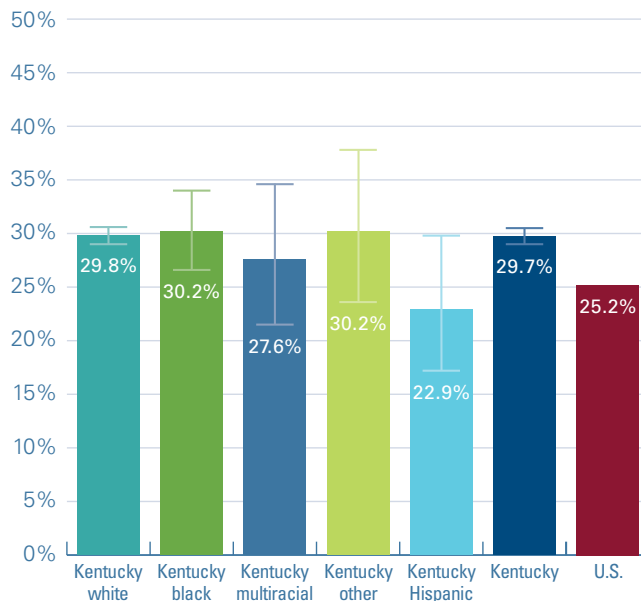


No Physical Activity

According to the federal Physical Activity Guidelines for Americans, adults should get, at a minimum, 30 minutes of moderate physical activity on at least 5 days per week.¹⁶ Despite this recommendation, nearly 3 in 10 Kentucky adults (29.7%) engaged in no leisure time physical activity or exercise in the prior month. No significant differences were seen across racial or ethnic groups in Kentucky. In the United States, 1 in 4 adults (25.2%) reported no physical activity in the prior month; Kentucky was significantly more sedentary than the U.S. overall.

*The Healthy Kentuckians 2020
Prev-10-4 goal is 25.5% of
Kentucky adults reporting no
physical activity in the past month.¹⁷*

No Physical Activity by Race and Ethnicity, 2011-2013

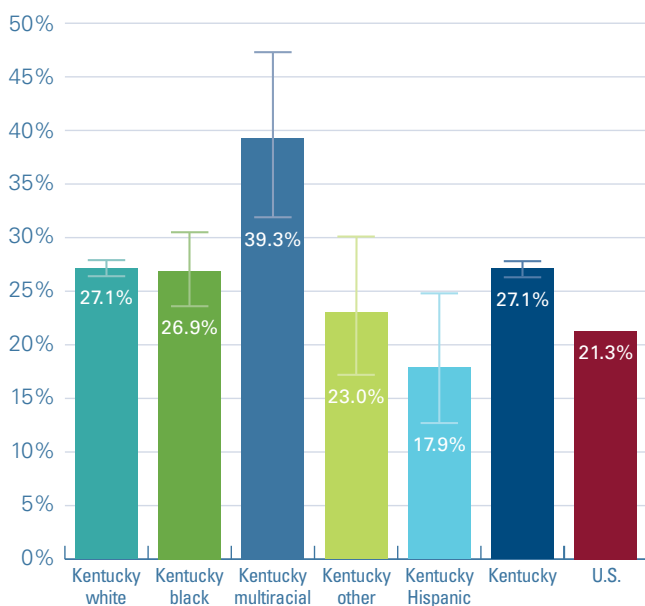




Activity Limitations

Poor physical and mental health can have a profound impact on our quality of life, and being unhealthy makes it difficult to do the things we need and want to do. More than 1 in 4 Kentucky adults (27.1%) reported that their activities were limited “because of physical, mental, or emotional problems.” Significantly higher rates of activity limitations were reported by multiracial adults when compared to Kentucky as a whole and to other racial and ethnic groups. Hispanic Kentuckians reported the lowest prevalence of activity limitations (17.9%). In the U.S., about 2 in 10 adults reported activity limitations (21.3%).

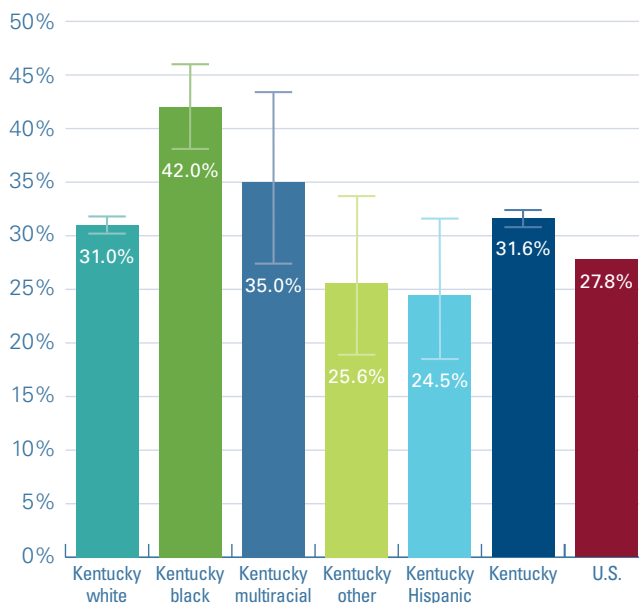
Activity Limitations by Race and Ethnicity, 2011-2013



Obesity

For adults, obesity is defined as having a body mass index¹⁸ (calculated from self-reported weight and height) of 30.0 or higher. Obesity is both a chronic disease and a risk factor for other diseases, including heart disease, stroke, type 2 diabetes and certain cancers.¹⁹ More than 3 in 10 Kentucky adults (31.6%) were obese, significantly higher than the national prevalence. Nationally, about 1 in 4 adults (27.8%) reported a body mass index of 30.0 or higher. The prevalence of obesity was lower for Kentuckians of Hispanic ethnicity (24.5%) or other race (25.6%). Prevalence of obesity was highest for black Kentuckians with more than 4 in 10 (42.0%) experiencing obesity.

Obesity by Race and Ethnicity, 2011-2013

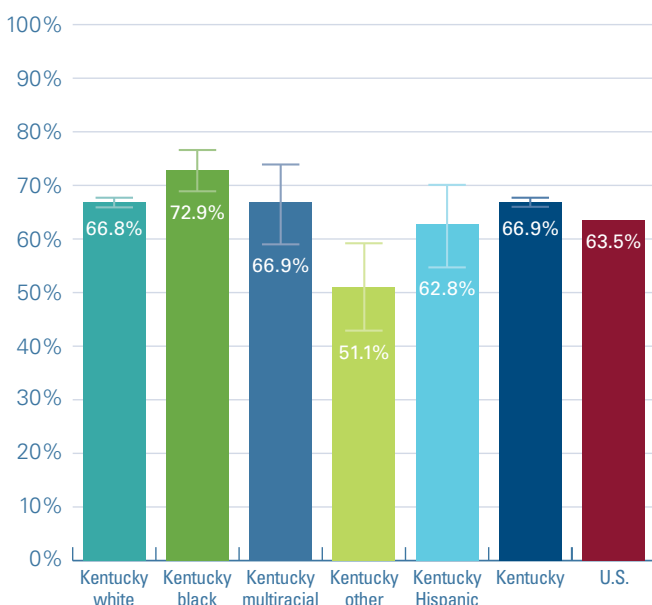




Overweight or Obese

Overweight is defined as having a body mass index of 25.0 to 29.9, and obese is defined as having a body mass index greater than 30.0. Like obesity, being overweight increases an individual's risk of other chronic diseases. In Kentucky, two-thirds (66.9%) of all adults weighed more than is recommended. More than 7 in 10 black Kentucky adults (72.9%) were overweight or obese. The prevalence of being overweight or obese was lower only for Kentucky adults reporting other race. In the U.S., more than 6 in 10 were overweight or obese (63.5%).

Overweight or Obese by Race and Ethnicity, 2011-2013

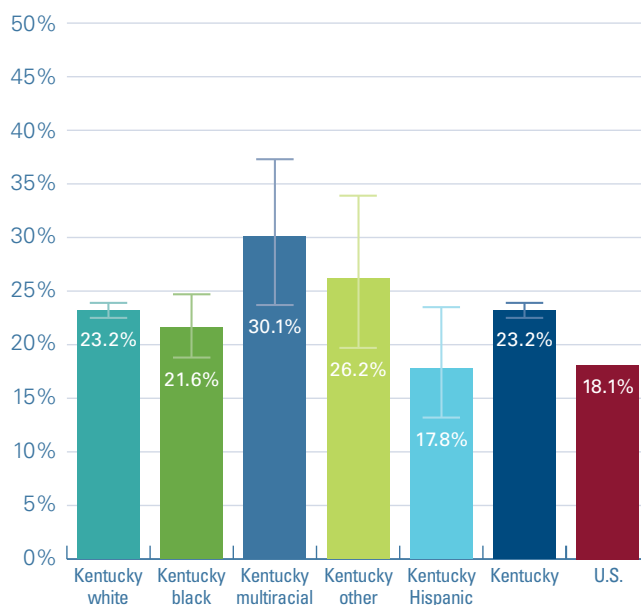


Health Outcomes

Fair or Poor Health

BRFSS asks respondents to rate their overall health status as excellent, very good, good, fair or poor. Nearly 1 in 4 Kentucky adults (23.1%) described their health as fair or poor. Overall, Kentuckians of nearly all racial and ethnic groups reported worse personal health status than the national average. Hispanic Kentuckians reported personal health status similar to the national average. Nationally, less than 1 in 5 adults (18.1%) described their health as fair or poor.

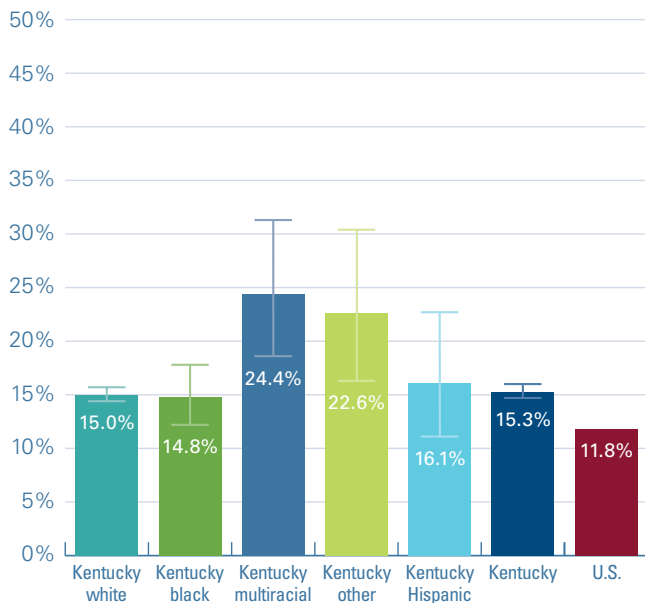
Fair or Poor Health by Race and Ethnicity, 2011-2013



Poor Mental Health

For this question, BRFSS respondents are asked "... thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The graph presents the proportion of adults who said their mental health was not good on 14 or more days in the last month. The prevalence of poor mental health was significantly higher for multiracial Kentuckians when compared to white and black Kentuckians. For the state as a whole, more than 1 in 7 adults (15.3%) experienced poor mental health for more than two weeks out of the prior month. In the U.S., about 1 in 10 adults reported poor mental health for more than two weeks out of the prior month (11.8%).

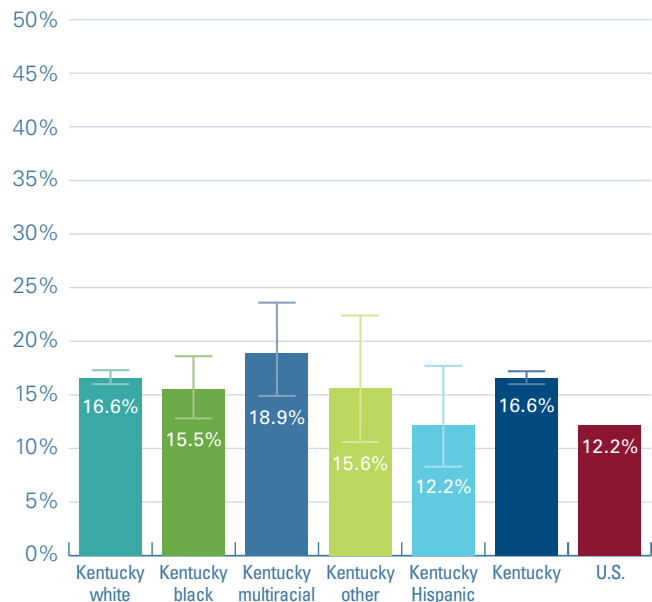
Poor Mental Health by Race and Ethnicity, 2011-2013



Poor Physical Health

This question is similar to the question about mental health, but in this case, respondents were asked how many days their "physical health, which includes physical illness and injury" was not good. The graph shows the proportion of adults who said their physical health was not good on 14 or more days during the last month. One in 7 Kentucky adults (16.6%) reported that their physical health was not good for at least two weeks out of the prior month. There were no differences across race and ethnicity groups in Kentucky. However, Kentucky as a whole fared worse in comparison to the national average (12.2%).

Poor Physical Health by Race and Ethnicity, 2011-2013

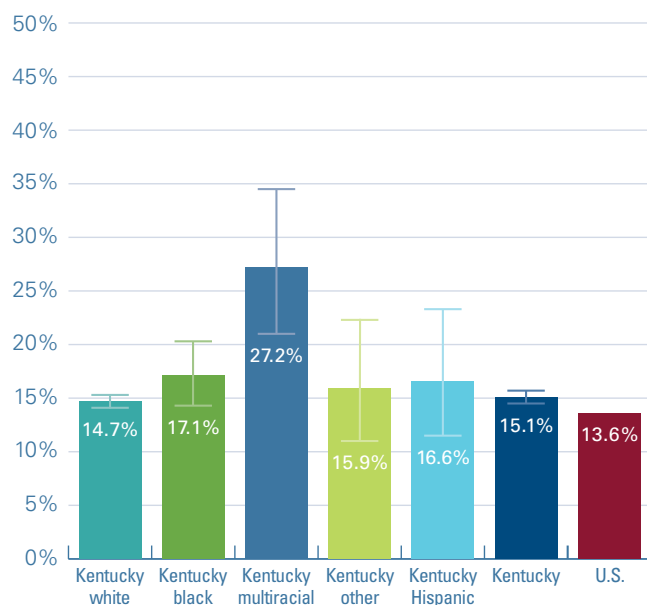


Asthma

More than 1 in 7 adults in Kentucky (15.1%) have ever been told by a doctor, nurse, or other health professional that they have asthma. The prevalence of asthma for multiracial Kentuckians (27.2%) was higher than for white and black Kentuckians. Nationally, more than 1 in 8 adults (13.6%) reported having asthma.

Healthy Kentuckians 2020 goals on asthma include reducing adult asthma mortality, HCC-2d-1, and reducing overall hospitalizations for asthma, HCC-2d-2.²⁰

Asthma by Race and Ethnicity, 2011-2013



Diabetes

About 1 in 10 Kentucky adults (10.7%) reported having at some point been told by a doctor, nurse, or other health professional that they have diabetes. This estimate includes individuals with both Type 1 and Type 2 diabetes, but does not include women who experienced gestational diabetes during pregnancy. Uncontrolled diabetes may lead to other health problems such as eye, kidney, or heart problems. Diabetes was more commonly reported by black and multiracial Kentucky adults, with about 1 in 8 reporting being diagnosed with diabetes (12.4% and 12.9% respectively). Diabetes prevalence in Kentucky (10.7%) was slightly higher than the national average (10.1%).

The Healthy Kentuckians 2020 goal for diabetes is to "reduce the disease and economic burden of diabetes mellitus (DM) and improve the quality of life for all persons who have, or are at risk for, DM." This includes prescribing medication, controlling A1C, educating on diabetes management, and decreasing diabetes related hospitalizations (page 36-39).²¹

Diabetes by Race and Ethnicity, 2011-2013

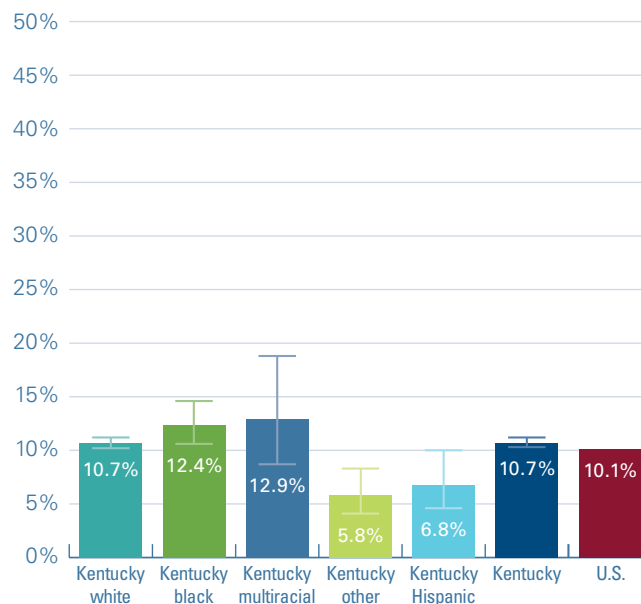


Table 1. Respondents by race and ethnicity KY-BRFSS and U.S. Census* population

Race and ethnicity	KY BRFSS respondents 2011-2013 Percentage Count	KY: US Census July 1, 2014 Percentage
White only, non-Hispanic	84.4% 27,962	85.4%
Black only, non-Hispanic	9.6% 3,176	8.2%
Hispanic	1.4% 463	3.4%
Multiracial, non-Hispanic	2.0% 654	1.8%
Other race only, non-Hispanic	1.4% 476	1.8%
Non-response on race and ethnicity	1.2% 397	
Total	33,131	

* Retrieved from <https://www.census.gov/quickfacts/table/PST045215/21>.

Table 2. BRFSS Indicators and Question Text

Indicator	Question Text*
Annual influenza vaccine	"During the past 12 months, have you had either a flu shot or a flu vaccine that was sprayed in your nose? (A new flu shot came out in 2011 that injects vaccine into the skin with a very small needle. It is called Fluzone Intradermal vaccine. This is also considered a flu shot.)"
Ever had an HIV test	"Have you ever been tested for HIV? Do not count tests you may have had as part of a blood donation. Include testing fluid from your mouth."
Foregoing needed care due to cost	"Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?"
Insurance coverage	"Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicare, or Indian Health Service?"
Lack of physical activity	"During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Continued on next page

Table 2. BRFSS Indicators and Question Text (Continued)

Indicator	Question Text*
Limited activity in the past month	"Are you limited in any way in any activities because of physical, mental, or emotional problems?"
Mentally unhealthy days	"Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"
Personal doctor	"Do you have one person you think of as your personal doctor or health care provider?"
Physically unhealthy days	"Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?"
Prevalence of asthma	"Has a doctor, nurse, or other health professional EVER told you that you had any of the following? (Ever told) you had asthma?"
Prevalence of binge drinking	"During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?" and "Considering all types of alcoholic beverages, how many times during the past 30 days did you have 5 or more drinks for men or 4 or more drinks for women on an occasion?"
Prevalence of current smoking	"Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?"
Prevalence of diabetes	"Has a doctor, nurse, or other health professional EVER told you that you had any of the following? (Ever told) you have diabetes?"
Prevalence of obesity	"About how much do you weigh without shoes?" and "About how tall are you without shoes?"
Prevalence of overweight	"About how much do you weigh without shoes?" and "About how tall are you without shoes?"
Self-report of health status	"Would you say that in general your health is — Excellent, Very good, Good, Fair, or Poor"

*Retrieved from <http://www.cdc.gov/brfss/questionnaires/index.htm>.

References

- 1 U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at <http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx>. Accessed June 8, 2016.
- 2 National Prevention Council. National Prevention Strategy. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General, 2011. Available at <http://www.surgeongeneral.gov/priorities/prevention/strategy/>. Accessed June 8, 2016.
- 3 Centers for Disease Control and Prevention (CDC). Health Disparities and Inequalities Report. Morbidity and Mortality Weekly Report: Supplement, Vol. 62, No. 3. November 22, 2013. Available at: <http://www.cdc.gov/mmwr/pdf/other/su6203.pdf>. Accessed June 8, 2016.
- 4 Centers for Disease Control and Prevention. Adult Obesity Facts. Updated September 21, 2015. Available at <https://www.cdc.gov/obesity/data/adult.html>. Accessed June 8, 2016.
- 5 Centers for Disease Control and Prevention. Health of Hispanic or Latino Population. Updated April 27, 2016. Available at <http://www.cdc.gov/nchs/fastats/hispanic-health.htm>. Accessed June 8, 2016.
- 6 Body Mass Index, or BMI, is equal to weight in pounds divided by height in inches squared and then multiplied by 703. For a 5'9" individual, a BMI of 30.0 would correspond to a weight of 203 lbs.
- 7 U.S. Census Bureau. QuickFacts Kentucky, July 1, 2014. Available at <https://www.census.gov/quickfacts/table/PST045215/21>. Accessed June 8, 2016.
- 8 U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020, Objective AHS-6.2. Washington, DC. Available at <http://www.healthypeople.gov/2020/about/disparitiesAbout.aspx>. Accessed June 8, 2016.
- 9 Kentucky Department for Public Health. Healthy Kentuckians 2020. Goal IA-1-2, page 9. Frankfort, KY: Kentucky Department of Public Health, 2013. Available at <http://chfs.ky.gov/nr/rdonlyres/20bb6896-a602-426b-9f5f-e6230a9caac4/0/healthykentuckians2020final62013.pdf>. Accessed June 8, 2016.
- 10 Ibid.
- 11 Seasonal flu vaccinations are available as a shot or nasal spray. Estimates provided in this report are for the proportion of adults who have received an annual flu shot only, because the data for nasal spray utilization is not available for all time periods in this report. Nasal spray utilization in Kentucky is very low and would not change the estimates.
- 12 Kentucky Department for Public Health. Healthy Kentuckians 2020. Goal Prev-5-3, page 26. Frankfort, KY: Kentucky Department of Public Health, 2013. Available at <http://chfs.ky.gov/nr/rdonlyres/20bb6896-a602-426b-9f5f-e6230a9caac4/0/healthykentuckians2020final62013.pdf>. Accessed June 8, 2016.
- 13 Branson BM, Handsfield HH, Lampe MA, Janssen RS, Taylor AW, Lyss SB and JE Clark. Revised Recommendations for HIV Testing of Adults, Adolescents, and Pregnant Women in Health-Care Settings. MMWR 55(RR14); 1-17, September 22, 2006. Available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5514a1.htm>. Accessed June 8, 2016.
- 14 U.S. Department of Health and Human Services. The Health Consequences of Smoking: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office of Smoking and Health, 2004. Available at http://www.cdc.gov/tobacco/data_statistics/sgr/2004/complete_report/index.htm. Accessed June 8, 2016.
- 15 Kentucky Department of Public Health. Healthy Kentuckians 2020. Goal Prev-12-2. Frankfort, KY: Kentucky Department of Public Health, 2013. Available at <http://chfs.ky.gov/NR/rdonlyres/20BB6896-A602-426B-9F5F-E6230A9CAAC4/0/HealthyKentuckians2020FINAL62013.pdf>. Accessed June 8, 2016.
- 16 U.S. Department of Health and Human Services. 2008 Physical Activity Guidelines for Americans. U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. Available at <http://www.health.gov/paguidelines/guidelines/default.aspx>. Accessed June 8, 2016.
- 17 Kentucky Department of Public Health. Healthy Kentuckians 2020. Goal Prev-10-4. Frankfort, KY: Kentucky Department of Public Health, 2013. Available at <http://chfs.ky.gov/NR/rdonlyres/20BB6896-A602-426B-9F5F-E6230A9CAAC4/0/HealthyKentuckians2020FINAL62013.pdf>. Accessed June 8, 2016.
- 18 Body Mass Index, or BMI, is equal to weight in pounds divided by height in inches squared and then multiplied by 703. For a 5'9" individual, a BMI of 30.0 would correspond to a weight of 203 lbs.
- 19 Centers for Disease Control and Prevention. Adult Obesity Causes & Consequences. Updated June 16, 2015. Available at <http://www.cdc.gov/obesity/adult/causes.html>. Accessed August 2, 2016.
- 20 Kentucky Department of Public Health. Healthy Kentuckians 2020. Goals Respiratory Diseases, pages 47-48. Frankfort, KY: Kentucky Department of Public Health, 2013. Available at <http://chfs.ky.gov/NR/rdonlyres/20BB6896-A602-426B-9F5F-E6230A9CAAC4/0/HealthyKentuckians2020FINAL62013.pdf>. Accessed June 8, 2016.
- 21 Ibid.

Photos on pages 12 and 13 are from the Yale Rudd Center for Food Policy & Obesity.

Acknowledgements

The authors are grateful to the following individuals for their assistance in developing this report:

M. Gabriela Alcalde, MPH, DrPH

Sarojini Kanotra, PhD, MPH

Rob Gorstein Design

Susan Zepeda, PhD

Bonnie J. Hackbarth



FOUNDATION FOR A
**HEALTHY
KENTUCKY**

1640 Lyndon Farm Court, Suite 100 | Louisville, KY 40223 | 502.326.2583 | www.healthy-ky.org

